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MISSING**



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International Harvester Company twine is the *best expensive twine*, as you can figure at a glance. Frequently, so called "cheap" twine is offered at a reduction of a quarter of a cent a pound.

In these tests there is a difference of 51.5 feet to the pound in favor of the International Harvester Company twine.

You'd be glad to buy 36 to 51 feet of binder twine for a quarter of a cent, wouldn't you?

That is the amount more that you get by paying the extra price for the International.

Which is the inexpensive twine?

As to strength:

These tests showed that while International Harvester Company twine averaged 59 and 9-10 pounds, one competitor's barely reached the standard (50 pounds) and the other two fell below from 2 and 7-10 to 4 and 4 1/2 pounds.

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International Harvester Company twine—sisal standard, manila or pure manila—is sold and distributed through local agents located at all principal towns and cities in Canada.

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(INCORPORATED)  
CHICAGO, U. S. A.

**QUESTIONS AND ANSWERS.**

1st.—Questions asked by bona-fide subscribers to "The Farmer's Advocate" are answered in this department free.

2nd.—Questions should be clearly stated and plainly written, on one side of the paper only, and must be accompanied by the full name and address of the writer.

3rd.—In veterinary questions, the symptoms especially must be fully and clearly stated, otherwise satisfactory replies cannot be given.

4th.—When a reply by mail is required to urgent veterinary or legal enquiries, \$1 must be enclosed.

**Miscellaneous.**

**STEAM ENGINEERING.**

The branch of engineering in which I am interested is steam engineering. Where can I obtain instructions?

H. N. M.

Ans.—Write School of Practical Science, Toronto, for information.

**HICKORY SAPPLINGS FOR WALKING CANES.**

Could you, or any reader, inform me where a person could get a quantity of hickory sapplings, from half an inch to one inch in diameter, suitable for making walking canes?

J. S. W.

Ans.—A response through our "Want and For Sale" advertising columns is invited.

**SUNDAY BETWEEN CHORES.**

Can I, or can I not, go away on Sunday between chore times? My employer claims that I must stay home whenever he goes away. There was no agreement as to that. As it is a very lonesome place, I like to go away for a few hours on Sunday, but am always home to do the chores. If your answer is yes, to stay home, I am willing to do so, but several persons have told me I do not, as long as I am home to do chores.

W. E.

Ans.—You are entitled to go away between chore times as proposed.

**SALT FOR POULTRY — CLAM SHELLS VS. OYSTER SHELLS — WOOD ASHES VS. DUST BATH.**

1. Would fresh-water clam shells, broken up, be as good for poultry as crushed oyster shells?

2. Do laying hens require salt when fed mixed grain, beef scrap, grit, and oyster shells and fresh water? If so, how should it be fed? We don't feed wet mash?

3. Are wood ashes, as dust bath, injurious to hen's feathers? W. S. M.

Ans.—1. Clam shells would be quite as good as the oyster shells, with the exception of the salt, which would be present more or less in the oyster shells.

2. I think laying hens require a little salt, not more than one ounce a day to 100 birds; perhaps half of this would be sufficient. If you supply plenty of oyster shells, salt would not be necessary. If I was feeding salt, I would dissolve it in water and then mix with some mash.

3. Wood ashes have been, in my experience, injurious to bird's feathers. Coal ashes are not. The alkali in the wood ashes appears to have a serious effect on pigments feathers, etc.

Q. A. C. W. H. GRAHAM.

**BLACK CURRANTS SHOULD BE PRUNED REGULARLY.**

Re black currant cultivation, I find that forking to any depth around the plants in spring causes the fruit to drop off before maturity, so I cultivate in the fall, and just keep the ground clean during spring and till the fruit is taken off. Pruning seems to be the difficulty with making a success of raising this fruit, and I would like to get some instructions on this point some time next spring, as I think some of the plants have too many branches. Black currants were very scarce in this locality this season, and the chief reason for failure is want of proper pruning.

W. M.

Ans.—Every year, either in the late fall or early spring. A good plan is to grow them in the bush form, with about six branches to the bush. Then adopt a renewal method of pruning by cutting out every year two of the oldest branches, and allowing two strong new ones to take their place. Cut out all the other new canes which come from the bottom, and shorten back the two left to about two feet, to cause them to branch out at a proper height.

H. L. HUTT.

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Our wheels will outwear several wagons; in fact, will last a lifetime with ordinary care. Farmers who have trouble with their wheels should try a set. They are low and strong, cheaper than wooden wheels, and a saving of labor for both man and horse. Made any size and width of tire and to fit any axle. Our guarantee goes with the wheels. Write to-day for catalogue.

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**2 Tons in 10 minutes**

No two men could ever keep up with our **Champion Hay Loader**. Just think of the time saved—perhaps on a day when it threatens rain: Drive to the field, attach the **Loader**, and in ten minutes have a great, big load on, ready to put away in the barn. How soon would it take to pay for that **Loader** with the hired man's time it would save?

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**FROST & WOOD CHAMPION HAY LOADER**

**QUESTIONS AND ANSWERS.**  
Miscellaneous.

**BARBED-WIRE FENCES.**

1. A built a fence, and put a barbed wire on top, after consulting his neighbor, B, who refused to have the barb put on. Would A be liable to damages on B's stock, or could B force A to remove barbed wire?  
2. Can a man build a road of barbed wire, or would he have to be responsible for damages in cases of run-away or accidents?  
Ontario.

Ans.—1 and 2. We cannot tell without first seeing your local municipal by-laws on the subject. We consider it highly probable, however, that in maintaining such objectionable and dangerous fences, A would run considerable risk of being proceeded against and rendered liable to payment of damages and costs.

**SCHOOL FEES.**

Part of my farm, and also barns, are in town corporation, while house is just outside corporation. I am paying town taxes on barns and part of farm. Can they compel me to pay school fees in town for my children?  
Ontario.

Ans.—It is possible that the circumstances are such that they are entitled to do so; there is not sufficient information before us to enable us to say definitely. See, however, Sec. 95 (4) of the Public Schools Act (1 Edw. VII., Chap. 39), providing that where the property of a non-resident is assessed for an amount equal to the average assessment of residents, the children of such non-resident shall be admitted to the public school of the section on the same terms and conditions as the children of residents.

**CULTURE OF GOOSEBERRIES.**

I set out a number of young gooseberry bushes last spring, and would like information on a few points as to the culture of the plants, namely:

1. Which is the best style of pruning, in bush form or in a tree?
2. Which is the best time for taking cuttings?
3. What is the name of a few of the best kind of gooseberries?

Any other information as to the culture or pruning of the young plants would be thankfully received. J. E. M.

Ans.—1. In the Old Country, gooseberries are best pruned in the tree form, and, for this purpose, all buds, except the top one, are removed from the cutting before it is placed in the ground, and from this, a shoot is trained upward to form a trunk for the little tree. In this country, however, the bush form is preferable, because the cane borers, which are troublesome at times, may be cut out with the old canes that are removed from time to time. Another advantage is that the bush form shades the ground, and gives the roots the coolness and moisture which gooseberries prefer.

2. The gooseberry is best propagated by means of mound layers. For this purpose, earth is mounded into the bush about midsummer, soon after the fruit is picked. Roots form on the base of all shoots so covered, and, in one or two years, depending upon the species, the bush may be cut apart, and from two to three dozen good plants obtained. The American varieties usually form good roots in the course of one year, while the English varieties generally require two years in the mound to form well-rooted plants. The gooseberry may be propagated by means of cuttings, but these do not root so readily as other bush fruits, like the currant. Cuttings should be taken in the fall, after the leaves are off, and may be planted at once, or packed in sand and planted early in the spring. The leading varieties of gooseberries for Ontario are Pearl, Downing, and Red Jacket of the American type, while Whitesmith and Industry are the most satisfactory English variety. Possibly in British Columbia English varieties might be grown more satisfactorily than in Ontario. Here they are very subject to mildew. This, however, may be held in check by careful spraying with the lime-and-sulphur mixture, as is used in fighting the San Jose scale.  
H. L. HUTT.  
O. A. C.

# The Farmer's Advocate and Home Magazine

"Persevere and  
Succeed"

Established  
1866.

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LONDON, ONTARIO, DECEMBER 5, 1907.

No. 793.

## EDITORIAL.

### MACHINERY DISPLACING HAND LABOR ON THE FARM.

A large share of modern farming is done in factories. Much labor formerly applied directly in simple operations of sowing, reaping, threshing and marketing is now devoted to manufacturing plows, pulverizers, seed drills, binders, mowers, tedders, rakes, wagons, hay forks, grain slings, cutting boxes, threshers, engines, windmills, manure spreaders, feed and litter carriers, and cream separators, and in building and equipping railroads, warehouses, flour mills, creameries, cheese factories, basket factories, and hundreds of other facilities for the economical production and distribution of farm produce. With these auxiliaries, a farmer can now produce in a year several times as much sustenance as his great-grandfather could, and with less than half the muscular exertion. Of the increased wealth produced, part goes to the city laborer, the inventor and the capitalist, and part—not as large a part as we should like to see—goes to supply the farmer's family with more privileges, comforts and luxuries than was possible in earlier days.

In the household, the loom and the spinning-wheel have been long since stowed away in the garret. The factory, with its automatic processes, turns out the yards of linen and woollen goods once woven at home with unremitting industry. Of late years, even the family sewing-machine rattle seems less frequently heard, tailored and ready-made clothes taking the place of homemade garments, with advantages in the way of housewifely leisure, and possibly of style and fit, if not of warmth and wear.

Through it all we trace the farmer's evolution from the rank of a strenuous toiler to the more complex estate of a business proprietor, with emphasis upon management, whereas it was once placed upon manual dexterity and strength.

### RURAL CANADA STILL SPARSELY POPULATED.

As in all periods of transition from simple hand methods of production to more efficient machine-aided industry, there is a disposition in some parts of older Canada to wonder, seeing that one man is to accomplish the work of two or four, how the rural population is to be maintained. "What," they say, "will we find here to do?" These inquirers overlook some important facts.

The world's population is steadily increasing, and the world's wants becoming ever more complex. While yet a long way from staring starvation in the face, the human race finds it necessary to maintain and even increase the prices for food supplies from year to year, despite more economical methods of production. In America, vast, growing cities bid liberally for breadstuffs, meats, milk, cheese, butter, eggs, fruit and vegetables, and demand, especially for the better quality, has been steadily outstripping supply. The world needs more food-producers, and Canada, with her fertile soil, favorable climate, and progressive citizens, is in an unrivalled position to supply the demand. It pays, and will pay better, to devote to the land the extra labor and extra fertilizers that tend to increased yields, and to grow those intensive crops that return maximum market values per acre.

Canadian farms are not yet half worked, compared to the standard of culture in older lands. In Britain, where much of the soil has been tilled almost a quarter as many centuries as much of ours has years, average crops of grain and hay

are almost fifty per cent. better, while our pastures are no match for theirs at all. Even at home, all we need do is to contrast the best yields with the poorest, or the best with the average, to perceive immense opportunities for increasing the population that may be sustained upon the land. Intelligent manuring, drainage and cropping, combined with thorough tillage, will do wonders. Think of the miniature countries of Denmark, with an area of 14,829 square miles, and a population of 2,449,540 in 1901, or 165.2 people per square mile; Holland, with an area of 12,558 square miles, and a population, in 1900, of 5,104,137, or 404 to the square mile; and Belgium, with an area of 11,373 square miles, and population, in 1899, of 6,744,000, or 593.11 per square mile. With the exception of Belgium, these countries are practically self-sustaining as regards food supplies, exporting enough in dairy and live-stock products to balance the imports of grains and breadstuffs. Yet, in Denmark's 14,829 square miles, 882,336 inhabitants are engaged in agriculture, or about 40 per cent. of the population. Then think of Canada, with her 3,745,574 square miles, equal to 30 United Kingdoms, 18 Germanys, 220 Denmarks, 290 Hollands, and nearly 330 Belgiums, and a population of less than two people per square mile.

We have scarcely begun to farm in America. We have merely scratched the surface of our agricultural resources. In the Northwest they have hardly tickled the soil.

Of course, we do not wish to emulate these minor European principalities in all respects. Five or ten acres would be rather too small for an average Canadian farm. We would scarcely care to tether our cattle, or spend leisure moments, as some of the Belgian peasants do, stamping the ground to bring worms to the surface for the poultry. In Canada, we deem it more important that the people on the land should live comfortably and well than that there should be a maximum population per square mile. But there is ample room in almost every Canadian county to double or treble the agricultural population, while materially raising the standard of living.

### HOW MAY MORE PEOPLE BE SUPPORTED ON THE LAND?

Turning from generalities and statistics, let us consider a few ways by which the farms of older Canada may support in comfort an increasing agricultural population. First of all, let us remember that economizing labor does not necessarily mean dispensing with it. A farmer who has been growing grain and hay on land adapted for profitable orcharding or strawberry culture, may economize labor by planting trees or setting out strawberries, thereby enabling himself to earn on this land two, three or four dollars a day instead of a dollar and a half. Or he may economize labor by growing a large acreage of corn, which, while requiring considerable work, produces a heavy crop of valuable feed, thus liberally recompensing the labor expended. Economizing labor means making the most out of it by avoiding waste of effort and applying every ounce of energy to the utmost advantage. To-day, on Canadian farms, there is much labor applied to indifferent purpose. We can avoid a great deal of this by reforesting the poorest soils and steepest hillsides, and seeding the better of them to permanent pasture, so that live stock may harvest the crops. Hillsides not too steep to mow should be seeded to alfalfa, which will quickly convert them into mortgage-lifting areas. The rest of the land should be divided into few fields, and worked with four-horse implements wherever

possible. Thereby we make provision for the more profitable employment of extra labor in cultivation and also facilitate harvesting, while at the same time reducing the area of fence-corners and headlands. Seed selection to develop prolific strains of crops, cow records to eliminate the star boarders from the herd, and constant study to avoid waste of time in stable and fields, are other ideas which, if practiced, will not only augment the profits of farming, but also tend to increase the rural population per square mile.

Having disposed of the rougher and poorer lands by reforestation, laying down in pasture, and seeding to alfalfa, the next step is to farm better the remaining area. Millions of acres of Canadian farms are badly in need of tile-draining. This work could be done in slack seasons. Better preparation of seed-beds and more time spent in cultivating orchards, fruit plantations and growing corn would also be amply repaid.

Shorter rotations should be adopted in most cases, leaving smaller areas in grass, with more fields of clover and corn. Whereas the average farm now raises but five to ten acres of Indian corn, it might with advantage be raising twenty-five. Many a farmer with a hundred acres of ordinary land has been surprised to find that, by building a silo, he could increase his cattle stock thirty or forty per cent. without buying extra feed.

Stockmen, and particularly dairymen, will find it to their advantage to resort to a system of partial soiling (cutting and feeding green stuff) in the summer months. The experience of the Pennsylvania clergyman-farmer, Mr. Dietrich, who, by means of soiling, kept 30 head of stock, of which 17 were cows in milk, on a farm of 15 acres, on which he raised all the bulky food required, carries an eloquent weight of suggestion to Canadian farmers. It has been calculated that a meadow cut for hay will yield three or four times as much food as if grazed, and, in midsummer, the effect of grazing in reducing the yield of forage is undoubtedly much more pronounced than ordinarily. While we would not counsel the general adoption of Mr. Dietrich's method in Canada, deeming it not only unnecessarily laborious, but inimical to the thrift of our herds, still there is no doubt that, by the use of alfalfa, mixed grain, millet, green corn and silage to supplement the parched pastures of July and August, an additional ten to thirty per cent. more stock could be kept upon our farms, and much larger and more profitable yields of milk or increases in live weight secured. The necessity for such measures will increase as the land rises in value.

The third great need is for further diversification, raising more crops and more kinds of crops, keeping more stock and more kinds of stock. While we believe in each farmer having a specialty, we are equally convinced that it will, as a rule, pay to group around this specialty quite a few complementary branches. Nature rebels against the one-crop or one-stock system. Other conditions being equal, the largest crops and the thriftiest stock will be found where frequent change of crop is made, and not too much of any one kind of stock is kept on a given area. The importance of this principle is especially manifest in the case of poultry and sheep. No large poultry plant that we know of has succeeded for any length of time, and the unwisdom of keeping too many sheep on a farm is a matter of common knowledge. To a less extent, the same principle applies in other directions. Diversification not only tends to maximum production and elimina-

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THE LEADING AGRICULTURAL JOURNAL IN THE  
DOMINION.

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JOHN WELD, MANAGER.

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LONDON, CANADA.

tion of waste, but makes farming far more interesting, and also helps to solve the labor problem by providing continuous employment throughout the year.

Besides the cattle and hogs, sheep should be accorded a place on nearly every farm. As weeders and soil improvers, a small flock easily earn their keep. Poultry, too, should receive more attention. Modern poultry-housing is inexpensive and modern directions for the care of poultry are less exacting than was formerly the case. Horse-breeding, again, opens an avenue of snug profit. A couple of good sound brood mares should be part of every farm stock.

Then, in addition to these staple lines, there are unexampled opportunities in up-to-date orchard practice. Throughout Western Ontario the apple tree receives scant credit, yet here and there, as at Forest, Chatham, Simcoe, and other points, the business of apple-production has been revolutionized, and the orchard has become the best-paying asset on the farm. It should be so everywhere, and, eventually, bearing orchards of standard varieties will be commonly valued at \$500 to \$1,000 an acre, as they now are in Nova Scotia.

In many localities, strawberry-growing offers splendid opportunities to increase farm revenues, while, in the special fruit districts, prospects for peach, grape, plum and bush-fruit culture were never brighter. In the vicinity of cities, milk production for the retail trade has assumed the proportions of an extensive industry, while market-gardening, in its various phases, is another of rapidly-growing proportions. On the Island of Montreal is a musk-melon grower who produces cantaloupes which often sell for \$2.00 apiece. In fact, on every hand opportunities for adding to farm profits by new branches and specialties adapted to the locality are presenting themselves faster than we can perceive and grasp them. All it requires is enterprise and study. The modern

farmer must be a reader, a thinker, and a manager, above all else.

The young man now looking towards the farm may rest assured that he is choosing a select occupation, a paying occupation, and one that will improve in standing and opportunities with each succeeding year. Let him not be alarmed if he cannot secure a two-hundred-acre ranch. Fifty acres, well worked by up-to-date methods, will furnish a better living than many a hundred-acre farm does to-day. Good soil and convenient location are more to be desired than vast area.

Farm values all over Canada are rising, but especially in the neighborhood of cities, and as the West fills up they will rise faster. The new agriculture will make far more out of the soil than did the old-time grain-and-hay system, and the diversified agriculture of fifty years hence will easily support double or treble the agricultural population now scattered over the broad expanse of Eastern Canada. It is a good time for the young man to strike root into the soil.

## THE MARCH OF AGRICULTURAL EDUCATION.

"Canadian Agriculture" was the subject of an incisive and informing address before the Canadian Institute, Toronto, by Prof. C. A. Zavitz, Experimentalist at the Ontario Agricultural College. Our readers will appreciate the synopsis published in this issue, for several reasons. Those engaged in the industry, and sometimes public men, appear to overlook its commanding magnitude, disclosed in the fact that agricultural products surpass in value the combined total value of all the products of forest, mine, fisheries, wild animals, and of manufactured products, less cost of raw material. Here, then, is the basis of the country's material prosperity, and in this fact lies an irrefutable argument for a scheme of public education that will serve the interests of the agricultural population at least equally with professional and mercantile pursuits. We are obliged to Prof. Zavitz for calling public attention, at this juncture in the discussion of the Ontario rural-school problem, to the widespread recognition of the paramount importance of agricultural instruction in the scholastic systems of other countries, from the lower grades in the rudimentary schools, right up through the colleges and normal institutions. Canada cannot afford to lag behind.

## HOW "THE FARMER'S ADVOCATE" STANDS IN

Many and quaint are the anecdotes that come to hand, illustrating the place which "The Farmer's Advocate" holds in the estimation of Canadian husbandmen. It is said that one careful father, whose daughters were visiting at a city relative's home, noticing a leading magazine on the library table, picked it up, and, handing it to the hostess, requested her not to allow his daughters to read it, as the only literature he sanctioned them to peruse was "The Farmer's Advocate" and the family Bible.

Another incident, vouched for by a reputable physician, comes from a hospital up in Muskoka. A woman patient, in the early convalescent stage, awoke from a sleep to ask the day of the week. "Thursday," replied the nurse. "Thursday, eh, that's the day 'The Farmer's Advocate' is published."

But the latest to hand is from A. E. Sherrington, who, in company with another delegate, was to speak at a fruit-institute meeting in Simcoe County. The only man who turned out was the one who had called the meeting. After a while he was seen to pick himself up and move towards the door. "What's the matter, you're not going, too?" "Yes, my wife is over here visiting some of her folks, and I guess I'll go there. I take 'The Farmer's Advocate' and read it, and I don't think anyone can tell me much about co-operation or fruit-raising."

I have been a subscriber to your valuable paper only since last Christmas, and am always pleased to read the many articles, and also the Questions and Answers to correspondents, for they contain information of great value to farmers. A good number of our neighbors subscribe for it. I believe many more will this Christmas.  
Simcoe Co., Ont. CHAS. NORTHGRAVES.

## THE FARMER'S OWN FAIR.

The Ontario Winter Fair, at Guelph, to be held this year on the dates December 9th to 13th, a summary of the programme for which will be found on another page in this issue, has proved the proposition that a farmers' fair without fireworks or circus performances can be made a success in the best sense of the word. It is the rounding-up live-stock, poultry and seed show of the year, where time and opportunity is given for the study of breeds and types of pure-bred and commercial cattle, sheep, swine and fowl, alive and in the dressed carcass; of seeing these judged and placed in order of merit by competent experts; of hearing helpful addresses and lectures by experienced farmers, breeders, feeders and scientists on the best methods of management, and the reason for certain results. And this year additional features of interest have been added to the programme, one of which is a discussion of the important question of improved roads, a question in which all are intimately interested, and none more than those in the great dairy districts of the Province, to be led by A. W. Campbell, C. E., Deputy Minister of Public Works, Toronto, and D. Ward King, of Missouri, the originator of the split-log drag, of which "Farmer's Advocate" readers have heard so much during the passing year. Mr. King has a continental reputation as an authority on road construction and maintenance, and is an able exponent of his views and experience as a lecturer on the platform. This is a large subject, and needs all the light that can be thrown upon it.

The horse industry is another topic in which all farmers are personally interested, and its discussion, in the light of the report of the Government Commission, as to the need of concerted action in the matter of improving the general horse stock of the Province, should interest every farmer who raises colts of any class.

The economical feeding of stock, a subject of special importance at the present time, is down for discussion, and should prove helpful to many who are short of supplies of fodder and other feedstuffs. The milking trials of dairy cows, the seed show, and the poultry display (the greatest of the year), the judging competition for young farmers, and the many other features of interest outlined in the programme, should prove attractive to all classes of farmers.

It is safe to say that in no way can young farmers spend a week more profitably than by taking in this short course of practical education, commencing on Monday afternoon with the annual meeting of the Experimental Union at the Agricultural College, open to all, where questions especially relating to the seeding and cultivation of farm crops will be discussed. Apart from the reports and discussions regarding the experimental work of the year, probably the outstanding feature of the Union meetings will relate to agricultural instruction in the public-school system. In addition to addresses by Mr. C. C. James, Deputy Minister of Agriculture, and President G. C. Creelman, of the O. A. C., reports are expected from the teachers of the six new agricultural classes in High Schools.

The judging of live stock commences on Tuesday afternoon, and the lectures, commencing the same day, are continued for four days. In former years, too many have made the mistake of leaving on Thursday, thus missing the Friday lectures on the dressed carcasses, and their sale by auction, which have generally been of special interest. This year, Mr. D. Ward King, who is an expert in horse-training, as well as on roads, will give a lecture on this subject and a practical demonstration in the show-ring of the training of an unbroken colt on Friday morning. As many as possible should, therefore, plan to stay till the close of the show.

A feature of the week will be the creamery meeting at the O. A. C., beginning at 1 p. m. on Thursday, December 12th, when half a dozen of the foremost experts in the dairy industry will introduce topics bristling with interest at the present time. In conjunction with the dairy-cattle section at the show, the addresses will relate to such live problems as cow-testing, co-operation between patrons and factorymen, and the sanitary handling of milk and milk products.

Single-fare rates on the railways, and moderate hotel expenses, should encourage farmers generally to avail themselves of this pleasant and profitable outing at a time when home work is not particularly pressing. Come prepared to question the lecturers and other experts. The Winter Fair is par excellence the farmer's fair, promoted and directed by the sons of the soil, and it should appeal to them for recognition and support to the extent of a bumper attendance. It will be a great week. Everybody go!

**AID TO THE BEEKEEPING INDUSTRY.**

Much as the busy bee has been extolled in poetry, prose and proverbial lore, it is a remarkable fact that the beekeeping industry has seldom received from Governmental offices the encouragement and support which its own importance and its immense incidental benefits to other phases of agriculture unquestionably warrant. Perhaps this is partly attributable to the limited numbers and unaggressive attitude of beekeepers, but more particularly, we surmise, to the woeful lack of general knowledge concerning the great value of bees in pollinating fruit, clover and buckwheat blossoms. Indeed, beekeepers are frequently anathematized by neighbors who really owe them a deep debt of gratitude for many an extra barrel of fruit or bushel of alsike seed. That orchards yield best, other conditions being equal, in the neighborhood of apiaries, is a matter of repeated comment among observant horticulturists. And yet, scores and hundreds of orchardists and farmers deny this, and berate the innocent apiarist, simply because they are uninformed regarding natural history, and too narrow and prejudiced to believe the statements of experts who have investigated the subject. There is great need for educational work in spreading knowledge of the value of bees to agriculture, as well as assisting beekeepers by freely-endowed investigation and experiment in the various phases and difficulties of modern apiary practice.

The value of the bee as an object-lesson for nature study, and of honey as a food, commends it. It displaces no other stock, withholds not a foot of ground from cultivation, outside the limited quarters of the apiary, and abstracts nothing from the fertility of the soil. France, which utilizes every resource, encourages beekeeping liberally. In Northern Ontario, honey is one of the first crops a farmer can take. Canadian honey has won high laurels wherever exhibited. At the Centennial Exhibition, in 1876, Ontario honey received first prize. At the World's Columbian Exhibition, in 1893, Ontario Province received 17 awards, and the whole United States 28. At the Pan-American Exhibition, in 1901, Ontario, with 21 exhibitors, secured the only gold medal, and 33 diplomas of honorable mention. Medals of distinction have also been won at St. Louis, Mo., and Paris, France.

These considerations emphasize the propriety of a couple of recent resolutions passed by organizations of apiarists. The National Beekeepers' Association of the United States, at their last annual meeting at Harrisburg, Pa., recorded a strong expression of opinion that all Federal, State and Provincial Departments of Agriculture give beekeeping encouragement and the same help that other branches of agriculture receive; that complaint had been made that incompetent men had frequently been appointed in the position of lecturers in this subject.

At a recent convention of the Beekeepers' Association of Ontario, a resolution was passed unanimously asking that exhibits be made at Toronto, London, Ottawa and other exhibitions, giving demonstrations in methods of producing honey, the management of bees, showing forth their natural history, and instructing the public in judging and caring for honey; also that the Dominion and Provincial Departments of Agriculture be asked to give beekeeping the same help and encouragement that other lines of agriculture are receiving.

We take it that the spirit of these resolutions does not call for monetary appropriation to the same extent as accorded, say, the dairying industry, for instance, but there certainly is ground for expecting greatly-increased Departmental attention and aid to beekeeping, and there is reason

to believe that, so far as Hon. Nelson Monteith, Ontario's Minister of Agriculture, is concerned, this will be forthcoming. In this connection, it may not be amiss to note that Dr. Robertson has intimated his intention of instituting a strong apiary department in the Macdonald College at Ste. Anne de Bellevue, Que., and the O. A. C. must not lag behind. It is now a moot question, whether it would not be advisable to establish, either at Jordan Harbor or Guelph (probably at both, with provision for interchange of colonies and demonstration facilities), a strong, well-equipped experimental and demonstration apiary department, in charge of an expert apiarist employed the year round. At present, there is but a fall-term course at the O. A. C. by a non-resident lecturer, and it is not conducted in a way to exalt the beekeeper's art or occupation in the mind of the average student. Development of this department is clearly required, and any reasonable expenditure will be well repaid. Manitoba and Nova Scotia Agricultural Colleges might also consider the claims of the bee industry in their institutions. Once such apiary departments are established in competent hands, other means of promoting the industry will suggest themselves in sequence. Professors in any line are prolific in devising plans for further aid to the industries they represent.



F. J. Miller, Ealing, London, Ont.  
President Ontario Beekeepers' Association.

**TWO PROPOSITIONS.**

**TO NON-SUBSCRIBERS**—Just stop a moment and think of the volume of helpful suggestions and live news compiled in the various departments of "The Farmer's Advocate and Home Magazine" from week to week. Now, ask yourself if you can afford to be without a valuable journal like this. Try it, and you will soon find that it is worth the subscription price many times over.

**HERE IS AN OFFER**—For \$1.50 we will send you "The Farmer's Advocate and Home Magazine" from now until December 31st, 1908. Subscribe now, and you will be in time for our Christmas Number, which comes out next week.

**TO OLD SUBSCRIBERS**—Very many subscriptions expire at the end of this year. If yours is one, we confidently look for a prompt renewal, as we are sure you appreciate our efforts to give you just what a farmer needs—a first-class, up-to-date farm paper. We know our subscribers are looking forward to our Christmas Number. Tell your neighbors about it, and secure their subscription at once, thus securing for yourself some of our premiums.

Do not neglect sending your renewal to "The Farmer's Advocate and Home Magazine" by the earliest possible mail.

**OUR MARITIME LETTER.**

**A CHAT WITH THE CHIEFTAINS.**

We were at Ottawa last week—a little pleasurable run to the Capital, as a conclusion to a tunnel campaign on the Mainland—merely to see how things agricultural stand all round, and to meet the men concerned with them officially for a moment. "Just see the trouble you are giving us, Father Burke," was Chief Clark's first salutation, as he pointed to the piles of correspondence from all over Canada requesting "Farm Weeds," the new illustrated bulletin we prize so much, "why, we'd need an edition ten times the size of that which we have, and a whole army of clerks to attend to this." We were delighted, we said, to know that "The Farmer's Advocate" fetched fire so conclusively in its recommendations, and didn't know what the Government had to do but supply the edition to bona-fide farmers, at least—the men that bulwarked the country on every side, and had a right, above all others, to whatever was going. As for clerks, were they not numerous enough already, or, if not, was it not in order to pre-empt others? Besides, we were able to show Chief Clark that he, himself, in his letter of transmission, had recommended a general distribution to farmers and teachers. "Well," he concluded, "we'll have to get other editions. And the work is worth a dollar of anyone's money." But why should the farmer pay, when the nabob, who had no direct interest in farm weeds, rejoiced in a free exemplar of this fine book? There is no reason, and the Chief, like the rest of us, will see that the Minister be convinced that this is a good work, even if out of the ordinary in cost, and although a little exacting on the staff of the Division.

Through innumerable cabinets and a small army of clerks we were conducted, in this same Canadian building, same side of flat, to the office of Dr. Rutherford, Live-stock Commissioner and Veterinary Director-General for Canada, and found him in the midst of a multiplicity of things, still wearing his perennial smile. But the worries and contrarities of life reach him, too, sad to say, and he is solicitous about one thing or another in the varied field he supervises. Lest we might delay under the seduction of his Scottish cadences, we had asked Chief McNeill to drop round innocently in fifteen minutes from our incoming and remind us of the other calls upon our limited time. We had just discussed a Maritime matter of considerable importance in which we were personally interested, when our Fidus Achates came to summon us, and, with the assurance that there was much in the Division of importance to Canadian husbandry eventuating just now, we took leave of the genial doctor, to the good-natured reminder, "You Maritime people amuse me; I am amused at it in your writings; you all think that you are the whole earth down there, and that there are no other concerns but yours." "My dear doctor," we rejoined, "we are certainly the most modest and least-obtruding of your humble servants, but in this public scramble we wish to vindicate our right to live and move and have our being, even if we cover little of the earth's geography. Besides, the man who does not push his quest as if it were all that needed attention generally gets left, and we are not out for amusement only, even if it doth attain our chieftains in the hearing." And so, conscious of the gravamen there again, we left with feelings really cordial.

The Fruit Division is somewhat of a home to us. We like the other departmental places, we are interested in all they serve, but in this we feel that our own special public effort, if worth anything, is registered. We found Chief McNeill and his staff occupied with many things, although, to our mind, there was only one necessary thing—the holding of another National Council of Horticulture for Canada this incoming winter. He seemed to be little concerned about that, however, so regardless becomes the official attitude with time's elapse. A newer and better report of crop conditions was the immediate matter in hand, and, indeed, he will work it out to great advantage shortly. The extension of the orchards of Canada, especially our own in Prince Edward Island, engaged him secondarily. We were anxious to ascertain, too, if any move had been made towards providing the horticulture of

the country with a colored, illustrated bulletin of the standards of commercial fruit, as had been done for weeds—such a work as the National Conference of a couple of years ago urgently demanded. A step had been taken in this direction, although not on the scale or with the pretensions of the work suggested, and the Division is cognizant of the demand and the necessity for accurate pictures of our Dominion fruits and their correct nomenclature. We may discuss some of these matters with the Chief at our annual meetings in these Maritime Provinces.

In Mr. Newman's bureau, where we met Mr. Raynor, one of Ontario's live agricultural publicists, we saw the work of preparation for the fall-speed competitions forwarded, and learned from the energetic secretary that the pure-seed movement itself was going on apace throughout the whole country. Mr. Newman thinks that there are great possibilities for this work with us down here, and hopes to see the Winter Fair at Amherst well filled, in the space allotted, with all kinds of selected field seeds. "Your excellent crop in Prince Edward Island," said he, "should permit of good sales of pure seeds being made this year through the society, for the Island membership; and, as the local Government is assisting in the gathering of a larger exhibit than ever, much good must necessarily come to you." We are certainly desirous of extending our seed-grain growing, and will take occasion to place the view of specialists before our constituency, that we are naturally the pure-seed division of Canada.

Chief McNeill politely left us with the Deputy Minister, Hon. Mr. Fisher, the Minister of Agriculture being out of town; and, strange to say, although not unknown to each other, this was our first personal encounter. Mr. O'Halloran is not an agricultural enthusiast, but a cool and calculating member of the legal fraternity, placed in his important position as a sort of moderator of expenditure, an allayer of exaggerated enthusiasm, an official Cerberus, often protecting the Minister's privacy, and ever defending his policy. We found him very gracious and considerate withal, and deeply devoted to the cause of agriculture generally. We heard nothing here of the importunities of Maritime leaders, although, unconsciously, the impression was imparted that our poor section of the Dominion had its full consideration by the Department, which is altogether to be brought into question. It is intended to call another Live-stock Council this winter at Ottawa for the whole Dominion. Most of us will not soon forget the first.

Other agriculturists in the official sense did we see at Ottawa, but of them and their work, anon.

A. E. BURKE.

## HORSES.

### A HORSEMEN'S EXPERIENCE COMPETITION.

The best matter an agricultural journal can publish is practical experience. What man has done, man can do. The experience of someone who has made a success of raising draft, saddle or carriage colts for market; or of one who has made money at picking up raw colts, mating, breaking, and selling them for good prices; or of someone who has had unusual success in handling vicious horses, or in treating wounds or diseases by some simple treatment, must be helpful to fellow farmers similarly situated.

We desire to print a number of such articles this winter, and, as a means of inducing our readers to contribute freely of their experience, we have decided to offer \$30 in cash prizes for the three best articles describing comprehensively the writers' personal experience in breeding, raising or handling horses. The first prize will be \$15, the second \$10, and the third \$5.

The idea is not to secure beautifully-finished essays, but plain, truthful information that will prove most instructive for our readers. The experience recited may extend over one year or several, but the longer the better. If you have made a particular success for a number of years, say, in raising draft colts, or in fitting up run-down horses and selling them at a profit, or at any other phase of the horse business, tell us about it. In the case of the colts, tell how they

were bred, how they were fed and cared for, what they cost, and what they sold for, especially submitting figures when possible. Then give us the benefit of what you have learned through your experience, and don't forget to mention the mistakes.

The prizes will be offered, not for the biggest story or the smoothest sentences, but for the most encouraging and useful experience. The articles will be critically examined, and, if seemingly extravagant statements are made, pains will be taken to investigate the facts.

The competition is open only to subscribers, and contributions are especially invited from experienced horsemen. Compositions of the schoolboy order are not eligible. The MSS. must be in our office before January 15th, 1908. The prize essays will be published early in the year, followed by such others as are worthy of space. For any of these that can be used (excepting the prize ones) compensation will be paid at our usual rates. Letters must be written with pen and ink, on one side of each sheet of paper only, and be marked plainly, "Horse Experience Competition."

The present is an important and promising era in the Canadian horse industry. The time is opportune for such a discussion. Think it over, and put your experience in writing. The effort will benefit you personally. Writing an article is far more helpful than reading one. Let us hear from you before January 15th, 1908; the more replies, the better.

### LAMENESS IN HORSES.

#### BOG SPAVIN AND THOROUGHPIN.

Bog spavin is a tense, fluctuating swelling at the interior portion of the anterior (or inner front) surface of the hock. It consists in a distension of a bursa or sack that contains synovia (joint-oil). Thoroughpin consists in a bursal enlargement, showing on the posterior portion of each side of the joint just below and a little anterior to the point of the hock. When the enlargement on one side is pressed, that of the other side will be noticeably increased, hence the name.

Some horses have naturally puffy hocks, and others have hocks that are predisposed to these bursal enlargements, and they do not cause lameness, and by many are not considered an unsoundness, especially in a heavy horse.

In cases of this kind it will generally be noticed that the puffs disappear to a greater or lesser degree upon exercise, but reappear when the animal has had a few hours' rest. This is accounted for from the fact that, while there is a great secretion of synovia during exercise, there is also a much greater consumption of the same; and, there being a constant secretion and little consumption during rest, the sacs become full when the animal is standing. Hence, when there is a distension of these sacs, there will be the puffiness noted when they become full; but when the animal is exercised the synovia is consumed in larger quantities than it is secreted, and the puffs disappear. Bog spavins and thoroughpins usually accompany each other. At the same time, it is not unknown for the one to be present without the other. When either or both appear from sprain or other injury the case is much more serious than those described. There is usually more or less severe lameness, accompanied by heat and soreness of the parts. In some cases the lameness is very severe, the animal being scarcely able to put any weight upon the leg. Bog spavin is more likely than thoroughpin to show these serious symptoms, but in some cases they appear from the same cause, and each causes trouble.

#### TREATMENT.

While we have stated that these puffs, in a heavy horse, when not accompanied with heat and pain, and not causing inconvenience, are not considered very serious, in a light horse they are very undesirable, and reduce his value greatly, and even in heavy horses they are now objected to by most horsemen. They are very hard to reduce. Treatment must, of course, be directed to causing a contraction of the bursal sac, and this can best be done by repeated blistering. The enlargements are usually more noticeable in cold than in warm weather, and, especially in colts, it will be noticed that, during the winter, especially if the animals are allowed to run out in the day time, there will be almost or quite an absence of enlargements, and then is when treatment is most successful. If the seats of the enlargements be well blistered about once a month during four or five months in cold weather, the sacs will usually contract to the normal size and the puffs no longer be noticeable. When lameness is present from the effects of these puffs, treatment must be more energetic. The first object should be to reduce

the inflammation and allay pain. In severe cases, where the pain and lameness is excessive, it is wise to place the patient in slings, as, if this is not done he will have trouble in rising, and may thus aggravate the trouble. The application of hot water, long and often to the parts, followed each time by the application of an anodyne lotion, as one composed of 1 ounce laudanum, 1 ounce chloroform,  $\frac{1}{2}$  ounce acetate of lead, and water to make a pint, will, in the course of a few days, accomplish the object. This can be followed by the application of cold water and compresses or camphorated liniment. Compresses made especially for the purpose can be purchased from dealers in veterinary instruments, or they can be applied with reasonable success by bandages. Of course, as soon as the acute lameness disappears, the patient should be removed out of the slings and allowed to lie down. When lameness has been cured, if we wish to reduce the enlargements, we should continue the compresses or blister repeatedly. In regard to compresses, if suitable ones, that will remain in place, can be procured, they will act as well as blistering, either in these cases, or in those first described, in which no lameness is present. "WHIP."

## LIVE STOCK.

### PROVINCIAL WINTER FAIR PROGRAMME.

In order to extend the high standard of educational lectures of previous years, the management of the Ontario Winter Fair, at Guelph, December 9th to 13th, has decided to add two new departments to the series of addresses, namely, "Good Roads," and "Horses." This will be in addition to the usual course of lectures on beef cattle, dairy cattle, sheep swine, poultry and seeds. There will also be the usual demonstration showing the conformation of the live animal required to obtain a certain kind of carcass. The reasons for the awards, publicly announced in the various judging rings, will give interested spectators an opportunity of knowing upon what special points, relative to conformation, the judges made their awards. All these various opportunities give the Winter Fair its reputation as one of the great educators on live-stock and kindred subjects, and account for its popularity among those who are interested in this class of subjects.

#### GOOD ROADS.

For the "Good Roads" addresses, the Fair has been fortunate in securing Mr. A. W. Campbell, Deputy Minister of Public Works, and Mr. D. Ward King, of Missouri, the originator of the split-log drag.

#### THE HORSE INDUSTRY.

Two sessions have been set apart for discussion of the "Horse." On Thursday morning there will be taken up practical subjects relating to the care and management of the horse. The Thursday afternoon session will be set apart for a general discussion of ways and means of improving conditions relating to the horse industry, following the report recently published by the Ontario Department of Agriculture. The Inspectors who visited the various sections of the Province will be present, as well as the directors of the Ontario Horse-breeders' Association, whose resolutions on various points will form a basis of discussion.

#### ECONOMICAL FEEDING AND HORSE-TRAINING.

The addresses on "Economical Feeding of Live Stock," a timely subject, should be very helpful to stock-feeders during the coming winter.

Attention is specially directed to the practical demonstration on the management of the unbroken horse, by Mr. D. Ward King, of Missouri. Mr. King has made a special study of this subject, and his ideas are original and radical. This demonstration will take place in the cattle-ring on Friday morning at 10 o'clock, and will last for from one to two hours.

Other lectures of importance will be given in connection with subjects relating to seed grain, poultry and dairying, the latter session taking up subjects of special interest to milk producers, including some practical information from individual members of testing associations organized by the Dominion Department of Agriculture for the purpose of extending the use of cow records.

#### EXHIBITS.

The exhibits will consist of interesting displays of beef cattle, dairy cattle, sheep and swine, beef carcasses, mutton carcasses and swine carcasses, and will include the unexcelled poultry show, taking in both live and dressed poultry. The seed department will contain exhibits entered in the open competition, and also those entered for the special prizes offered by the Canadian Seed-growers' Association.

#### JUDGING.

The following programme for judging will be carried out as far as possible:

Dairy Cattle.—Saturday, 1 p. m., commencement of dairy test; Monday, 1 p. m., conclusion of dairy test.  
 Beef Cattle.—Tuesday, 2 p. m.; Wednesday, 10 a. m., continued until finished.  
 Sheep.—Tuesday, 2 p. m.; Wednesday, 10 a. m., continued until finished.  
 Swine.—Bacon hogs: Tuesday, 2 p. m.; other classes, Wednesday, 10 a. m.  
 Poultry.—Tuesday, 8 a. m.

**BLOCK TESTS.**

The killing of the different classes of live stock will commence as follows (exhibitors will carefully note Rule 11 of the prize-list):

Bacon Hogs.—Wednesday, Dec. 11th, 8 a. m.  
 Cattle.—Wednesday, Dec. 11th, 3.30 p. m.  
 Sheep.—Thursday, Dec. 12th, 8 a. m.

The exhibit of carcasses in the cooling room will be open to the public Wednesday evening, Thursday afternoon and evening, and Friday morning, and, if possible, Wednesday afternoon. This department will be in charge of Prof. R. W. Wade, O. A. College.

**RAILROAD RATES.**

General Public.—Single-fare rates for all Ontario points east of Port Arthur, on the usual certificate plan, will be available.

**EXHIBITORS' LUNCHEON.**

The exhibitors of live stock at the Winter Fair will be entertained at luncheon by the City Council from 12.30 p. m. to 1.45 p. m. Exhibitors of sheep and dairy cattle on Tuesday, exhibitors of swine on Wednesday, and exhibitors of beef cattle on Thursday.

**HOTEL ACCOMMODATION.**

The City Council, Board of Trade and Fat-stock Club have taken up the question of accommodation, and have placed a competent man in charge of the work. He will have an office in the City Hall, close to the Fair Building. Persons wanting accommodation should see him at once upon arrival at Guelph. Any person wishing to arrange for accommodation beforehand should write to Ald. J. M. Struthers, Chairman Reception Committee, Guelph.

[Note.—Detailed programme of lectures and list of meetings appear on another page in the back part of this paper.]

**DON'T SACRIFICE THE BREEDING SOWS.**

Editor "The Farmer's Advocate":

Of late we have heard much comment on the matter of raising a fresh crop of pigs in the face of a 6-cent market and high-priced feed. This is the initial question that would naturally be asked by the fellow who uses his hands but forgets he has a brain. We have made it our business to inquire into this matter, and only last week, while in the stock-yards, were astonished to find so many fine specimens of brood sows, well advanced in pig, going to the slaughter-house. This was not the only thing that impressed us. Pigs half-grown, pigs half-fed, and pigs of all shapes and sizes were dumped on the packer. The only cause we can attribute this to is the farmer getting rid of his stock at sacrifice prices in order that he may sell his grain. This may seem very well for the present, but there is always a future. Indications are pointing to cheaper feed, and what are we going to do for hogs next summer. We are not going to have half enough. The packers are already predicting high prices for March and April pigs, and in our own locality a large packer has been going through the country and offering the farmer pigs and feed for nothing, and to give every tenth hog to the farmer for his trouble of feeding. This looks good to us, and we are filling every available space in our barns in order to be able to supply the demand for breeding stock to replace those valuable matrons that were sent to the factory. History will repeat itself, and soon the farmer will wake up and find cheaper feed, with hogs selling at top-notch prices, and many men with nothing to look at but empty pens. Much controversy has taken place from time to time as to the cause of hogs taking a slump, in the face of good local and foreign markets for the packers. Usually the packers have had to take the blame for such conditions, but the farmer, we believe, is wholly responsible for the existing low prices. Is it reasonable to suppose that any firm could be expected to pay even a reasonable price for goods that are totally unfit to put into their business; in fact, which, if continued for any considerable length of time, would ruin any trade? D. C. FLATT & SON, Wentworth Co., Ont.

A prompt renewal of your subscription to "The Farmer's Advocate and Home Magazine" is requested.

**THE WHY AND HOW OF THE SHEEP INDUSTRY.**

During the last decade of the last century the sheep industry was at a low ebb. Mutton, in common with other articles, was low, while wool was away down, at a price which made selling seem like giving away. The census of 1901 actually found rather fewer sheep in the country than in 1891. Since 1901, sheep have not increased very rapidly in numbers, because the increased demand for mutton and the consequent high prices led farmers to sell many of their ewe lambs, as well as wethers. The growth of the

lamb and a run-out flock. There are sections where a good pure-bred ram is not to be found. The ewes are long-legged, ragged of fleece, and usually altogether bare underneath. Long, thin necks, hollow backs, with a lack of heart-girth, and consequently lack of good heart and lung power, without which the whole body cannot be properly nourished, are those most frequently met with. These sheep are fine in the bone, and it is not necessary to feel to be sure there is no flesh on their bodies. From districts like this come to the market the lambs that average up the lower side of sixty pounds, and are dear at any price, because they will not kill out much over forty per cent. dressed weight. This is not the worst feature. The carcasses are so lean and tough that, to the consumer, they are dear at any price. Lambs of this sort are bought at from 1½c. to 2c. per pound below the ruling prices, if bought at all. It invariably happens that in districts where poor sheep are raised the rams are not castrated, and both sexes are allowed to wag long tails.

**GETTING NEARER THE TOP.**

Other districts have slightly better sheep. Good rams of fair quality are used, and better food is given, with the result that the lambs run from 60 to 80 pounds, the average being between 65 and 70 pounds. Lambs of this class usually average up in price from ½ to 1c. less per pound live weight. Very many districts raise this class. There are still other districts where the lambs average 100 pounds or better. These lambs are of good type, well-fleshed and woolled. All tails are trimmed off, and no ram lambs are to be found amongst them. This class of lambs top the market, and pay the breeder and butcher good profits, and supply the consumer with a choice article. They invariably come from sections where nothing but pure-bred rams are used, and the ewes look, in many cases, like pure-breds. There, for many years the breeder has used nothing but pure-bred sires, and of one particular breed—not a Leicester this year and a Shropshire next year. While both these are excellent breeds, it is impossible to grade up a flock by such a practice.

**A FEW FACTS TO THINK OVER.**

This fall, one breeder we know of brought in 17 lambs to the buyer, his whole lamb crop from 20 ewes. They averaged barely 60 pounds. The buyer, under protest, paid 4c. per pound, or \$2.40 each. A man in another district brought in 20 lambs that averaged 102 pounds. He kept 20 ewes, and his lamb crop from these once reached the 28 mark; this year it was 24. He was paid 5½c. per pound, or \$5.60 each. The 20 brought \$112, to say nothing of the four best ewe lambs

retained as breeders. The first man's lambs brought \$10.80. Bad luck or a dozen other excuses may be made for the poor lot, but sheep-breeders know that well-bred, well-fed and properly-mated sheep raise a good percentage of strong twin lambs, while in run-out flocks that are neglected, one is the limit, and well if it lives. Poorly-fed ewes, served by poor scrub rams, produce weak, sickly lambs that give no end of trouble trying to get them to live—very often trouble taken in vain. The second man is making the

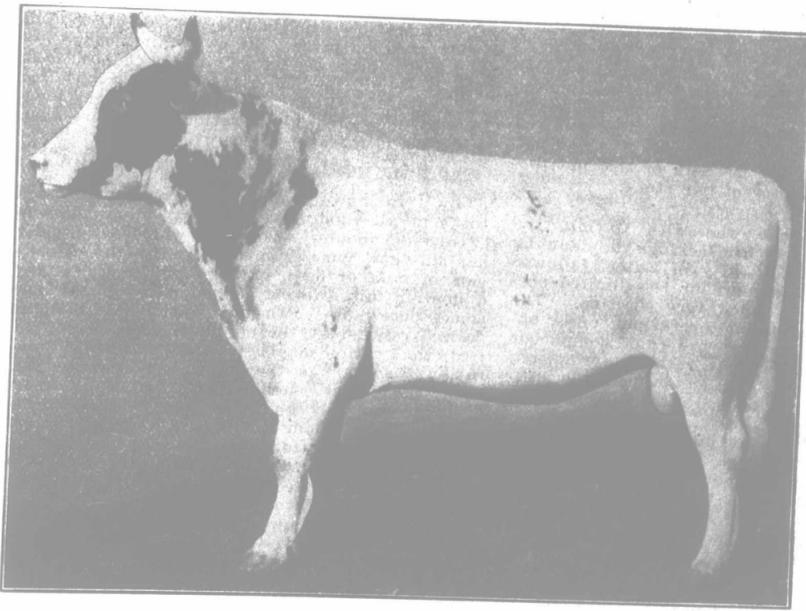
most out of the business; the first man was in it because in some way he had to make a bare living, and sheep seemed easiest. The good pure-bred ram used cost \$40, the scrub was valued at \$5; we doubt if he was worth it. The four ewe lambs could not be bought for \$25. Say the 21 lambs were worth \$137; the 17 brought \$10.80—\$96.20 of a difference. This great difference came not by the use of one superior sire in one year—breeding operations do not work so fast—but by the continued use of good pure-bred sires of this one breed, and by a rigorous culling out of the inferior ewes, coupled with good feeding and management.



Two-year-old Southdown Ram.

First prize and champion of the breed, Royal Show, 1907. Shown by W. M. Cazalet.

dairy industry in some sections caused farmers to do away with their sheep, because sheep are thought to be hard on pasture. Others, with suitable environment for sheep, did not go into raising them because they feared low prices again. To-day, on the average farm, all sides of the question considered, and the debits and credits duly brought down, sheep are the BEST-PAYING CLASS OF LIVE STOCK. They require less handling than other kinds. Handling takes labor, and labor is both scarce and dear. They will do well on land unsuitable for any other class of stock, and they will help clear a dirty farm of most of its noxious weeds. There are upwards of six hundred weeds and grasses in America. Of these, horses will eat eighty-three, cattle fifty-five, and sheep five hundred and fifty. These facts, coupled with the steadily-increasing demand for mutton, at paying prices, and the high price of wool, should lead many farmers to double their flocks and improve their management, and



Pearlstone 18510.

Ayrshire bull, three years old. First in aged class, Canada Central Exhibition, Ottawa, 1907. Exhibited by D. M. Watt, St. Louis Station, Quebec.

consequently treble their returns. Almost every farm could keep two dozen good breeding ewes without very materially lessening the number of other animals kept now. Northern and Eastern Ontario and Quebec have much land that would yield a good revenue from sheep that is being unsuccessfully cultivated or grazed by cattle—i. e., if a suitable breed is kept and properly managed.

**MISTAKES IN MANAGEMENT.**

Those acquainted with the industry know that on many farms the management is bad. One of the first great mistakes is the use of grade and scrub rams, with the consequent result, poor

To-day, every progressive sheepman keeps a pure-bred ram at the head of his flock, and present prices warrant every breeder keeping one. All flocks need pure blood, and the more run-out the sheep are, the greater is the need and the greater will be the results when a pure-bred of the right type is introduced. The better bred the sire is, the more prepotent will his blood be to effect change or improvement; while the more degenerate the ewes, the weaker their blood will be to resist change. Thus it is that, in place of fifty per cent. of the sires characteristics, it is more likely to be seventy-five per cent. that the lambs will possess.

#### WINTER QUARTERS AND FEEDING.

Sheep, in order to thrive, need comfortable winter quarters. The building need not be expensive, so long as it is free from draughts and will keep off the snow, two things that cause most of the winter troubles. In addition to being free from draughts, the building should have lots of pure air, if the sheep are going to be healthy. Sheep are unable to stand close con-

finement. Better turn them out altogether and feed them well than keep them in damp, poorly-ventilated quarters. Good husbandry consists of good food and proper housing. Sheep should have a large yard to run out into when the weather is not stormy; cold will not harm them during the day. The feeding racks should have perpendicular sides, at least on the side the sheep eat from, if they feed only from one side, and should not be over eighteen inches wide at most, but fourteen will be better, as then the sheep will not be able to push its head so far through, and thus dirty and destroy all the neck wool. The sticks should be far enough apart to let the sheep's head in, else they will pull the feed out and part will be wasted. A mixture of salt and sulphur should be always where they can get at it. These purify the blood and keep the whole system in order. The ordinary feeds grown on the farm are sufficient, if fed properly. There is nothing better than well-saved clover hay. Good oat straw, say one feed a day, is excellent. Pea-straw cut on the green side is a feed hard to beat, particularly if a few peas are still to be

found. Some sheepmen feed it unthreshed, and pea-mutton cannot be excelled. But with any of these feeds better results will be obtained by feeding a couple or three pounds a day per head of good Swede turnips. They balance up the other feeds and make the ration more succulent and palatable, and therefore more digestible. A few oats, say from one-half to one pound, gives wonderful results, particularly before and during the breeding season, and at lambing time.

#### TWO SPECIAL MARKETS.

Those who feed for the Christmas market, of late years, have made more money than those who sold early. The Easter market has been extremely high, and the demand is invariably sure to be keen, because few keep their lambs that long. However, the sheep-feeders to-day are making more than the beef-cattle men. Prices for mutton and lambs have been much above beef prices. This, coupled with the fact that sheep are less trouble, and can be fed on a smaller margin, should make thinking farmers seriously consider this important industry. N.F.M.O.

## Some Principles of Economical Stock Feeding.

The winter of 1907-8 is likely long to be remembered by Canadian live-stock men. Not for forty years or more have prices for feeds of all kinds approached the present high level. Still, from the standpoint of live-stock improvement, occasional periods of high prices for feed are more or less advantageous, the ability of the stockman to truly pass upon his own animals being the measure of such advantage. He who can correctly judge his own stock and has the courage to part with such as fail to come up to his standard, will this year be doubly advantaged.

Yet, all advisable weeding done, much care and study must still be given his feeding operations by the stockman who wishes to come through the winter at anything like a reasonable cost. Hence, a brief consideration of some of the fundamental principles of animal nutrition may prove of use to some worried farmer at the present juncture.

#### BULK THE FIRST ESSENTIAL.

One of the very first aims of the successful feeder is to fill his animals up. Contentment plays no small part in economical feeding, and no condition so conduces to contentment as a good full stomach and active intestines. Thus, though roughage of all kinds may be relatively even dearer than concentrates of various sorts, it will not do to sacrifice bulk in too large a degree in order to improve upon quality, or for the sake of economy. Two pounds of meal and twenty pounds of straw is likely to give better results than five or six pounds of hay and an equal weight of meal fed the same animal.

#### PALATABILITY PAYS.

Generally speaking, coarse feeds lack somewhat in palatability. Probably the best-known method of inducing a willing—in fact, one might almost say an enthusiastic—consumption of otherwise unpalatable food is to lend it, by some means or other, a good measure of that quality so pleasing to all classes of live stock.

#### SUCCULENCE.

Where roots or silage wherewith to mix the straw or low-grade hay are lacking, the damping down with a liberal quantity of water, followed by the admixture of a more or less limited portion of meal, will be found very effective. The writer recalls some feeding operations once observed in Manitoba, where the chief component part of the ration was that rather unpromising material, wheat straw. By lending succulence to the straw and chaff, or chaffed straw, it evidently gained greatly in palatability, and even in nutritive value, for some 300 or 400 steers of different ages, fed on this same feed, with the addition of a comparatively small amount of grain, looked full, and sleek, and thrifty and happy. In this case the straw was chaffed, then thoroughly wet with hot water from the boiler of a small portable engine, the same that was used to chaff the straw. Succulence lends palatability, apparently increases digestibility, and certainly increases the range of foods profitably utilizable, hence should be a characteristic of the roughage part of the ration whenever possible.

Succulence once a characteristic of the more bulky part of a ration, the modification of its quality by the addition of meal becomes a comparatively easy problem. Almost any kind of meal or concentrate may be used, even such as might, under less favorable conditions, be quite impossible on account of unpalatability. Further, the feeding of the concentrates mixed in with the bulky part of the food insures somewhat more thorough digestion, since it has a much better chance of being regurgitated and rechewed along with the coarse food with which it was mixed.

With roots or ensilage as a basis, the preparation of a ration that shall stand high in palatability and feeding value is simple. A method of preparing the ration that has been found to give most excellent results is as fol-

lows: On the feed-room floor is spread a layer of cut straw or hay, as the case may be; on top of this a layer of pulped roots or ensilage; then, if for steers, a sprinkling of the meal mixture being fed. The meal layer is followed by straw or hay, followed by roots or ensilage, again followed by meal, and so on, until the amount required for the one, two or three-day period, as the case may be, has been placed in the pile. If the supply of roots or ensilage should be insufficient to allow of putting such thick layers thereof as to insure the whole mass being moistened, then a sprinkling of water so liberal as to insure complete softening of the hay or straw, but not so great as to prevent fermentation or heating, will be found eminently satisfactory as a means of adding palatability to the ration.

Where dairy cows or different groups of animals, receiving different amounts of meal per head per diem, are being fed from the same pile, the meal layer, at least in part, would have to be omitted, and the proper additional amount for each group or each animal added at feeding time to the roughage after it was in the manger. Where roots and ensilage are lacking, the mixture of chopped hay or straw and meal, all moistened down with water, will be found of great advantage. Where hay or straw cannot be chopped, moistening the long feed a day or two ahead with water, or, if on the day of feeding, with water to which a little salt has been added, will help matters, especially if a sprinkling of meal be thrown on the moistened straw or hay.

With feed prepared in this way, only two feeds a day need be given. If a certain amount of long feed is being fed as well as the chopped feed, then it should be fed right after the cut feed morning or evening, or morning and evening. The dividing of a given ration into more than two feeds is a waste of energy.

#### "BALANCED RATIONS" EXPLAINED.

By "ration" is meant, of course, the sum total of all food consumed by an animal in twenty-four hours. The man who feeds usually has in view some specific objective—the production of milk or flesh, or the maintenance of the animal in fair growing condition till grass time comes once more. When the ration fed gives the desired results, at the minimum expenditure for feed, that ration may be said to be a "balanced ration," so far as that stockman is concerned, even though it should differ materially from what is generally known as the "standard ration." By trying long enough, and varying the composition of the ration often enough, the man who knew absolutely nothing of the composition of foods or of their feeding values, might eventually stumble on the mixture that would give the highest returns at the lowest cost; that is, a balanced ration, so far as he was concerned. The man who knows something of the feeding values and of the peculiarities of different feeds can, however, by doing a little thinking and calculating, arrive quickly at the probably best proportions in which to mix the feeds at his disposal.

Food given animals has two functions to perform: (1) To supply material for the maintenance of life and the restoration of worn out tissue; and (2) to build up extra tissue of one kind or another, as flesh, fat or wool, or to produce milk. The substances required for these purposes are three in number, sugar or starch (carbohydrates), fat, and protein. Fat and sugar and starch are very closely related in composition and function. Fat is more valuable than sugar or starch; generally speaking, 1 pound fat is worth 2.25 pounds or more of sugar or starch (some chemists rate it 2.3 times as valuable). Sugar and starch are practically the same thing, so far as food value is concerned.

Fat and starch or sugar—the two latter commonly known as carbohydrates—maintain the heat

of the body and enter into the composition of milk or help build up different tissues. Protein enters very largely into the composition of new tissues, particularly the muscles of lean meat, and forms a very important part of milk, viz., casein or curd.

Protein might be said to be the life-giver, the tissue-builder, while fat and carbohydrates might be called the life-supporters. Practically every ration possible to feed an animal contains more or less of each of these two great groups of substances. In fact, everything grown on the farm contains these substances in certain proportions. These proportions vary, of course, in different foods. In addition, there is more or less mineral matter, as, for instance, lime, phosphorus and potash, as well as various other substances. For the present purpose, however, the mineral part of the feeds may be neglected.

#### THE NUTRITIVE RATIO.

A study of the animal body and its products, together with observations on the results obtained by feeding certain rations, has led to the conclusion that, for a given purpose, the best results are obtained when a certain proportion maintains between the amount of protein on the one side, and the amount of carbohydrates, plus the fat, on the other in the ration. This proportion, whatever it may happen to be, in any given ration or food—1 of protein to 3 of carbohydrates and fat, or 1 of protein to 50.5 of carbohydrates and fat—is called the nutritive ratio, and is written thus, 1:3, or 1:50.5, as the case may be. The first is called a "narrow nutritive ratio," the latter a "wide nutritive ratio."

#### COMPOUNDING RATIONS.

The digestible constituents of a food or ration known, the nutritive ratio is easily determined. To illustrate, 100 pounds wheat bran contains 12.2 pounds protein, 39.2 pounds carbohydrates, and 2.7 pounds fat (or, as sometimes called, ether extract). The fat multiplied by 2.25, gives 6.07 its equivalent in carbohydrates, the nutritive ratio therefore 12.2:45.27 (39.2 + 6.07), or, simplifying—that is, dividing through by the protein number—we get 1:3.7, the more common way of expressing the same. Where a number of different feeds enter into a ration, as is usually the case, the different amounts of protein are added together on the one side, and the different amounts of carbohydrates and fat on the other, and the total simplified as above.

To illustrate the method of arriving at the nutritive ratio of a ration, or of compiling a ration of a certain nutritive ratio, suppose it to be a question of determining the nutritive ratio of the following ration, and of modifying it, if necessary, to suit a dairy cow in full flow of milk:

- 40 Pounds corn ensilage,
- 10 Pounds clover hay,
- 5 Pounds oat straw
- 5 Pounds wheat bran,
- 3 Pounds oats.

According to table appended hereto, the ration shows the following composition:

FOOD	Amount, Lbs.	Protein, Lbs.	Digestible Carbohydrates + Fat (x 2.25), Lbs.	Total, Lbs.
Corn Ensilage	40	8.4	5.16	5.52
Clover Hay	10	8.5	3.96	4.64
Oat Straw	5	4.5	2.02	2.08
Wheat Bran	5	4.4	2.26	2.84
Oats	3	2.7	1.60	1.87
Total		28.5	15.00	16.99

This shows a proportion of 1.99 protein to

15.00 carbohydrates and fat, or, expressing the same idea in other words, it shows a nutritive ratio of 1.99:15.00, or, as more commonly expressed, N. R., 1:7.5.

"STANDARD" RATIOS.

Now, chemical analysis and practical feeding experiments have led to the conclusion that probably the best or "standard ration" for milk production should show a nutritive ratio of about 1:5.7. It is evident, therefore, that our ration falls considerably short in protein. To balance it up, some food rich in protein must be added. A glance at the table will show oil meal, cottonseed meal or pea meal as being of such character. The addition of 2 pounds of oil cake would make our ration show 2.58 pounds protein and 15.99 pounds carbohydrates and fat, or a nutritive ratio of 1:6.2. This is not yet as "narrow" as the "standard," but is what may be considered a ration with a good nutritive ratio, or, as commonly expressed, a fairly well-balanced ration. Experience in America has shown that rations of wider nutritive ratio than the European standard calls for are usually cheaper and quite as effective.

The standards most commonly accepted—the Wolf-Lehmann—are as follows, for the dairy cow in milk and the fattening steer. Dairy cow weighing 1,000 pounds, and yielding at least 22 pounds of milk per day: Dry matter, 29.0 lbs.; protein, 2.5 lbs.; carbohydrates and fat, 14.25, showing a nutritive ratio, 1:5.7. Steer, rapid fattening of 1,000-lb. steer: Dry matter, 30.0 lbs.; carbohydrates and fat, 16.25 lbs.; N. R., (nutritive ratio), 1:6.5.

Where animals are not expected to gain in flesh, nor produce milk in considerable quantities, nor do hard work, as in the case of oxen or horses, such narrow rations are not required. This means, of course, lowering the cost of feeding, for the ration of a narrow nutritive ratio is, under ordinary conditions, usually expensive.

The table which follows shows the dry matter, the protein, the carbohydrates and fat combined, the total digestible constituents and the nutritive ratio of most of our more common feeding stuffs. This table should greatly facilitate the arriving at some idea as to the probable value of a ration for the purpose in mind:

NAME.	Total Dry Matter in Each Lb.	Protein.	Carbohydrates + Fat x 2.25.	Total.	Nutritive Ratio.
<b>Hay, Straw, etc.—</b>					
Timothy Hay	.87	.028	.465	.493	1:16.6
Red Clover	.85	.068	.396	.464	1:5.8
Alfalfa	.92	.110	.423	.533	1:3.8
Oat Straw	.91	.012	.404	.416	1:33.6
Wheat Straw	.90	.004	.372	.376	1:93.
Pea-vine Straw	.86	.043	.341	.384	1:7.9
Corn Fodder	.58	.025	.373	.398	1:14.9
Corn Stover	.60	.017	.340	.357	1:19.9
<b>Grain—</b>					
Oats	.89	.092	.568	.660	1:6.2
Barley	.89	.087	.692	.779	1:7.9
Wheat	.90	.102	.730	.832	1:7.2
Peas	.90	.168	.534	.702	1:3.2
Corn	.89	.079	.764	.843	1:9.7
Rye	.88	.099	.700	.799	1:7.1
Buckwheat	.87	.077	.533	.610	1:6.9
Flaxseed	.91	.206	.823	.469	1:4.0
<b>Mill Products—</b>					
Wheat Bran	.88	.122	.453	.575	1:3.7
Middlings (Wheat)	.88	.128	.607	.735	1:4.7
Buckwheat Bran	.90	.074	.347	.421	1:4.7
Buckwheat Middlings	.87	.220	.456	.676	1:2.1
<b>By-products—</b>					
Malt Sprouts	.90	.186	.409	.595	1:2.2
<b>Brewers' Grains</b>					
(wet)	.24	.039	.125	.164	1:3.2
(dry)	.92	.157	.478	.635	1:3.
Gluten Meal (high-class)	.92	.258	.656	.914	1:2.5
Linseed Meal (old process)	.91	.293	.485	.778	1:1.7
Linseed Meal (new process)	.90	.282	.464	.746	1:1.6
Cotton-seed Meal	.92	.372	.444	.816	1:1.2
Skim Milk	.094	.029	.059	.088	1:2.
Buttermilk	.10	.039	.065	.104	1:1.7
Whey	.066	.008	.054	.062	1:6.7
<b>Roots and Ensilage—</b>					
Mangels	.09	.011	.056	.067	1:5.1
Turnips	.09	.010	.078	.088	1:1.8
Carrots	.11	.008	.082	.090	1:10.3
Sugar Beets	.13	.011	.104	.115	1:9.4
Ensilage (Corn)	.21	.009	.129	.138	1:14.3
Potatoes	.21	.009	.165	.174	1:18.3
<b>Soiling Fodder—</b>					
Fodder Corn	.20	.010	.125	.135	1:12.5
Peas and Oats	.16	.018	.076	.094	1:4.2
Peas and Barley	.16	.017	.077	.094	1:4.5
Red Clover	.29	.029	.164	.193	1:5.6
Alfalfa	.28	.039	.138	.177	1:3.5

THE HOG PROBLEM AGAIN.

It is seldom that the farmer allows himself to be carried away by a panic. His customary hard common sense and conservative methods usually protect him from this evil; but when we hear of young pigs being sold at fifty cents each at weaning time, or slaughtered to stop their demands for food, it would seem as though something closely approaching a panic must be abroad in the land.

PANIC AGGRAVATES EVIL.

There probably never was a panic which did not aggravate the evil which set it in motion, and the demoralizing effects of the present panic among farmers must be apparent to every eye. Doubtless there are some farmers who are forced to sell their pigs through sheer necessity, but such unfortunate cases are not sufficiently numerous to account for all the young pigs and breeding sows which are being dumped upon a doubly-glutted market at present. The farmer with feed in his bins has need to do some careful calculating before deciding to throw away his pigs. Selling stock on a poor market in order to sell grain upon a high market, is not always a profitable enterprise, and the number of dollars coming into the treasury during the year may be considerably less under this method than had the grain been marketed in the form of meat. Farm animals, and especially hogs, consume and turn into valuable meat many products which otherwise would have been wasted; and though the farmer may not always realize the highest market prices for the grain fed to his hogs, the otherwise unsalable products for which the hogs have provided a market will generally, under a careful system of feeding, much more than make up the deficiency.

WHERE IS THE PROFIT?

What does the farmer gain by sacrificing his hogs and selling his grain? In the first place, he obtains prevailing market prices for his grain, which might or might not have been obtained had the grain been fed to hogs. Secondly, he saves the labor of feeding the hogs. Thirdly, he has less risk, and less capital invested. Against this, he has incurred a heavy loss by disposing of his stock on a glutted market. He still has the labor of cleaning the grain and teaming it to market. He has lost the sale of a number of products which the hogs could profitably utilize. He has sold a lot of valuable fertility, the absence of which will lessen his next crop, and hence increase the cost of production. He has placed himself in a position where he cannot take advantage of the high prices for finished hogs which seem certain to prevail when the present excitement has burned itself out. And, after all, he is not absolutely certain that he got any more for his grain than if he had fed it to his hogs. This last point calls for further consideration.

SOME IMPORTANT FIGURES.

During the past two years, the Ontario Agricultural College has collected some very valuable data regarding the prices realized for feeds consumed by hogs. Part of the hogs were fed at the College, and part were fed by farmers in different parts of the Province. The experiments deal with the food consumed by 297 hogs, aggregating 56,718 pounds when sold, or an average weight of 190.9 pounds each. A variety of foods was used, comprising barley, peas, oats, middlings, bran, corn, skim milk, roots, and miscellaneous foods which were valued by the feeders at certain sums and duly charged against the pigs. The young pigs, at weaning time, are valued at \$1.50 each, which is considerably above the cost of raising pigs from birth to weaning, including maintenance of sow, etc., as shown by experiments conducted at the College. Deducting from the selling price the cost of the pigs, at \$1.50 each, and the charges for miscellaneous foods, we find as follows:

If the pigs were sold at 4½ cents per pound, live weight, they would return \$20.45 per ton for all meal consumed, including middlings and bran, 20 cents per hundredweight for skim milk, and 10 cents per bushel for roots.

At 5 cents per pound, live weight, they would return \$23.87 per ton for meal, 20 cents per hundredweight for skim milk, and 10 cents per bushel for roots.

At 5½ cents per pound, live weight, they would return \$27.29 per ton for meal, 20 cents per hundredweight for skim milk, and 10 cents per bushel for roots.

At 6 cents per pound, live weight, they would return \$30.71 per ton for meal, 20 cents per hundredweight for skim milk, and 10 cents per bushel for roots.

At 6½ cents per pound, live weight, they would return \$34.13 per ton for meal, 30 cents per cwt. for milk, and 10 cents per bushel for roots.

Considering that middlings and bran enter quite largely into the mixture, and taking into consideration the prices received for hogs during the year, we must admit that this is a remarkably good showing in values received for feed. We must also remember that the grain was fed as it

came from the threshing machine, and the price obtained for uncleaned grain by feeding it to these pigs should certainly leave a comfortable margin of profit to the farmer.

LET US CONSIDER.

The points touched upon would bear amplification, but perhaps enough has been said to set someone thinking. Let it be understood, however, that there is no attempt to dictate to the farmer. Every farmer must be his own judge as to what is the best course for him to pursue, and the farmer who finds himself compelled to sacrifice his stock is deserving of sympathy. But let those with feed on hand take very careful counsel with themselves, and thoroughly consider all the features of the situation before deciding upon a line of action. Let our action be governed by sane deliberation, and let us do all in our power to stem the disastrous tide of panic which appears to threaten.

GEO. E. DAY.  
Ontario Agricultural College.

LEAVES FROM A FARMER'S NOTEBOOK.

Editor "The Farmer's Advocate":

How to feed economically, and still keep stock up to the standard condition, is a problem that farmers everywhere are trying to solve. The abundance of feed in recent years has encouraged prodigality, and the present shortage in food-stuffs presents a somewhat apprehensive aspect where the necessity for strict curtailment is more than ordinarily recognized. That this scarcity is greatly overestimated is becoming more and more apparent as the season advances. In my own district we are not anticipating anything of a serious nature. With some crops we have had a partial failure, in others we are up to the average. To insure a sufficiency of fodder, the utilizing of straw will be quite prominent this winter in our feeding operations. Strawstacks, for the most part, are conspicuous by their absence, straw being too valuable an asset on any farm where live stock is kept to be longer despised as a cattle food. It has, so far as possible, been stored under cover, instead of being allowed to rot down, as heretofore.

USE OIL MEAL WITH STRAW AND COARSE FODDERS.

Now is a good time to get busy figuring out a system of winter feeding. In constructing a ration suitable to the needs of stock, straw and other coarse fodders may be largely used in the place of more expensive hay or clover. Fed in conjunction with a little oil cake, they are made palatable and nutritious, and animals receiving nothing else will come out in the spring in as good condition as cattle getting the best of hay. This plan is very extensively followed by Old Country farmers in the management of breeding cows and young heifers. Where silage or roots are to be had, it is preferable to run the straw through a cutting-box and mix with the succulent material, allowing the mixture to stand for several hours before feeding. If grain is to form part of the ration, it should be stirred into the mixture, so that it may go into the first stomach, be brought up again, and masticated, thus enabling the animal to get the full benefit of it. The foregoing principles reduced to practice will effect a considerable saving, and aid in obtaining the largest profit.

VALUE OF MILK RECORDS WHEN WEEDING THE HERD.

Dairymen who have been keeping individual records of their herds are this year afforded a striking illustration of their utility. If by force of circumstances they are forced to reduce the number of their cows, they will have some definite information as to which ones it would be wise to dispose of. Some are waiting long and loud over a very real discrepancy between stock and food supply, while stable room is being given a lot of boarder animals that will eat their heads off many times over before spring. It will be money in pocket to knock these on the head, as the hides and tallow are their only cash equivalent. If present conditions should result in a general weeding out of our dairy cattle, any temporary depression would ultimately be regarded as a blessing in disguise.

RETAIN SOME OF THE BROOD SOWS.

The bacon-hog outlook does not seem to be of the brightest. An unusual number of brood sows are being rushed to market, which, if continued, will result in no small curtailment of production. Many farmers are inclined to get panicky over the present situation, a fact they will soon regret should they allow any undue excitement to influence their serious judgment. All branches of farming have their ups and downs, which doubtless has something to do with the farmer having his "ins" and "outs." Unfortunately, when the ups occur the farmer is frequently out, and vice versa. Now would be a good time to profit by past experiences, and hold on to at least part of the breeding sows. A reasonable number of

hogs are a necessity on every farm, and, as rent-raisers and mortgage-lifters, have a record that is probably unexcelled by any other line of live stock. To winter the sows, would not be a very expensive operation, if they are provided with warm and comfortable quarters. Very little, if any, grain need be fed, as they can be carried along in very fair condition on roots, ensilage and kitchen slops, arrangements being made to get them out early to pasture in the spring.

#### ADVANTAGE OF SCALES IN MARKETING STOCK.

That the price of hogs continues low, notwithstanding the abnormal cost of feed, is a poser that farmers generally would like some ray of light thrown upon. Packers claim that the shipment of selects has been considerably reduced this fall, and the market glutted with unfinished and undersized hogs, which alone would have no small tendency to keep prices down. Evidently, farmers are very well aware that the feed required to put the last 30 or 40 pounds on a 200-pound hog is decidedly more costly, in proportion, than to bring him up to the necessary weight limit of 160 pounds. Consequently, they are hustled off just as soon as the owner "guesses" they are heavy enough to pass muster. A good set of scales would eliminate this guesswork and soon pay for itself. I have in mind a certain butcher, since retired in comfortable circumstances, who made it a practice, when out buying cattle, to nose around in every out-of-the-way corner to satisfy himself whether or not there were any scales about the place, governing himself accordingly as to what price he would offer. Not until the business side of farming is transacted with something like exactness, and more attention paid to details, will the farmer reap his whole share of the profits.

#### WILTSHIRE BACON IS CANADA'S SPECIALTY

A question that is not infrequently raised, and is having a somewhat protracted innings at the present time, is whether it costs more to produce the bacon hog than those of the fat type. That there is any fixed relation between the type of a pig and the cost of producing 100 pounds increase in weight, it has been found impossible to demonstrate. Personally, I have never been able to discover any real difference from tests or observations covering a series of years. The belief, in some minds, that the difference does exist, is, I am of the opinion, more a product of the imagination, or of judgment from a too-limited number of instances, than sound doctrine backed up by indisputable facts. If a pig is thrifty, has a good constitution, and good digestive organs, it can make good use of its food, no matter to what type it belongs. Individuality has been shown far more effective in determining the cost of production. The whole problem thus resolves itself into a question of selection, and clearly proves how important it is to perpetuate only the best. The short, fat breeds are unsuited to our conditions. They have been evolved in the great corn belt of the Middle West, for the purpose of converting corn into lard, for which there is but little demand in Canada. To compete for a share of the export trade in fat-pork products would be folly. Our interests are centered in the lean type, with a fastidious class of customers, willing to pay a high price for our carefully-prepared brand of "Wiltshire Sides." With an established reputation and a growing demand, let us not thoughtlessly tear down what we have builded so well; rather give close attention to right principles in breeding and feeding, whereby economy and quality are promoted, and, incidentally, our own cash accounts.

Elgin Co., Ont.

In over forty years' experience, "The Farmer's Advocate and Home Magazine" was never so widely read and highly prized as to-day. The renewal season for 1908 is at hand. If you have not already renewed by sending in \$1.50, we make you this favorable proposition: Send the names of two new subscribers and \$3.25 and we will advance your own subscription for one whole year, as well as send "The Farmer's Advocate and Home Magazine" regularly to the new subscribers from December 1st till the end of 1908. We cannot suggest a better, or easier, plan of paying your renewal subscription. The new subscribers will be delighted with every issue of a farm paper so useful and beautifully illustrated, and particularly with the Christmas number. Set out TO-DAY and get those two new subscribers.

An early renewal of your subscription to "The Farmer's Advocate and Home Magazine" will be appreciated.

## THE FARM.

### CANADIAN AGRICULTURE.

Synopsis of address by Prof. C. A. Zavitz, Agricultural College, Guelph, before Canadian Institute, Toronto, Saturday evening, Nov. 16th.

The agricultural wealth of the Dominion of Canada amounts to upwards of two billion dollars. The annual value of the products of agriculture, according to the last statistical reports of the Dominion amounted to over \$366,000,000. The products of agriculture are seven times greater than those of the forests, eight times greater than those of the mines, and nineteen times greater than those of the fisheries. In fact, the products of agriculture are greater than the combined total value of the products of the forests, the mines, the fisheries, the wild animals, and of the manufactured products, less the cost of the raw material.

The agricultural wealth of Ontario is greater than that of all the rest of the Dominion. The annual value of the field crops grown in Ontario alone is greater than the combined value of the products of the forests, and the mines, and the fisheries, of the whole of Canada.

The average yield per acre of some of the principal farm crops of Ontario is now increasing from year to year, owing to the introduction of better varieties and to the improved methods of agriculture which are being adopted. There are yet vast areas of good farming lands in Northern Ontario which are almost unknown. The extensive areas of the rich soils of the West are gradually being brought under cultivation. We are, therefore, convinced that Canada is not only an agricultural country at the present time, but that it has great agricultural possibilities for the future.

Unfortunately, the occupation of agriculture has not always received the high recognition in Canada that it has received in many of the older countries of the world. In England, we find the nobility proud of their possessions of lands, of herds and of flocks. His Majesty King Edward VII. takes a very deep interest in agricultural pursuits, and usually has exhibits of pure-bred stock at the leading exhibitions, in competition with the other stock of the country. The social status of the agriculturists of Canada is undoubtedly increasing. The farmers are gradually taking their proper place in the affairs of the Dominion.

It is yet only about one hundred years since the first school of agriculture was established, near Berne, Switzerland. There are now hundreds of colleges and schools of agriculture throughout the world. Agricultural instruction is also becoming a part of the system of public-school education in many of the eastern countries. In France, for instance, agriculture is now being taught, not only in the farm schools, the practical schools, the nine agricultural colleges, and the Agronomic Institute, in Paris, but it also forms an important part of the whole system of public-school education. Several thousands of country schools have school gardens or demonstration fields attached, and the subject of agriculture is divided into several grades, and is taught to children of different ages about as follows: Lower grade, seven to nine years; middle grade, nine to eleven years; and higher grade, eleven to thirteen years. After pupils are more than about thirteen years of age, they take the advanced course in the superior primary schools. Systematic instruction is given in the normal schools along the lines of field agriculture, live stock, and rural economy.

In Ontario, we are pleased to note that, through the co-operation of the Educational and the Agricultural Departments of the Provincial Government, classes in agriculture have been started in six of the High Schools of the Province. These classes are in charge of teachers who are graduates of the Agricultural College. Such teachers, who possess the practical knowledge, the scientific training, the teaching capabilities, and the love of the work, should in time help to overcome prejudices, and to establish an education touching somewhat closely the rural homes and the very lives of the people. Undoubtedly, this line of work will be gradually extended until it permeates our whole system of public-school education, especially throughout the rural districts.

It seems difficult for us to realize that it is only about sixty years since the establishment of the first experiment stations for the investigation of agricultural problems. It was about the middle of the last century that Sir J. B. Lawes, in a private capacity in England, and a little group of farmers in an organized capacity near Leipsic, Germany, started the experiment-station move-

ment, which has been most marvellous in its development and has been far-reaching in its results. At present there are about eight hundred experiment stations in existence. Those countries are few which cannot boast of their organizations for experiment and research work along the lines of agriculture. It is certainly true that these organizations vary greatly in extent of their work, in the variety of their investigations, and in their methods of operation. The great object, however, in the experiment-station movement throughout the world is to help in the development and in the progress of agriculture. Through the aid of organization and of Government support many exceedingly important lines of investigation are being successfully conducted by united effort which it would have been practically impossible to have undertaken by the individual efforts of the people who are engaged in agricultural pursuits. The experiment stations are endeavoring, by the aid of chemistry, botany, bacteriology, and other sciences, to better understand the underlying principles of agriculture. Not only are they making use of the scientific knowledge obtained in past ages, but, through their skillfully-arranged and carefully-conducted experiments and investigations, they are now actually helping to enrich and to give a deeper meaning to the study of science itself. It will, therefore, be seen that this great work is destined to wield an immense influence on agricultural methods and on our knowledge of the fundamental principles of agriculture. I believe the time is fast approaching when the experiment station, with its co-operative work throughout the country, will be the chief source of information, not only for the farmer himself, but also for the agricultural-college professor, the institute speaker, and the agricultural writer.

The Ontario Agricultural College at Guelph performs the work of investigating and of experimenting, as well as that of teaching. It is endeavoring to unite science with practice. The fertility and the cultivation of the soil, the ripening and the storing of the crops, the selection and the preservation of the seed, the feeding and the care of the farm stock, the breeding of the plants and the animals, and many other problems of intense interest and of great practical value to farmers, are being carefully studied in the fields, in the stables, and in the laboratories of the College. The experimental grounds for the Department of Field Husbandry occupy about fifty acres, and contain some 2,000 plots. Fully one hundred distinct lines of experimental work are being conducted during the present year. Some of these are comparatively simple, while others are very extensive, complicated and difficult. All of them, however, have a direct bearing on agriculture. The work in plant-breeding has been receiving a considerable amount of attention during the past few years. This involves the systematic testing of varieties, the thorough selection of plants and seeds, and the proper mating and skillful crossing of varieties of different characteristics, in order to produce new sorts, with the object of combining the good qualities and of eliminating the undesirable characteristics of the parent varieties. Work of this kind requires not only a practical knowledge of the greatest needs of the farmers, but also a scientific knowledge of the laws of nature, and especially of heredity, as well as a considerable amount of time, money, good judgment, patience and perseverance. About 20,600 hybrid plants of farm crops were grown separately in the experimental grounds at the College this season. Some exceedingly interesting and very promising hybrids have already been obtained. It has been stated that the introduction of new varieties of farm crops, through the medium of the Agricultural College and the Experimental Union, is worth to the Province of Ontario as much as it would require to maintain one hundred agricultural colleges. The prospects for future work in plant-breeding and in plant-introduction are very encouraging.

The Ontario Agricultural and Experimental Union is doing an admirable work in this Province. It forms a close connection between the scientific worker at the College and the practical worker on the farm. Under the guidance of this organization, upwards of seven thousand farmers throughout Ontario conducted co-operative experimental work at their own homes in 1907. When the farmers themselves once become both interested and active in the carrying out of some important and well-defined line of experimental work, they have entered upon a course of thought and action the good results of which it is impossible to correctly estimate. This work not only enriches the lives and improves the farming operations of those who are actually engaged in the work, but it also tends to the betterment of agriculture generally. It helps to impart to those who engage in the work some of the important and essential features of a true education.

Agriculture is not only the most valuable of the Canadian industries, but it is also one of the greatest of the sciences and one of the noblest of the professions.

NOTES FROM IRELAND.

A DISAPPOINTING SEASON.

It has sounded somewhat incongruous to those who know the actual state of the country to hear in our churches during the past month or so the old, familiar harvest thanksgiving lines:

"All is safely gathered in,  
Ere the winter's storms begin."

These words are being sung in our town churches, and doubtless by rural congregations as well, at a time when the great bulk of the season's crops seemed to have no prospect of being secured. We have experienced in many ways a disastrous year. The spring was so damp and unsettled that land could hardly be worked, and the seed of the various crops was sown with great difficulty. During the autumn, equal difficulty has hampered every effort to get the produce out. September proved a fairly good month, but October's rainfall was phenomenal, and caused a dangerous delay in harvest duties. Providentially, the advent of November witnessed a much-needed improvement, and the several dry, fine days since experienced have been accepted as a valued boon, even though it did not come till the eleventh hour (I had almost written month). The raising of potatoes and the threshing of corn have been busily undertaken. The season's yields, as a whole, are much below the average, but there are some elements of compensation in that, with reduced supplies on the market, prices are bound to advance, and are doing so already, much to the discomfort of city consumers.

THE FORESTRY PROBLEM.

It would seem as though at last the problem of reforesting suitable areas in Ireland is being seriously tackled by the authorities. A Departmental Committee is pursuing inquiries, with the object of reporting upon (1) the present provision of state aid to forestry in Ireland; (2) the means whereby existing woods may be preserved, and land suitable for forestry acquired for public purposes; and (3) the financial and other provisions necessary for a comprehensive scheme of reforestation. The chairman is Mr. T. P. Gill, secretary of the Department, and a considerable amount of valuable and interesting evidence has been received. The area of plantations in the country is returned at 300,000-odd acres, or only 1.5 per cent. of the total area of Ireland, and since 1880 a steady decrease has been taking place. The consensus of belief is that any extensive scheme of reforestation must be undertaken by the state, for, as one of the witnesses put it, "No other body can afford to wait for the return from the initial expenditure entailed." We have formerly had experience of commissions of this kind, and are sometimes cynical enough to regard their appointment as a favorite Government method of shelving a difficult problem. It is to be hoped that the present commission will not end its work by providing the authorities with an excuse for doing nothing.

AN EXPERIMENT IN WINTER DAIRYING.

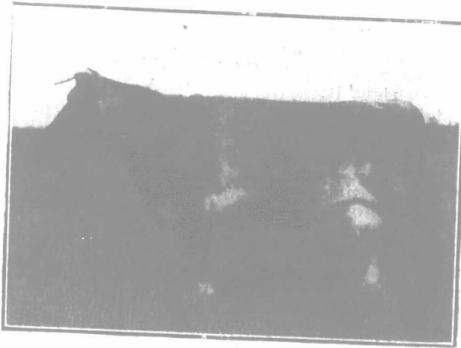
Winter dairying has been much talked about of late—its merits and demerits widely discussed. In response to repeated appeals, the Department of Agriculture has agreed to carry out in the County Cork, at an expenditure of £250, what promises to be an interesting and important experiment. Three farms are to be selected, and on each are to be at least five cows calving in November or December, and five calving in April or May. The milk of each animal is to be weighed morning and evening, and the weights registered. A composite sample of morning's and evening's milk of each cow is to be tested once a week for quality. All the winter-calving cows are to be fed on the same ration, if possible. Suggested ration: Hay, 10 pounds; oat straw, 4 pounds; straw, 16 pounds, or roots, 56 pounds; decorticated cotton cake, 3 pounds; Indian meal, 2 pounds; bruised oats, 2 pounds; bran, 1 pound; of the latter four, from 6 to 8 pounds daily. Calves are to be reared on dam's milk for three or four weeks, and then on separated milk and meal mixture, and to be kept until 12 months old. Weekly records are to be kept of yields and quality of each cow's milk. Daily records of milk converted into butter. Weekly records of price of butter, or of milk, if sold to a creamery. Actual cost of all purchased foods to be entered. Both sets of cows to be fed alike when on grass, an allowance of two pounds decorticated cotton cake per head daily being suggested. It will be seen that some exhaustive data are likely to be obtained from these experiments which should help to definitely set at rest the conflicting views prevailing on the subject of winter dairying.

EMERALD ISLE.

Every up-to-date farmer should take "The Farmer's Advocate,"—Colin C. Craig, P. E. I.

CHEESE-FACTORY OUTPUT IN 1907.

Throughout Western Ontario, the make of cheese during the past season has been of good quality. About the only trouble occurred in July, when there was some acidity and "pinholey" cheese, owing to the milk being overripe and gassy. This, makers tried to overcome by cutting a little finer, thus getting a firmer curd. But the bad effects of tainted milk cannot be entirely overcome. During May and June, or up until the hot weather came, the quality was finest. Cool weather prevailed up to that time, and this is certainly positive proof to the patrons that



Gloxina 3rd.

One of the good milking cows in the Shorthorn herd of A. W. Smith, Maple Lodge, Ont. Record, 50 lbs. milk per day.

cooling milk to low temperatures makes finest cheese. Nature cooled the milk during the fore part of the season.

In point of quality, the make has been very fair in the Ingersoll and Woodstock districts, and around Simcoe. The northern districts suffered most, and the eastern part of Brantford section is also light. Generally speaking, the quantity of cheese made in Western Ontario has been larger than might have been expected. Eastern Ontario has been somewhat harder hit. Prices have certainly been good, though the present market situation is a little uncertain. Some factorymen who refused 13 cents a pound, stand a chance of regretting their action. From all accounts, there is not likely to be much trouble with green cheese being shipped this fall. Some cheese were sold a while ago to buyers, who were subsequently unable to take them, owing to the financial stringency, and the cheese stayed in the factory, and will have to be sold over again.



Lady Viola.

Jersey cow. First and champion of Royal Show, England and Jersey. Owner, A. Miller-Halletts.

The secretary-treasurer of a representative Western Ontario cheese factory (Gladstone), in order to afford an indication of how the cash returns to farmers in 1907 compare with 1906, furnishes us the following encouraging statement:

	1906.	1907.
April .....	\$1,765	\$1,863
May .....	4,491	4,867
June .....	5,966	6,531
July .....	5,444	5,828
August .....	4,535	4,808
September .....	4,885	4,237
October .....	4,865	4,081
Total .....	\$32,051	\$32,212

Cost of making would be deducted from the above.

This indicates that, instead of a falling off, the cash disbursements to patrons show a small

gain. But for the shrinkage in the latter part of the present season, there would have been a decided advance. We would be glad to hear from other factories the result of their 1907 operations.

FAVOR THE PLAN OF HEATING THE WHEY.

That idea of heating whey at cheese factories, by using the exhaust steam from the boiler, and then injecting enough live steam into the tank to bring the temperature up to 165 degrees, is all right," said Mr. Frank Hens, Chief Dairy Instructor in Western Ontario, to "The Farmer's Advocate" last week, on his return from a district dairy meeting at Woodstock. At first he was a little dubious about how it would take among the patrons, but reports from two or three factories where it has been tried indicate that the patrons strongly approve of it. W. C. Shearer, of Bright, the noted Institute speaker, is a patron of the Bright factory, where the plan of heating has been tried for seven months, and he says he doesn't want his whey returned to him any more without heating. W. E. Thompson, a prominent patron of Innerkip factory, also pronounces himself in equally strong terms. The advantages are that it improves the whey for feeding purposes by arresting the development of lactic acid and other bacteria in the whey tanks, while, by destroying the bacteria that cause yeasty and bitter flavors in cheese, it prevents these trouble-producing germs being spread to other farms through the milk cans in which the whey is returned. The yeasts which cause these may get into one or more patrons' milk from one of a hundred sources, such as plants and trees of various kinds; but if, through the heating of the whey, they can be prevented from spreading to other patrons' dairies, it is possible to locate the farms at which the trouble occurs and remedy the conditions thereat. Ordinary cleansing of whey tanks will not prevent these germs being disseminated through the whey. The whey and the tanks must be heated in order to destroy the germs. Mr. Hens alluded to a couple of cheese factories in Western Ontario which have always taken unusual pains to keep their whey tanks clean, and yet both have had persistent trouble with bitter and yeasty flavors. By heating the whey as described briefly above, and more fully on page 1602 of our issue of October 10th, 1907, they have overcome the trouble. It is to be hoped that the practice will become universal, as the cost is slight, and the feeding value of the whey considerably increased, while the saving in cans, owing to the sweeter condition in which the whey is returned, is a further item in its favor.

DISCOURAGING THE PRACTICE OF ADULTERATING MILK.

Sixty prosecutions of cheese-factory patrons for tampering with milk have been made the past summer in Western Ontario by Mr. I. L. Farrington, the official appointed for the purpose last spring. Some were for skimming, some for watering, and some for both skimming and watering. In each case, three or four consecutive days' tests were made before prosecuting, as it was not thought right to prosecute anyone on the strength of a single day's test, owing to the possibility of a patron's milk being diluted by accident, or being, perchance, lower than usual in fat content. It is significant that 272 further cases of adulteration were discovered, but the offenders, learning of the presence of the official at the factory, desisted from the practice and escaped action.

At first the defendants were let off easily by the courts with five and ten dollar fines. Latterly, the magistrates perceived the necessity of more drastic measures, and fines of twenty and thirty-five dollars were levied. Half the fines goes to the factory where the adulteration is practiced, and half to the Dairymen's Association, which has been able, out of its share of the fines collected, to defray all the expenses and salary of its special prosecuting officer. The deterrent effect of this energetic action has been noticeable, and Mr. Frank Hens, Chief Dairy Instructor in Western Ontario, and Secretary of the Western Dairymen's Association, is confident that another year will pretty well stamp out the practice of tampering with milk.

Of course, the logical way for any cheese factory to stop the practice is to remove or at least lessen the temptation by paying according to the "per cent. of fat, plus 2" system, and a good many live dairymen are waking up to this fact; but, meantime, the practice of adulteration must not be allowed to run rampant, and the Association's action is in every way commendable, and greatly to the monetary interests of all honest patrons, who are, of course, robbed by the dishonest patron who waters or skims his milk, to whatever extent the latter may gain by so doing.

## TRANSPORTATION POETRY BOILS OVER.

The "fog" has shifted. No doubt the recent cold spell has come in contact with the "hot air" that usually hovers along the banks of the Ottawa, and produced a greater fog than has been in Bytown. The fog whistle is now blowing so vigorously that the sounds from the sawmills and from Chaudiere Falls are drowned by the noise of the fog-horn. We also, apparently, see less clearly on account of the mist enveloping the subject of refrigerator cars for transportation of butter. May we very briefly try to dispel some of this fog?

## FOG NO. 1.

So far as we know, there were no unnecessary delays in the transportation of the butter referred to, and the butter was sold promptly on arrival in London, after inspection, and was not held for a rise in price.

## FOG NO. 2.

We might have filled a whole page of "The Farmer's Advocate" with our experiences in getting some accurate information about refrigerator cars, but we did not wish to take up valuable space, especially as we had, at the request of one of the commissioners, laid the details of our observations before the Railway Commission more than two months ago. Doubtless, when that busy, useful but overworked body reaches the question of the refrigerator-car service, all the facts in the case will be made public. We regret that we had not more information to give the Commission, but no one realizes the amount of time required to get facts of this nature until he has tried it. The accuracy of certain statements of ours having been challenged, we tried in our poor way to give certain facts we had observed. These facts are not disputed, but, instead, we are treated to personal diatribe. We commend to the consideration of our friend, Plato's saying, "No man should be angry at the truth."

## FOG NO. 3.

The reason we did not report the matter to the Department, where such information properly belongs, is that, on a previous occasion, when we did so, our communication received very scant courtesy, and we did not care to repeat the experiment.

As other matters now press for our attention, we have only this to say in conclusion: We could have forgiven all else, and would have been prepared to fall on our brother's neck and give him the kiss of reconciliation, had he not rudely torn away the pseudonym which covered us, thus exposing our nakedness and all our deformities, weaknesses and many shortcomings, to the cruel stare of the cold world. We can now realize to a very slight extent what must have been the feelings of "George Eliot" when the prying world insisted on knowing the real person who wrote Adam Bede, Felix Holt, etc., and she was exposed to their curious gaze as merely a woman enjoying the very plain name of Mary Ann Evans. To a person of sensitive feelings, this is the most unkind cut of all. The shock of exposure is very great to a young, ambitious writer struggling for fame and fortune with a merciless world. All else, O Chief, might have been forgiven, had you spared us this great humiliation.

Said the Chief of 'Frigeration  
To the Chief of Marketation,  
Who disturbs our meditation  
O'er the produce of a nation?

Shall our wigwag by the sawmill  
Be o'erthrown by any haw-hill?  
Does he think that you or I will  
Give a "tinker" for his ice-pill?

Will his little glass thermometer  
Raise or lower our barometer,  
Or the hot-air anemometer  
Affect the readings of our lactometer?

Shall a poor, despised professor  
Be the prime and sole possessor  
Of ice-car knowledge? I say, yes, sir,  
In future you'll be the aggressor.

Said the Chief of Marketation  
To the Chief of 'Frigeration,  
In any coming agitation  
I shall try to help the nation.

When the cars are running right,  
I shall keep me out of sight;  
But in case of need light,  
I'll be there both day and night.

H. H. D.

## LINSEED OIL FOR CAKED UDDER.

Editor "The Farmer's Advocate":

I have had good success in using raw linseed oil for caked udders in dairy cows. I thank you very much for your prompt answer to my question re the paper milk bottles. G. H. T.  
Bruce Co., Ont.

## UNSATISFACTORY ACTION OF CHEESE BUYERS.

Editor "The Farmer's Advocate":

In reading your valuable journal, as I do every week, I have been very much surprised not to see someone taking up a great wrong under which the dairy farmer is at the present time working, which is the very unsatisfactory way cheese buyers buy cheese. For instance, our salesman goes to the London Cheese Board and sells our cheese, and comes home well satisfied with his day's work. In the meanwhile, during the next week, or between the sale and the shipping date, cheese drops in price, and Mr. Buyer refuses to take the cheese. Now comes the funny part: If cheese goes up in price, and we want the raise, does Mr. Buyer give it to us? Oh, no! "I bought your cheese at such a price, and I want it," and we have to let him have it. There is an old saying, "It is a poor rule that don't work both ways." To say the least, it is a most unbusinesslike transaction. I would like very much to hear what others think of this matter, and how to right it. G. A. DISBROWE.  
Elgin Co., Ont.

## SALTPETRE FOR TURNIP FLAVOR.

A Western Ontario cheesemaker tells us that, in his factory there has been less trouble this season with tainted milk than usual, and he says he had no trouble with the turnip-top nuisance, though some turnips had been fed. Where done in moderation after milking, little or no trouble resulted. If the odor be apparent, he dissolves a teaspoonful of saltpetre in water and thoroughly stirs it in the vat of milk before applying heat, thus working off the turnip flavor.

## GARDEN &amp; ORCHARD.

## HORTICULTURAL PROGRESS.

Prepared for "The Farmer's Advocate" by W. T. Macoun, Horticulturist, Central Experimental Farm, Ottawa.

## NOVA SCOTIA FRUIT-GROWERS' ANNUAL REPORT.

The 1906 report of the Nova Scotia Fruit-growers' Association shows careful editing, and is a credit to the Association and the Secretary, Mr. S. C. Parker, Berwick, N. S. It contains a number of useful papers, among these being the President's address, "Orchard Management," "Spraying," "What Varieties Shall we Plant?" "Packages and Packing," "Forest Preservation a Factor in Fruit Packages."

There is enough information in this report to prevent beginners in fruit-growing making many mistakes and losing many dollars. Even experienced fruit-growers will get suggestions from reading it.

## MISCIBLE OILS FOR SAN JOSE SCALE.

The lime-and-sulphur mixture is now the standard remedy in Canada for San Jose scale, but, owing to its caustic character, which makes it disagreeable to use, and the length of time required to make it, fruit-growers would be much pleased if another spray just as effective could be found which would be pleasanter to handle, and could be more quickly made. Several experiment stations have been working for some time with this end in view. Some of the most promising new sprays are the miscible oils (oil preparations which form emulsions when mixed with water), and it is of these that Bulletin 79 of the Delaware Station treats. The bulletin is in two parts, one by C. L. Penny, on "Homemade Miscible Oils," the other by C. O. Houghton, on "Orchard Tests of Miscible Oil."

Past experience has proved that kerosene emulsion is not sufficiently effective to destroy the San Jose scale, unless the kerosene used is in a very concentrated condition, and the evaporation is so rapid that the full effectiveness of the kerosene is not obtained. On the other hand, the heavier oils, such as paraffine oil, which are of a more viscous and gummy nature than kerosene, are effectual in killing the scale, but frequently injure the trees when applied by themselves. The oils in the experiments reported on in this bulletin were emulsified by using a "soap solution" for this purpose; and, as this soap solution is an important part of the oil emulsion, the description of how it is made is given in full below:

The Soap Solution.—Formula No. 28: Menhaden oil (fish oil), 10 gallons; carbolic acid, 8 gallons; caustic potash, 15 pounds. Heat to 290 degrees or 300 degrees F., then add at once, while still hot, kerosene, 14 gallons; water, 22 gallons. Cost, after addition of kerosene and water, 15.7 cents per gallon.

The caution is given here that this mixture is inflammable when hot, and disagreeable fumes are given off from the carbolic acid. Hence, for comfort, as well as safety, the operation should be conducted out of doors, or at least with good ventilation and freedom from fire risk. A suitable vessel for the boiling is a deep iron kettle,

such as is used for heating water. Of course, its size should depend on the amount of soap to be made. A capacity of 25 to 50 gallons is usually suitable, though generally the larger the better, since it should not be much over half full to provide against foaming.

The kettle should be covered by boards or otherwise to prevent the mixture from taking fire. A thermometer, passing through a hole in the cover, affords the readiest means of determining the progress, and finally the end of the operation. When the temperature approaches 255 degrees or 260 degrees F., foaming begins, and continues until the temperature approaches 270 degrees F. During the most active foaming, the fire must be checked somewhat by withdrawing a part of it, or otherwise, as by throwing sand on it. After the foaming partially subsides, the fire is increased, until the temperature of 300 degrees F. is reached, when the fire is withdrawn and the soap made. Overheating a few degrees—10, or even 20 degrees—does not spoil the soap, but it should be avoided, as it increases the fire risk. At the beginning, it is best to stir the mixture with a stick or an iron rod, to keep the potash from caking on the bottom of the kettle, but it is unnecessary to continue this after the mixture is warm. A small wood fire is sufficient to boil a kettleful. The operation may last from half an hour to an hour. After the fire is removed, the requisite amount of kerosene and water are added to the hot soap mixture very conveniently in an open barrel to which the soap has been transferred, the kerosene always first, since otherwise there is danger of an explosion from pouring water on the hot oil. The whole is then thoroughly mixed by stirring. It should form a uniform liquid, very slightly ropy, and without any separation, on standing, into layers; fluid enough at the freezing temperature to pour readily, and a portion mixed with a large volume of water, five or ten times its own volume, should dissolve to a uniform liquid, perhaps a little turbid, but without any free oil. The soap thus made, seems to suffer no deterioration from age or exposure to the air. A sample, kept for eight or nine months in an open barrel, was found unimpaired and unchanged. It does not separate into parts on standing, and hence, when once made, it requires no further mixing.

In place of potash, it is possible to use caustic soda, but it hardly seems to be advisable. The reaction with the soda is less active than with the potash, and frequently a residue of soda is left unacted on, so that the proportion of alkali is somewhat uncertain. While the soda is cheaper, and often easier to obtain, the potash seems to be preferable. If, however, soda is used, the weight should be about the same as given for the potash, and care should be taken that the soda is all dissolved. But soda is not recommended. All of our experiments have been with the potash soap, and at present, at least, we cannot advise the use of any other.

The object in adding the kerosene and water to the soap is partly to keep the mixture fluid. The soap proper—that is, the mixture before the water and kerosene are added—is quite solid when cold, and hence, to dissolve it in the various oils would require either heat or a long time, both requirements quite inconvenient. But, in a liquid form it mixes with the oils readily. There is the further advantage that, out of a number of proportions tried, the one given seems to make the best emulsions. It will be seen that of the final mixture, hereafter to be called the "soap solution," only one-third is soap and carbolic acid, the remainder being kerosene and water. This, of course, requires larger containers. If it is preferred, the kerosene and water may be omitted, and the soap and carbolic mixture may be prepared in the form of solid bricks, to be melted when they are mixed with the oils. This would save much in the cost of packages, but would be far less convenient, as heat would be required, whereas the "soap solution" mixes readily with oils in the cold.

After the making up of the "soap solution" just described, all subsequent operations are carried on in the cold, with no other appliances than barrels or other tanks for mixing the liquids. Herein is the chief difference between the miscible oils and the lime-and-sulphur wash, as to the work required in preparing them. For every gallon boiled to make a miscible oil, from 50 to 200 gallons of the lime-and-sulphur wash must be boiled, to give the same amount of spray material in each case.

Once this soap solution is made, the emulsion can be made without further heating, merely by mixing the soap solution in the proper proportions with the oil and water, by agitating with a dasher until the mass is of a uniform consistency, or emulsified. Different oils require different quantities of water to make good emulsions. In making the miscible-oil emulsions, no special order is necessary in adding the ingredients, unless it is necessary to add water, when it should be put in last, adding it until there is a satisfactory emulsion.

Twenty-three different formulas are given in

this bulletin for summer and winter use, some of which contain bluestone for diseases.

On April 22nd, 1907, experiments were tried with four of these emulsions, thirty trees being sprayed with each emulsion. By May 13th it was found that from 90 to 100 per cent. of the scales were killed. An examination was made for young later on, but upon the majority of trees no trace of young was found. No injury from any of the applications was noticed. The formula which was found most effectual was: Soap solution (as described), 9 gallons; water, 1 1/4 gallons; paraffine oil, 40 gallons; rosin oil, 6 gallons. Cost, 15.4 cents per gallon.

For spraying, one gallon of the above is added to nine gallons of water, making the cost of the spraying material 1 1/2 cents per gallon.

Rosin oil is a product distilled from rosin, of which it forms about 85 per cent. It is thick and viscid at ordinary temperatures, much resembling molasses in consistency. For our purpose, it has an extraordinary value in its property of facilitating the making of emulsions with crude oil and paraffine oil. Emulsions of these materials, without rosin oil, are difficult to make.

Paraffine oil is a trade name for lubricating oil or machine oil. It is a petroleum product, consisting of the heavier fractions of the crude oil. It is not volatile at the ordinary temperature, and hence would remain indefinitely on the tree if not removed mechanically, as by rain.

Following are the conclusions drawn at the Delaware Station after using the above formula: "A miscible oil, made up according to the formula given above, proved an effective insecticide for the San Jose scale where the emulsion, as applied to the trees, contained on about 10 per cent oil.

"Of the various miscible oils prepared at this Station, it is believed that the one made according to the formula given above is the most effective insecticide for the San Jose scale that we have produced, and it is believed that the emulsion thus made will be found to be effective when considerably less than 10 per cent. oil is applied to the trees.

"All the emulsions or miscible oils thus far tested, when applied to trees in leaf, injured the foliage seriously when used at a strength that was necessary to kill the majority of the adult scales; but it is believed that it is often better, where the work can be done fairly early in the season, to spray trees badly infested with San Jose scale while they are in foliage than to leave them unsprayed. This is advised, of course, only in those cases where it has been found impossible to spray the trees during the dormant season."

Canadian fruit-growers, while adhering to the lime and sulphur until it is clearly proven that something better is discovered, should carefully note the experiments which are being carried on with the "Miscible Oils," and when any formulas so promising as that given above are suggested, they should give them a limited trial.

**DIRECTIONS FOR TREATING THE SAN JOSE SCALE.**

Following is a copy of the instructions sent out by the Pennsylvania Department of Agriculture to residents of the State on whose premises the State Inspectors find San Jose scale.

"If you wish to save your trees, it is advisable for you to treat them promptly with some material that will kill the scale, but not injure the trees. You should cover the trees entirely with this material from top to bottom. Small trees can successfully be treated by hand, using a paint brush, if the twigs all be reached to the very tips, and on all sides. To save time and be sure of getting the trees entirely covered, it is best to spray them.

"We therefore recommend spraying (or thorough painting by hand) with one of the following materials:

"1. Lime-sulphur wash, made by boiling quicklime or unslaked lime with finely-powdered or ground sulphur, using 5 pounds of quicklime and 4 pounds of sulphur, in enough water to boil it for an hour, stirring it occasionally, and, after boiling, add enough water to make the entire amount equal to 12 gallons. Strain this well through a cloth as fine as it can be made to pass through, or, better, through a fine wire netting that has at least 24 meshes to an inch. Give the infested trees and shrubs two coats of this material at any time while the leaves are off, but the best time is just before the buds burst in the spring.

"2. Whale-oil soap, two pounds, dissolved in one gallon of water, applied as a spray or wash.

"3. The Commercial Insecticides, generally known as Soluble Oils, applied, in general, at twice the strength that is recommended by agents and manufacturers, or use one part of the oil to 10 parts of water, instead of 20 parts, as most commercial formulas are stated.

"4. Common Kerosene Oil or Crude Petroleum, emulsified, and used not stronger than 30 per cent. for peach and plum trees, and not more than 50 per cent. for apple and pear.

"Avoid other material than these here mentioned, as there is danger of killing the trees or not killing the pests. H. A. SURFACE, Economic Zoologist." "Harrisburg, Pa.

[Note.—Of these four modes of treatment, the best and safest, according to our present information, is the first one named, i. e., the lime-sulphur mixture.—Editor.]

**POULTRY.**

**POULTRY HOUSES.**

The Single House, Without Scratch-shed Attachment—Description of a Pen and Inside Arrangement—How Ventilation Without Draft is Secured, and Moisture Absorbed—An Up-to-date and Popular Arrangement.

By A. G. Gilbert, Manager Poultry Dept., Exp. Farm, Ottawa.

I was standing in a pen of a long poultry building, the latter one of several, of a large plant in Northern Ontario, last winter. I remarked to the managing director, who accompanied me, "I see that you have not the scratch-shed addition."

"No," he replied, "why have it when it is not required? Depend upon it, we would have adopted it had we thought it necessary. We have forty thousand dollars invested in this plant, and we built according to most up-to-date plans."

its plan of arrangement will be preferred in many instances yet to come.

**THE SINGLE HOUSE—HOW IT IS FURNISHED AND HOW IT LOOKS.**

Not every house that was built in past years had the scratch-shed attachment. A notable instance was the poultry plant of L. H. Baldwin, Deer Park, Toronto, which is still to the fore. And, again, there was the plant of the Toronto Poultry Co., at Eglinton, a suburb of Toronto. Of both these plants and their genial managers, the writer has many very pleasant recollections. A correct idea of an up-to-date poultry plant, on the single-house, continuous plan, may be had by a visit to the Poultry Yards of Canada, at Pembroke, Ont. The following is a description of the interior of one of the single houses of this establishment:

The pens are 10 x 16 feet. Entrance to them is had from a 4-foot passage. Both passageway and pens run the length of the whole building. The floor of the pen we are describing is concrete, and on this is litter to the depth of eight inches, affording all the material for the birds to search for the whole grain thrown into it that is requisite. There is also a hopper, divided into four compartments, containing grit, oyster-shell and charcoal.

Drink water is supplied in tins so arranged that the birds cannot wet their combs or feathers while drinking. This is a point of no little import in cold districts. Meat, vegetables, etc., are regularly supplied. The rations are principally whole grains, with mash occasionally.

The ceiling of the pen is slatted, and above it is straw, which absorbs any moisture.

The window, which is four feet square, is to the south. This is shown in plan below.

At the north end of the pen are the roosts, dropping board, and nests underneath them. In front of the roosts there is a hinged curtain, which may be swung shut on cold nights, thus protecting the fowls.

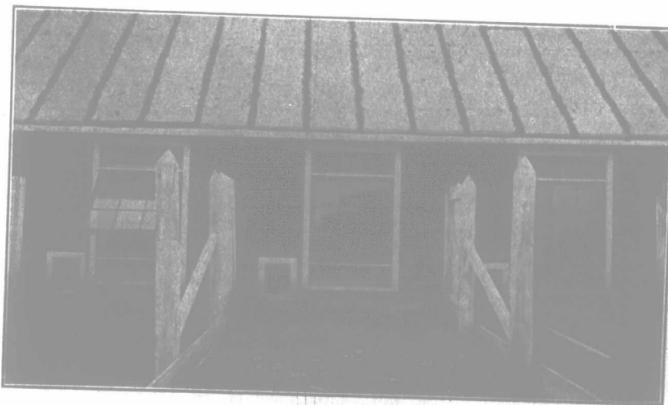
Ventilation, one of the most important features, is secured by openings 1 x 4 feet above and below the window. These openings are covered with cotton, and through these cotton-covered frames, or openings, the air passes, without draft. The object is to secure diffusion of air without draft at all periods of the winter season. This, in conjunction with the straw above the slatted ceiling, has been found an admirable system of ventilation. The theory is that moisture is absorbed by the straw, while fresh air is supplied through the cotton above and below the windows. In the past three winters—the age of the poultry-yards—there has been no moisture in any of the pens, which are all arranged according to the foregoing pattern, nor has there been faulty air.

It may be said that, to the left of the roosts in each pen there is a small lathed enclosure, about three feet high, and which holds two male birds. During the breeding season, one of these birds is allowed out one day, and the other the next—an excellent arrangement.

**OTHER STYLES OF HOUSES.**

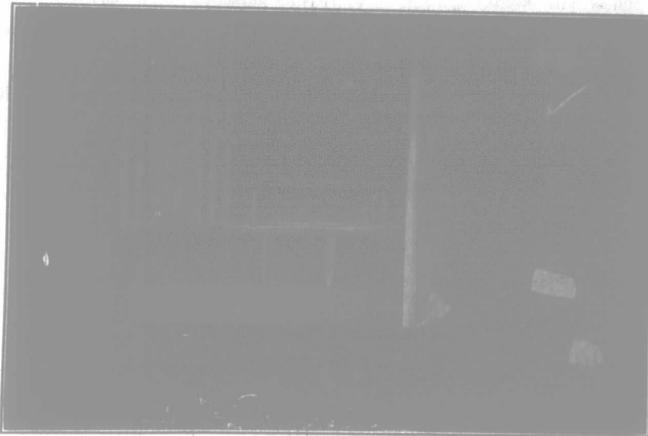
There are several other styles of houses and arrangements of interior, but the above is not only a popular pattern of house, but one that has been found most satisfactory at one of the most northern points in Canada. A pattern of a house of similar arrangements, but with cotton on each side of the windows, instead of at top and bottom, was described in "The Farmer's Advocate" last spring in the article about the poultry plant in connection with the Free Hospital for Consumptives at Gravenhurst, Ont.

The value of the total farm productions of the United States in 1907 is \$7,412,000,000, an amount 10 per cent. greater than the total for 1906, and far exceeding any previous year.



Ventilation Curtains.

This illustration shows the cotton frames above and below the windows, at the plant of the Poultry Yards of Canada, Pembroke, Ont.



Interior View of Poultry House, Poultry Yards of Canada, Pembroke, Ont.

The above halftone shows the roosts, dropping-board, with nests underneath. The hinged, curtain front is held partly open. The lathed enclosure for two cockerels is shown to the left. All these furnishings are at north end of the pen.

So spoke a practical, level-headed business man. It was his view of the poultry-house situation, and it illustrated the passing of the scratch-shed. Not the scratch-shed principle, be it noted, for the principle, so far as affording floor-room for the birds, was embraced in the pen in which I stood, and which really represented a single house, although one of many continuous pens. Of the single house, we write farther on. Meanwhile, we speak of the scratch-shed as a passing factor, for in recent years it has been largely superseded by the single house, which, by the way, is now generally recommended to farmers. It certainly stands to reason that, if the single house possesses the advantages of the double one, at less cost of material and space (money), it will best suit this highly practical age. We have no prejudice against the scratch-shed addition. Doubtless,

### DOES LIBERAL FEEDING OF LIME MAKE THE SHELLS TOO STRONG?

Editor "The Farmer's Advocate":

As hens have no teeth by which to grind their feed, it would be a good plan to lay in a supply of good sharp gravel or ground rock, and keep the hens well supplied with this. Give fresh, clean water every day.

Many people advocate the liberal use of lime or oyster-shell, or both, but I am not in favor of either; that is, I am not in favor of the hens having free access to it, for, while it is a good addition to the hen's feed, I am of the opinion that the too liberal use of it is the cause of so many chicks dying in the shell, through being unable to break the shell, which is as hard as cement. This theory may be new to some of the readers, but my observation leads me to believe that. I have noticed that difficulty repeatedly, more especially with amateur poultrymen, who use all the foods, grits and oyster-shells on the market, together with old mortar and lime.

This calls to mind a young friend of mine who had an incubator with 100 eggs in it; he got only 15 chicks from the whole lot. He took me home with him and showed me the eggs. We opened them, and found a fully-developed chick in every shell. I noticed, particularly, that the shells were nearly as hard as the shells of duck eggs, so I asked him what he fed his hens, and learned they got all the lime and oyster-shells they could eat, in addition to their other food, which was mostly wheat. The hens and roosters were strong and vigorous, and came of strong and vigorous stock; and as my friend was expert at handling an incubator, I came to the conclusion that the chicks died in the shells, owing to the shells being too hard for them to break, and that probably the too liberal use of lime, etc., was the cause of the shells being so hard. Since that my friend has lessened the lime supply, and has been more fortunate in hatching a larger percentage of chicks with the incubator. This is not the only evidence of the kind that has come to my knowledge, so that the conclusion is nearly forced upon me. I would like to know if others have had the same experience.

Goshen, R. I.

[Note.—I am of the opinion that this man's lime theory is right and wrong. Our experiments tend to indicate that a large amount of lime is good for the vigor of the chick. If the proper chemical changes take place in an incubator, the chicks would get out and be good, but I can readily understand the opinion of the writer of the article, and his suggestion may be worth something to get the chicks out of the shell, but I would prefer all the lime in the chick I could get, hence would not care to advocate his method. A hen set on the earth has a large supply of moisture and of carbonic-acid gas. These, in common terms, rot the shell, the chick absorbs portions of the same, if not all that is rotted, and you get a good bird. Most incubators are low in moisture and carbonic-acid gas, and do not get the results in quality.—W. R. Graham, O. A. C., Guelph.]

## THE FARM BULLETIN.

### EXPERIMENTAL UNION ANNUAL MEETING.

The annual meeting of the Ontario Agricultural Experimental Union will be held at the Ontario Agricultural College, Guelph, on the 9th, 10th, and 11th of December, starting Monday at 1.30 p. m. The co-operative experimental work of the Union has been conducted in 1907 in the departments of horticulture, agriculture, beekeeping, poultry-raising, farm forestry, and agricultural chemistry. In most of these branches, the work has been more extensive than in any previous year. Especially in the line of horticulture has the work been greatly increased. It now includes co-operative work with vegetables, as well as both small and large fruits. There were upwards of 7,000 co-operative experiments actually engaged in the work of the Experimental Union during the past year. The results of the successfully-conducted experiments throughout the Province will be presented and discussed at the meeting.

Interesting addresses are expected from Hon. Nelson Monteith, President G. C. Creelman, Prof. C. C. James, Mr. G. A. Putnam, Mr. J. Lockie Wilson, and others. Reports are expected from the six high-school agricultural instructors of the Province. Prof. W. P. Gamble will report on the work which has been done towards bringing about "Legislative Control of Commercial Feedstuffs." "The Future Development of the Field Crops Competition in Ontario" will be presented in an address by T. G. Raynor. It is expected that Mr. C. Nicholson, an ex-student of the College, an experimenter for several years, and the winner of first prize in the field competition in the Mt. Forest district in 1907, will be present, and lead in the discussion on Mr. Raynor's address. The Women's Institute Convention will be held at the College, and the Provincial Winter Fair will be held in the City of Guelph immediately following the Experimental Union meeting. Excursion rates are available.

### TUBERCULOSIS IN CATTLE.

At a meeting of farmers and dairymen, held at Cowansville, Quebec, on November 16th, Hon. Sydney Fisher, Minister of Agriculture, delivered an address on Tuberculosis in Cattle, in which he reviewed the history of the health-of-animals branch of the Department of Agriculture, stating that there had been found necessary, in addition to the quarantine work at ports of landing and elsewhere, a good deal of work inside the country, which was relegated partly to the Provincial and partly to the Federal Departments of Agriculture, Dr. Rutherford, the Veterinary Director-General and Live-stock Commissioner, having been authorized to superintend the work as carried on at the present time. The increasing prevalence of the disease, he stated, had impressed the farmers of the Eastern Townships with the fact that soon they will be at the imminent peril of losing their herds, their principal source of revenue, and now some of them are clamoring for an Act of Parliament legalizing compulsory testing, and, in the event of the cattle being found diseased, providing for a reimbursement of seventy-five per cent. of the value of the cattle. Mr. Fisher stated that there is no general testing of cattle for tuberculosis in any part of America at present. Some time since a number of the States tried compulsory testing, but public opinion among the farmers became so strongly opposed to it that the system had to be abandoned, and a large amount of money was expended by way of partial compensation for the loss of animals destroyed, with no benefit derived. There is no law in Canada to compel the farmer to have his cattle tested, and, if such a law was proposed and put before Parliament, it would be defeated by an overwhelming majority of the farmers who would oppose it. The Minister said, "The best assistance you can give me and yourselves in this matter is in the way you keep your own barns and cattle, and he dared to say that three out of every four of the barns in the Townships are prolific breeders of tubercular germs." Cleanliness and ventilation and constant purification of stables are absolutely essential to the curbing of this disease.

Mr. Fisher favored the testing by owners of herds of their own cattle, for their own benefit, without compulsion.

The Minister also referred to the law which was put in force in the early days of September last regarding the inspection of meat at abattoirs. The meat-packing establishments must be inspected if they do an inter-provincial or export business. This is a Dominion law. "We at Ottawa have no right to interfere with the jurisdiction of the health boards, which are provincial. When we passed a law dealing with meat-packing, we had, therefore, to insert the words, 'inter-provincial or export.'"

Dr. Rutherford, Chief of the Veterinary Branch of the Department, who followed the Minister in an address on the questions raised, is reported to have expressed the view that compulsory testing was absolutely necessary, if the contagion was to be extinguished. He went on to discuss some simple methods of ventilating stables, stating that any simple method that was workable was efficient. He accentuated the need of ventilation and cleanliness in the stables.

### HORSE QUESTIONS AT ONTARIO WINTER FAIR.

The following resolutions, expressing the opinion of the Board, were adopted at a meeting of the Directors of the Ontario Horse-breeders' Association, and will form a basis for discussion at the session held for this purpose at the Winter Fair, Guelph, Thursday afternoon, Dec. 12th:

1. That only pure-bred and registered stallions should be allowed to stand for service, except,

(a) That owing to one-third of the stallions in the Province being found by the inspectors to be unregistered, that for three years grade stallions known to be good sires, and, upon inspection, found to be of good conformation and free from hereditary unsoundness, should be granted a license to be known as "Grade 2."

2. That all stallions standing for service should be free from hereditary unsoundness.

3. That all stallions standing for service should reasonably comply with the standard of conformation for the breed which they represent.

4. That all stallions should be inspected, and that those complying with the above requirements, except those provided for in section (a) of resolution 1, should be given a license to be known as "Grade 1."

5. That no person should be allowed to accept a service fee for any stallion unless a license has been taken out for said stallion.

6. That all printed matter advertising any stallion should include a copy of the license certificate issued for such stallion.

7. That the inspection should be done by a county inspector or inspectors, appointed by the Government.

8. That the license fee should be \$10, out of which the expenses of the inspection should be paid, and that the surplus collected from each county should be returned to the county to be used for the encouragement of spring horse shows; no more than two of which shows should be held in any electoral district.

9. That local horse-show associations should be encouraged in each county; that the spring horse shows should be held under the management of these associations; and that these associations should be affiliated with the Ontario Horse-breeders' Association.

10. That educational meetings should be held in connection with the spring horse shows, held in each county, by arranging to have special lectures on practical subjects relating to the horse industry.

11. That "syndicating," under the generally accepted meaning of the word, should not be encouraged, and that some legislation should be passed to regulate it.

### APPLE SHIPPERS IN TROUBLE.

The fruit shippers as well as the grain men are having their troubles of late. In view of the fact that a million dollars' worth of apples are tied up in the Province of Ontario for want of adequate shipping facilities, an emergency meeting of the shippers of the Province was held at the Walker House, Toronto, on November 27th. It was pointed out that the supply of refrigerator cars was far from equal to the demand for them, also that the shipments were held back because of the fact that all G. T. R. shipments have to go via Portland, at which point ocean steamer accommodation is inadequate to the requirements of the trade. It was felt that in times of pressure the shippers should have the option of exporting by way of St. John or Boston and New York if they choose.

During the meeting it was learned that the Canadian Freight Association was in session at the Union Station, and the shippers decided to descend upon them in a body. Mr. Dalrymple, general freight agent of the G. T. R., was also interviewed. In neither case, however, did much satisfaction come to the shippers, the railway men, while admitting the shortage of refrigerator cars, claiming merely that the matter would have to be referred to the proper authorities in Montreal.

Upon their return to the Walker House, the shippers decided to organize, and, accordingly, elected officers of the "Ontario Apple-shippers' Association" as follows: President, Mr. Samuel Nesbitt, Brighton; Sec.-Treas., Mr. John Brown. Executive Committee—Messrs. D. C. Matthewes, Colborne; R. J. Graham, Belleville; W. H. Matthewes, Trenton; F. L. Fowke, Oshawa; Frank Everist, Toronto; M. S. Schell, M.P., Woodstock; J. G. Anderson, Lucknow; M. Snetsinger, Thornbury; E. D. Smith, Winona.

If measures are not soon taken to relieve the congestion, a deputation will be sent to Montreal to interview the chief officials, and to Ottawa to present the case to the Railway Commissioners and the Dominion Government.

### FORTHCOMING EVENTS.

Dec. 9th to 13th—Ontario Winter Fair, Guelph.

Dec. 12th, 1 p.m.—Creamery meeting, O.A.C., Guelph.

Dec. 18th to 20th—Nova Scotia Fruit-growers' convention at Berwick, N. S.

Jan. 6th to 11th—Eastern Ontario Fat-stock and Poultry Show, Ottawa.

Feb. 12th to 14th—Ontario Horse-breeders' Show, Toronto.

May 4th to 9th—Canadian National Horse Show, Toronto.

### CHRISTMAS GIFT FOR A FRIEND.

Christmas is coming, and people will be worrying what to purchase for their friends. Is there anything better than a good book? "Carnichael," the captivating story now running through our Home Magazine, is particularly well suited for this purpose, being handsomely bound and illustrated. How can you get it? In two ways: for \$1.25 (postpaid) from this office, if your local bookstore happens not to have it on hand; or as a premium for obtaining only two new subscribers to "The Farmer's Advocate and Home Magazine" at \$1.50. Try the latter plan.

### N. S. FRUIT-GROWERS' CONVENTION.

The annual meeting of the Nova Scotia Fruit-growers' Association will be held in Berwick, N. S., December 18th, 19th and 20th. Professors Waugh and Sears, of the Massachusetts Agricultural College, and other celebrities, are to be on the programme. A rousing convention is anticipated by the Secretary, S. C. Parker, this being the first meeting of the Association in its home town.

Friends of "The Farmer's Advocate and Home Magazine" everywhere will confer a favor by promptly sending in their renewal for 1908.

### PRESIDENT CREELMAN'S REPORTEE.

President G. C. Creelman, of Guelph, made a happy repartee at a recent McMaster University Literary Society meeting in Toronto. He had been invited to speak before the students at their annual opening of the Literary Society. His entrance to the platform was the signal for the other debaters redolent of the farmyard.

Without any apparent disturbance, the speaker opened his address thusly:

"Ladies and gentlemen, and old roosters in the gallery: I find I am not so far removed from the farmyards of Ontario as I had expected to be upon entering these classic halls."

Needless to say, the genial Simcoe boy captured his audience.

MARKETS.

TORONTO.

LIVE STOCK.

Receipts of live stock at the City and Junction markets for last week were not as large as they have been for some time past, the total being as follows: 181 carloads, composed of 3,019 cattle, 3,683 hogs, 3,474 sheep and lambs, with 228 calves. The quality of cattle offered as fat was far from being good, that is, the number of fair to good was small in comparison with the large number of inferior and common, trashy unfinished.

On Monday, at the Junction, prices ranged as follows: Exporters, \$4.25 to \$4.50; export bulls, \$3.35 to \$3.80; prime butchers', \$4.25 to \$4.65; medium, \$3.75 to \$4; common, \$3.25 to \$3.50; cows, \$2.50 to \$3.50; canners, 75c. to \$1.50; milkers, \$27 to \$62. Sheep, \$4; lambs, \$5 to \$5.25; calves, \$4 to \$6.50 per cwt. Hogs, \$5 for selects, \$4.75, f. o. b. cars at country points.

Exporters.—Last week scarcely enough were offered to make a market, and the highest price quoted was \$4.60. Export bulls sold from \$3.25 to \$4 per cwt.

Butchers'—Trade dull, prices low all round. Prime picked cattle, of which there were few on sale, sold at \$4.25 to \$4.50; loads of fair to good, \$4 to \$4.20; medium, \$3.60 to \$3.80; common, \$3.25 to \$3.50; cows, \$2.50 to \$3.75; canners, 75c. to \$1.50 per cwt.

Feeders and Stockers.—Deliveries were not as large as for several weeks past, and prices ranged as follows: Best feeders, 1,000 to 1,150 lbs., \$3.40 to \$3.65; feeders, 900 to 1,000 lbs., \$3 to \$3.25; stockers, 700 to 800 lbs., \$2.50 to \$3; stockers, 500 to 700 lbs., \$2.25 to \$2.50; common stockers, 500 to 700 lbs., \$1.60 to \$2 per cwt.

Milkers and Springers.—Good to choice milkers and springers sold at \$40 to \$60 each; common to medium at \$25 to \$35 each.

Veal Calves.—Trade in veal calves is much slower, since the market became flooded with poultry, and only the very best calves are being sought after. Prices range from \$3 to \$6 per cwt., and a few extra choice sold at \$6.50.

Sheep and Lambs.—Receipts were liberal; prices easy, but unchanged. Export sheep sold at \$3.75 to \$4 per cwt.; culls and rams, \$3 to \$3.50 per cwt.; lambs of good quality sold around \$5 to \$5.10; picked ewes and wethers, \$5.25 per cwt.; culls, \$4 to \$4.50 per cwt.

Hogs.—At the Junction, on Monday, hogs were quoted at \$5.50 per cwt., fed and watered; but at the City, on Tuesday, only \$5 per cwt., fed and watered, was quoted.

Horses.—Isaac Watson, of the firm of Burns & Sheppard, reports the horse trade as being anything but satisfactory. The Repository handled about 75 horses last week, at all kinds of prices. There were seven draft stallions, two and three years old, all registered, one of which was imported, that sold at \$125 to \$190. General-purpose horses, sound, and in good condition, sold at \$125 to \$150; heavy-draft, 1,400 to 1,700 lbs., at \$140 to \$175; expressers, \$120 to \$160. Common and inferior horses of all kinds sold at buyers' own price nearly. The trade has never been as dull and slow in the last decade.

BREADSTUFFS.

Wheat.—No. 2 white, 97c.; No. 2 red, 97c.; No. 2 mixed, 96c.; Manitoba, No. 1 Northern, \$1.14; No. 1 Hard, nominal; No. 2 Northern, \$1.10.

Rye.—83c.  
Peas.—No. 2, 86c., buyers.  
Corn.—No. 3 yellow, sellers, 70c., Toronto.

Buckwheat.—Sellers, 65c.  
Barley.—No. 2, sellers, 68c.; No. 3X, 63c. to 65c.

Oats.—No. 2 white, 50c.  
Bran.—\$19 to \$20, in bulk, at outside points.

Shorts.—\$21 to \$22, in bulk, at outside points.

Flour.—Ontario, 90 per cent. patents, \$3.80 bid for export; Manitoba patents, special brands, \$5.80; second patents, \$5.20; strong bakers', \$5.

COUNTRY PRODUCE.

Butter.—Moderate receipts are reported by wholesale dealers. Prices easier, as follows: Creamery, pound rolls, 30c. to 31c.; creamery, boxes, 29c.

to 30c.; dairy, pound rolls, 27c. to 28c.; tubs, 26c. to 27c. There is one brand, the Locust Hill creamery, that is being sold, wholesale, at 34c. per lb., and retailing at 38c. per lb., on the Toronto market.

Cheese.—Steady market. Large, 13c.; twins, 13 1/2c.

Eggs.—Cold-storage, 22c. to 23c.; strictly new-laid, case lots, 29c. to 30c. New-laid eggs, on the farmers' market, retained, on Saturday last, at 45c. to 50c., the bulk selling at the latter price.

Honey.—Market steady. Extracted, 13c.; combs, dozen sections, \$2.75 to \$3.

Potatoes.—Car lots, on track, at Toronto, 85c. to 90c. per bag.

Beans.—\$1.75 to \$1.85 for primes, and \$1.85 to \$1.95 for hand-picked.

Hay.—Baled timothy, \$18 to \$19, in car lots, on track, at Toronto.

Straw.—Baled straw, \$10 per ton, in car lots, on track, at Toronto.

Poultry, Alive.—Turkeys, young, 10c. to 11c.; turkeys, old, 9c.; geese, 7c. to 8c.; ducks, 7c. to 8c.; chickens, fancy, large, 9c. to 10c.; chickens, medium, 6c. to 8c.; fowl, 5c. to 7c.; squabs, per dozen, \$2 to \$3. Dressed poultry, 2c. to 3c. per lb. more than the above quotations.

TORONTO FRUIT.

The apple market is somewhat easier in Britain, which has its reflex here. Apples, \$3 to \$3.75; grapes, 10-lb. basket, 25c. to 35c.; onions, 40c. per basket, and \$1 to \$1.25 per bag.

HIDES AND TALLOW.

Prices are quoted as follows by E. T. Carter & Co., 85 East Front St., Toronto: Inspected hides, No. 1 cows and steers, 7c.; inspected hides, No. 2 cows and steers, 6c.; country hides, 5c. to 5 1/2c.; calf skins, No. 1, city, 12c.; calf skins, No. 1, country, 10c. to 11c.; horse hides, No. 1, each, \$2.75; horse hair, 28c.; tallow, 5 1/2c. to 6c.; wool, unwashed, 12c. to 13c.; washed, 22c. to 23c.; rejections, 16c.; lamb skins, 75c. to 80c.

MONTREAL.

Live Stock.—In the local market, the supply of choice beef continues very light, and even good stock is not very plentiful. However, there is no end to the supply of lower grades, and prices for these continue quite moderate. The demand was good all round, both local and outside buyers operating freely. Choice cattle were quoted at 4 1/2c., good being 4 1/2c. to 4 3/4c.; medium, 3 1/2c. to 4c.; common, 2 1/2c. to 3 1/2c., and inferior, 1 1/2c. to 2 1/2c. Canners were selling at from 1 1/2c. to 1c. a lb., the average being perhaps 1c. Sheep and lambs continue to arrive freely. Choice sheep sold at 4c., good being 3 1/2c. to 3 3/4c., and culls, 3c. a lb. Lambs are in as active request as ever, and sold freely at 5 1/2c. to 6c. per lb. The receipts of calves are not quite so heavy as formerly, but these continue in good demand, sales of choice stock being made at \$12 to \$15 each; good at \$6 to \$10, and common at \$3 to \$5 each. The market for hogs showed a decline, of 1/2c. to 1-3c., as compared with a week ago, owing, largely, to continued poor advices from Europe on bacon. Sales of selected lots were made here at 6c. to 6 1/2c. per lb., weighed off cars.

Horses.—The only demand which has arisen of late is that from lumber camps, and even this is not sufficient to create any activity in the market. The recent snowfalls and slippery pavements, while calling for the use of an additional number of horses, is in no way sufficient to employ the large number laid off at the close of navigation, and an attempt is being made to get rid of a large number of the inferior animals, rather than feed them over winter. Prices are as follows: Heavy-draft horses, weighing 1,500 to 1,700 lbs., \$250 to \$300 each; light-draft, 1,400 to 1,500 lbs., \$225 to \$275; blocks, 1,300 to 1,400 lbs., \$200 to \$225; express horses, \$150 to \$225; common plugs, \$50 to \$75, and choice carriage and saddle animals, \$300 to \$500 each.

Provisions and Dressed Hogs.—Owing to the decline in the price of live hogs, dressed hogs continue in good demand at lower prices, being 8 1/2c. to 8 3/4c. per

lb. for fresh-killed, abattoir-dressed hogs. Country-dressed were in good demand at 7 1/2c. to 8 1/2c. The market for provisions continues unchanged, and both bacon and hams are in excellent demand. Green bacon, boneless, and long clear, light, sells at 12c.; flanks, with the bone in, at 11c.; long, clear, heavy at 11 1/2c.; choice smoked brings 12c. to 16c. per lb. There is a very fair demand for hams at 12 1/2c. to 14c. for those weighing 25 lbs. and over; 13c. to 14c. for those weighing 18 to 25 lbs.; and 14 1/2c. to 16c. for 8- to 12-lb. hams. Salt pork, in barrels, ranges from \$22 to \$23.50 per barrel. Lard sells at 12 1/2c. to 13 1/2c. for pure, and 10c. to 11 1/2c. for compound.

Potatoes.—During the past week, stocks of potatoes on spot have decreased greatly. Dealers are now paying 80c. per 90 lbs. carloads, on track, for Quebec whites, a few lots being also obtainable at 78c. These are being re-sold, on track, in large lots, at 85c., and are being delivered into store at 1c. a lb.

Eggs.—Dealers here are feeling a little nervous over the renewed talk of large importations from the United States. The stock held here was purchased at a very high cost this season, so that it cannot be disposed of at a profit at less than 23c. to 24c. for No. 1 cold-store stock, and 26c. to 27c. for selects. Those who want fresh-laid boiling stock are compelled to pay at least 35c. to 40c. for them, fall fresh being 33c. to 35c. Fortunately for holders, American eggs will have to be sold 2c. to 3c. less than Canadian, as the quality is not thought to be as good. Besides this, the American exporters will have to pay duty, so that they will not find the Canadian market a very remunerative one.

Butter.—The market showed considerable strength, though, as a matter of fact, prices did not show any advance. Receipts continue light, and stocks here are very moderate, and will probably be supplemented in the course of a few months by importations from Australasia or Great Britain. Meantime, dealers quote best November butter at 27c. to 27 1/2c., and best October's at 28 1/2c. to 28 3/4c. Single packages will, of course, bring more. Thirty-lb. tubs are quoted at 29c. to 30c. There is hardly any dairy to be had, and holders in the West are demanding 25c. per lb. for them, making the cost here about 26c.

Cheese.—Although there is no great quantity of cheese changing hands, the market is moderately active and quite firm. Quebec cheese is in very small volume, it being said that only a few hundred boxes could be obtained. Very little change in price has taken place, quotations being now 11 1/2c. to 12c., to cover all qualities and makes of November's, and 12 1/2c. to 12 3/4c. for October's, and 13c. for September's.

Grain.—The general feeling in the market for oats is easy. Prices have declined considerably at Winnipeg lately, and there has been an easing-off in prices here also. Demand is limited, consumers only using what they cannot avoid. Manitoba No. 3 white oats are said to be available at 53c. to 54c., to arrive; Ontario and Quebec No. 2 white being 54c. to 55c., No. 3 being 53c. to 54c., No. 4 being 52c. to 53c. Manitoba rejected are available at very much lower prices, and rejected Quebecs and Ontario's are quoted at about 50c.

Hides.—The market for hides continues to decline at a surprising rate, and this week, dealers are only paying 5c., 6c. and 7c., at Montreal, respectively, for No. 3, 2 and 1 beef hides, and 8c. and 10c., respectively, for No. 2 and 1 calf skins. They are selling to tanners at an advance of 1/2c. a lb., but the demand is extremely dull, and there does not seem to be much promise of an immediate improvement. Sheep skins have declined 10c., at 80c. to 85c. each; while horse hides have declined about 50c. each, at \$1.75 for No. 1, and \$1.25 for No. 2. Tallow is about steady, at 1c. to 3 1/2c. per lb. for rough, and 6c. for refined.

BUFFALO.

Cattle.—Prime steers, \$5.50 to \$5.85. Hogs.—Heavy, mixed, Yorkers and pigs, \$5; dairies, \$4.75 to \$4.90. Sheep and Lambs.—Lambs, \$5 to \$6.75, a few \$6.85; yearlings, \$5.25 to \$5.60; ewes, \$4.75 to \$5.25; Canada lambs, \$6.25 to \$6.60.

CHICAGO.

Cattle.—Steers, \$4 to \$6.50; cows, \$2.65 to \$4; heifers, \$2.50 to \$5; bulls, \$4 to \$4.85; stockers, \$2.40 to \$4.60. Hogs.—Choice heavy shipping, \$4.75 to \$4.85; light butchers', \$4.75 to \$4.85. Sheep and Lambs.—Sheep, \$2.50 to \$5; lambs, \$5.50 to \$6.35; yearlings, \$4.25 to \$5.25.

BRITISH CATTLE MARKET.

London.—Canadian cattle are quoted at 11c. to 12c. per lb.; refrigerator beef is weak at 9c. to 10c. per lb.

Frosted Wheat and Other Foods.

Advices received by "The Farmer's Advocate" from Winnipeg indicate that within a very short time after the announcements of feed wheat for sale were made in the East, the Manitoba Grain-growers' Association had received over 500 enquiries from Ontario. It was estimated that of the 15,000,000 or 20,000,000 bushels of frozen wheat there would be about half of it fit only for feed. Though sold low enough at local points in Manitoba, freight and various other charges bring it to 60c. or 70c. per bushel at Ontario points, while good American corn varies from 60c. to 67c. One leading London dealer received a carload of feed wheat, which he quoted at \$25 per ton, corn ranging from \$21 to \$22. Other foods were quoted about as follows, per ton: Oil meal (old process), \$32; cottonseed meal, \$32; corn, \$21 to \$23; corn meal, \$29; barley, 70c. per bushel; peas, 80c. to 85c.; low-grade flour, \$80 per ton; oats, \$32; bran, \$24 to \$25; shorts, \$26. For fattening cattle, corn would seem to be the better proposition at these figures; but where flesh or milk production is the object in view, there is no food purchasable to greater advantage than oil meal. Good feeders usually grind oats with corn, or mix it with some other lighter feeds, for stall-feeding cattle.

Dr. Rutherford Takes a Rest.

Dr. J. G. Rutherford, head of the three heavy and growing Department of Agriculture branches, Health of Animals, Meat Inspection and Live Stock, on his way home from Brome Co., P. Q., where he attended a meeting with Hon. Sydney Fisher, was taken down with bronchitis and acute indigestion, and has been ordered South for a rest by his physician. A host of friends, both in the Dominion and Great Britain, join "The Farmer's Advocate" in wishing for his speedy restoration and return. Early in the year, he was given six months' leave, but stuck to his post of duty instead. In his absence, now, Dr. A. G. Hopkins will administer the Health of Animals service; Dr. Ward, Meat Inspection, and Jas. B. Spencer, Live Stock.

International Judging Trophy Won Again.

The Ontario Agricultural College student team, consisting of E. S. Archibald, T. R. Arkell, L. Bowes, R. W. Hodson and D. A. McKenzie, at the Chicago International Exhibition, won the judging contest, Sat., Nov. 30th—cattle, sheep and swine—the third consecutive victory, making the College owners of the bronze bull trophy. Being first in sheep, the team, also, captured the \$250 Armour scholarship.

TRADE TOPIC.

PROVINCIAL WINTER FAIR, GUELPH.—On account of the Provincial Winter Fair, the Grand Trunk Railway System will issue round-trip tickets at Single First-class Fare from all stations west of Kingston to Guelph, Ont. Good going Dec. 7th to Dec. 13th. Valid for return until Monday, Dec. 16th, 1907. Full information may be obtained from any Grand Trunk ticket agent.

American ladies, when in England, are the occasion of many jokes, good, bad and indifferent. Here is a recent one, which has for its scene the magnificence of Windsor Castle:

Fair American.—Butler, any chance to get a glimpse of the Queen?

Gentleman addressed.—I am not the butler; I am the Prince of Wales.

F. A.—How lucky! Is your mother in?



## Life, Literature and Education.

### SELECTIONS FROM THE POETS.

From the "Masnavi" of Rumi.  
[Jelalu'd-Din, "the greatest mystical poet of any age," was born at Balkh, in 1207 A.D. He was of illustrious descent, but his parents, having incurred the jealousy of the Sultan, were obliged to leave their native province, and for many years roamed about through the East, finally settling at Konia (the Icomium of the Scriptures), the old Roman Province of Galatia. Hence came Jelalu's name of Rumi, or the "Roman." Here the poet received the earlier part of his education. Subsequently he studied at Aleppo and Damascus, and on his return to Konia was professor of four colleges, receiving the title of Sultan-ul-Ulema, or "Chief and Ruler of the Learned." Upon the death of two of his sons, who were slain during riots in Konia, he withdrew from the world, and founded the famous order of Dervishes, called the "Maulavis." Rumi died at Konia in 1273.]

Whosoever is bewildered by wavering will,  
In his ear hath God whispered His riddle  
That He may bind him on the horns of  
a dilemma;

For he says, "Shall I do this or its  
reverse?"

Also from God comes the preference of  
one alternative;

'Tis from God's compulsion that man  
chooses one of two.

If you desire sanity in this embarrass-  
ment,

Stuff not the ear of your mind with  
cotton.

Take the cotton of evil suggestions from  
the mind's ear,

That the heavenly voice from above may  
enter it,

That you may understand that riddle of  
His,

That you may be cognizant of that open  
secret.

Then the mind's ear becomes the sensor-  
ium of inspiration;

For what is this Divine voice but the  
inward voice?

The spirit's eye and ear possess this  
sense,

The eye and ear of reason and sense  
lack it.

The word "compulsion" makes me im-  
patient for love's sake;

'Tis he who loves not who is fettered by  
compulsion.

This is close communion with God, not  
compulsion.

The shining of the sun, and not a dark  
cloud.

Or, if it be compulsion, 'tis not common  
compulsion.

It is not the domination of wanton wil-  
fulness.

O son, they understand this compulsion  
For whom God opens the eyes of the  
inner man.

Behold, then, God's action and man's  
action;

Know, action does belong to us; this  
is evident.

If no action proceeded from men,  
How could you say, "Why act ye thus?"

The agency of God is the cause of our  
action,

Our actions are the signs of God's  
agency;

Nevertheless our actions are freely willed  
by us,

Whence our recompense is hell or "The  
Friend."

### PEOPLE, BOOKS, AND DOINGS.

Five trained Belgian dogs have been added to the police force of New York City.

General Christian DeWet, of Boer-war fame, has been appointed Minister of Agriculture in the new Orange River Ministry.

Blind Trooper Mulloy, who lost both eyes in the South African war and has since graduated from Queen's University, is now taking a post-graduate course at Oxford.

By a system of public-school education recently established in China, only Mandarin speech is to be taught. The purpose of this innovation is to do away with the numerous dialects and patois in which the Empire abounds.

Even the epitaph on the stone which marks the grave of Robert Louis Stevenson, at Mount Vaca, written by him in view of his approaching death, is thrilled through with the indomitable, cheerful courage which marked the life of this gifted writer through many years of weakness and suffering. It reads:

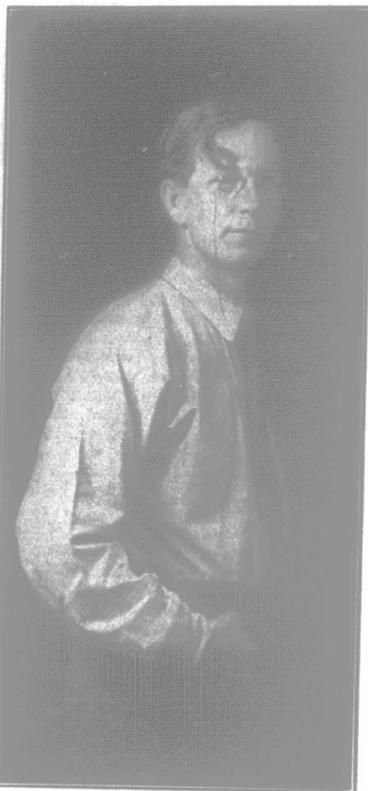
"Under the wide and starry sky,  
Dig the grave and let me lie,  
Glad did I live, and gladly die,  
And I laid me down with a will.

"This be the verse you grave for me,  
'Here he lies where he longed to be;  
Home is the sailor, home from the sea,  
And the hunter home from the hill."

Lady Helen Grinston, daughter of the Earl of Verulam, recently obtained a certificate in dairying from the Essex County Council. She is devoted to farm life and work in the open air, and is said to have been the most enthusiastic student the Dairy School at Chelsford ever had. She intends taking charge of the dairy on her father's estate, and will herself make all the butter for the household.

Hundreds of people, both Indian and White, met in the Mohawk

churchyard, near Brantford, Ont., on November 24, to do honor to the memory of Joseph Brant (Thayendanegea), the famous Indian chief, who died November 24th, 1807. A



Mr. Fred S. Haines, O. S. A.

wreath was placed on the stone slab which marks his grave, and another on the Brant memorial in Victoria Park; and on the following day a ceremony of condolence, lasting six



The Shepherds.

From a painting by Fred S. Haines, Meadowvale, Ont. This picture has been bought by the Ontario Government for the Normal School Gallery, Toronto.

hours, was held in the Council House of the Grand River reservation. The name of Joseph Brant is, perhaps, the most illustrious among those Indian names which have been handed down to history. He fought valiantly for the English during the Revolutionary War of 1775-1783, and was at all times noted for his loyalty, courage and courtesy. His fame does not, however, rest wholly on his connection with the English. The greater part of his lifetime was devoted to the enlightenment of his race, and upon two occasions, in the interests of his tribe, he made voyages to the Old Country, where, especially in Old London, he was very popular, and was feted and honored as few white men have been. He laid the foundation for the Indian settlement in the county which has been named for him, and it was largely owing to his influence that the Mohawk Indians came to the standing which they hold among the Indians of North America.

### THE MEADOWVALE ARTISTS.

To know really what it means to visit Meadowvale and the Meadowvale artists, you must go under certain conditions. In the first place you must be something of a Bohemian; enough, at least, to see poetry and freedom, and a great measure of common sense in the way these artists think and live. In the second, you must have a genuine love for the country, and an eye that sees beauty wherever grass grows, or a stream runs, or a tree tosses its greenery towards the sun. In the third, there must be something in yourself to which the finding of this little group of men working steadily towards a high ideal, thinking more of their art than of the Almighty Dollar, or what it can bring in mere material things, especially appeals.

Last of all, you must possess a genuine love of art, and a realization of what it may mean to have beautiful pictures about you always. You must know a little of the history of art, too; and if you are familiar with the story of that other little clique at Barbizon, who did so much to wrest it from a long imprisonment of convention and artificiality, all the better. Henceforth, when you think of Meadowvale you think also of Barbizon.

It was a fortunate circumstance—the thread of a former acquaintance with the wife of one of the artists—which gave me the opportunity of spending a very happy week-end at Meadowvale. I had not seen her husband, Mr. Haines, before, but had there been one hundred at the little station that sunny November morning, I should have known him for the artist as he sauntered toward me with the quiet, refined air which is so much a part of his personality. He is slight, and exceedingly youthful in appearance—he might pass for twenty-two—and there is something about his face which renders it different from the faces one meets every day. It is scarcely that of an idealist, and yet there is, at times, a dreaminess in the eyes which marks a man who thinks much out of the conventional, hard-beaten track of the more ordinary, more commercial life. Yet Mr. Haines is no mere dreamer. He is a man of

opinions, and decided opinions; of that I was very well convinced after more than two days of almost continuous conversation with him. But there were not one hundred at the little station, just two or three, and there was not a soul in sight as we walked down the bit of country road, with its vista of big trees and winding river which led to the village proper. Meadowvale, lying in the Credit River Valley, about 24 miles from Toronto, is not a metropolis of trade, even for the surrounding country. Long ago it saw its "palmy" days, when the Gooderham mills brought busy farmers with their grists, and a number of houses straggled about to accommodate the mill employees and other residents of the then thriving hamlet. Since then, one might judge, it may have been, for a time, a "deserted village."

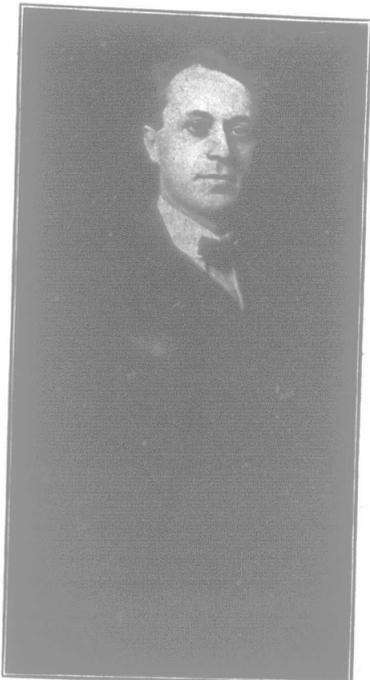
With the moving of the flour trade to another point the mill-wheels fell slack, and the people, many of them, moved away. Then, after a time, came the artists, and with them a distinctly new interest and an enrichment of personality which have rendered Meadowvale unique among the villages of Ontario. . . . There are to-day four of them, with their families, in the village, Messrs. Chavignaud, Thurston, Haines, and Ahrens, to name them in the order in which they came. A sculptor and portrait painter, Mr. Laur, has gone away but recently, and, at the time of my visit, a Toronto architect, Mr. Currie, was just moving in. Hence the expectancy may be understood with which I passed over the little mill stream that empties further down into the river, and, skirting the old mill itself, went with Mr. Haines up the street leading to his home, where a warm welcome from his charming wife and little daughter awaited me.

I don't think it is quite fair to turn a private home inside out before the public eye; otherwise I might be tempted to enter into detail. Suffice it to say that there were books everywhere—and, of course, pictures. Mr. Haines is a student as well as an artist, and talks literature almost as much as art. At times, too, he talks dogs, which he regards as jolly good comrades, and then he takes you out to see his kennels, where fifteen of the canine species are ready for a romp or a cross-country run. Mr. Haines makes a specialty of painting his pets, and for my benefit got Dorcas, a fine collie, to pose. It was quite interesting to see her stand, motionless almost as a statue, until told to "take a rest," when she scampered off, apparently proud of having done something worthy of praise. These trained dogs are sometimes required to stand so for ten or fifteen minutes at a stretch.

"You may think it looks easy," said Mr. Haines, in showing a half-finished picture of trees and sheep and a collie-guarded field, in his studio (if he had only known how hard and how wonderful I considered it!). "but look here!" And he showed dozens of studies, executed in pencil—sheep standing, sheep lying, sheep drowsy, sheep alert, sheep in sections, sheep roughly sketched or finished to perfection, a selection to choose from for the big picture, which you may see sometime at Toronto Exhibition or elsewhere. . . . It isn't telling tales out of school is it, either, to mention that I saw a string of a dozen ribbons or more, representing so many honors for paintings, hanging on the wall in this studio.

Mr. Haines, who is, by the way, the youngest of the group, was born in Meaford, Ont., and received his art training in the art schools of Toronto. He is a member of the Ontario Society of Artists, and has gained especial distinction for himself as an animal painter. He is, perhaps, the only artist in Canada who has given particular attention to dogs. In painting them, however, he has not been a follower of those—Landseer, for example—who have painted dogs before, and who have almost invariably invested them with human emotions. In this work he bears, possibly, the same relation to other dog-painters as Burroughs bears to

Thompson Seton and his followers in the world of literature. Neither are his animal pictures merely animal pictures. Almost invariably he has painted as a background for his favorite bits of landscape shimmering with sunlight and interspersed with the deep shade of trees, which show that this artist's talents are by no means limited. Mr. Haines considers his "Sheep in a Wood" as the most successful picture he has painted during the past summer. "The Intruder" (a cut of which appeared in "The Farmer's Advocate" some time ago) has probably been his most popular work.



Mr. Edwin Thurston.

MR. CARL AHRENS.

Going first to the home of Mr. Ahrens, Mr. Haines and I found the artist (the Big Comrade of whom Mrs. Ahrens wrote so entertainingly a few weeks ago in the Toronto Saturday Globe) and his wife, in the midst of unpacking, as they had but recently moved into the house which is to be their home in Meadowvale. But moving day did not matter.



Summer Scene.

From a painting by E. Thurston.

There were a big welcome, a "Come away back to the kitchen fire," a cup of tea, and a delightful chat about the camping trip which Mr. Ahrens and his wife recently completed while the artist was engaged in making the studies for Mr. G. W. James' new book, "In and Out Through the Old Missions."

Mr. Ahrens strikes you as a man

distinctly worth knowing. He has a strong, characteristic face, a keen sense of humor, and a passion for music second only to his love of art. Although he does exceptionally good work in illustrating, he is essentially a landscape painter, finding his greatest delight in a poetic rendering of natural beauty. "I love trees," he says, and as a consequence he has painted trees—trees deep in shade with rifts of light upon them, trees flooded with sunlight, trees bending beneath the lash of the storm, trees standing in the soft mists of early morning. While studying them he has often lived for days in the heart of the forest, hence is it, perhaps, that he has been able to put the spirit as well as the forms of the green depths upon his canvases. We are exceedingly sorry that it was impossible just now to get either a portrait of Mr. Ahrens or copies of his pictures for "The Farmer's Advocate," but will hope for that pleasure at some future time.

Mr. Ahrens studied art under Wm. M. Chase and F. Edwin Elwell, in New York, but he is a follower of no artist or school. "A man must get off by himself," he says, "and work out his own salvation." He spent a short time with Elbert Hubbard, at East Aurora, and has travelled extensively through the United States; yet his journeyings have by no means dissipated his conviction that a quiet and secluded life is the best to bring out the fullest self-expression, and, hence, perhaps, Meadowvale has especially appealed to him. Some good work from Mr. Ahrens may certainly be expected from him during his sojourn here.

MR. EDWIN THURSTON.

Leaving the Ahrens home, we proceeded next to the very dainty and artistic abode of Mr. Thurston and his wife, where, about a cheery grate fire, another long and delightful talk was awaiting. Mr. Thurston impresses you at first, perhaps, as a man who has seen much of the world and of social life. He begins to talk, perhaps—and he talks well—with a sort of Mona Lisa smile which you find it hard to penetrate; then suddenly some word impresses him, or some new idea strikes him, and the full attractiveness of his personality bursts upon you. You discover him to be a man of broad sympathies, deep observation of men, and conditions, and books. Art, of course, is his hobby, and while hearing him talk you realize that he would not in

he chooses to do decorative work rather than pure landscape. But in whatever he does, Mr. Thurston (as, perhaps, all of the artists of this vicinity) aims to express poetry, temperament, mood, feeling, rather than to produce mere photographic effects. "Art is not imitation," he says, with all the emphasis he can place upon the assertion. Art, as a means of making people see beauty, feel beauty, live better, more happily, is his ideal.

Mr. Thurston was born in New York State, of English parents, but he has lived intermittently in Canada for a number of years. He has received considerable art training in Toronto, but has also studied the best art the galleries of this continent contain. His picture, "Evening," was much admired at the Art Exhibition in Toronto last spring.

MR. GEORGE CHAVIGNAUD.

Our next visit was to the big house on the hill, where, in a big, cheerful living-room, which he has transformed into a studio, Mr. Chavignaud paints his pictures. Here again was a new personality, and another delightful chat. And now I realize why the artists of this place paint so differently. No two of these men, put them through what permutations and combinations you will, are in the slightest degree alike. Each paints according to his temperament, hence result pictures as different as those of the Barbizon School—Corot, Millet, Rousseau and Diaz.

Mr. Chavignaud was born in Brittany, and still talks with the most delightful French accent. He has travelled much on the continent, and has studied art in Paris and Belgium, and he and his wife have many interesting experiences of these places to relate. Upon the walls of his studio I noticed two pictures, one of which a portrait of a Dutch boy, was exhibited in Brussels (several of Mr. Chavignaud's pictures have been exhibited in the best galleries of Belgium and France), and the other, "Le Matin," at the Paris Salon. The latter was a fine water color, representing the first streak of dawn coming up from the horizon as a gray cloud lifts. In the foreground cluster some Dutch cottages, and a few tall trees bend before a morning breeze.

Mr. Chavignaud has been very successful in water-color work, but for the past year has been devoting himself to oils, in which he is likewise achieving success. Like the others, Mr. Chavignaud has little liking for the photographic school, and, like the others also, he has a supreme disregard of money-getting for the sake of mere luxury or possession, as the be-all and end-all of life. "I have been up to the city," he laughed, in his gay, Frenchy way, "I hear everywhere talk of the tightness of money. I think, 'we are rich men at Meadowvale. Our wants are few. We do not feel the tightness of money. We are millionaires.'"

And so they are, it seemed to me, millionaires in quiet contentment and high aim; in rich mental endowment; in their disregard of the excesses of fashion and the race for mere money, over which so much of the world is running mad; in a work which gives leisure enough to preclude the rush, rush, which burns up, perhaps, too much of the best of life.

All cannot be artists. Granted. But most of us, whatever our occupation, might be none the worse for a little of the philosophy which rules the lives of these men and such as these—for a little of the love of Nature, of the beautiful in art; a little of the altruistic spirit which can seek to perpetuate an appreciation of the beautiful and the poetic; a little of the enthusiasm which can deem one's work, whatever it may be, of more moment than the material reward which can come for it.

Our readers of the gentler sex may, perhaps, wish to hear more of the charming women who are the wives of these gifted men. But thus far I must not go. The feminine mind recoils from publicity, and we must not presume. In closing, I wish to express regret that the reproductions of paintings shown in connection with this article give so vague an

idea of the originals. Color, atmosphere, those qualities of art which can be felt, rather than described—all of these are lost in reproductions in black and white, the work of the photographic school (with which these cannot be classified) appearing, perhaps, to better advantage than that of any other class when thus reproduced. We trust, however, that our readers will comprehend the difficulty, and make allowance for it, and that they will, at the first and every opportunity, make a point of seeing something of original art, and judging for themselves.

enough to have no enemies, we all have neighbors—there is always somebody we can help. We may not be called on to address missionary meetings, or to lecture on a public platform, but there are plenty of opportunities of helpfulness within the reach of the poorest man, woman and child. Now that you are overhauling the house from cellar to garret, you may possibly come across many things which are lying idle when they might be of use to somebody. Clothes the children have outgrown, which will just fit some poor neighbor's little ones; a bottle or two of preserves,

handful of little faded garments to clothe the baby of some destitute mother, to carry a howl of grief to a sick friend with a word of heartfelt sympathy—these are a few of the acts by which the woman who is poor in this world's goods shows her helpfulness.

Every true woman would like to be good-looking. Why? Is it only from selfish vanity, or is it because she thinks she will have more influence and win more love? Although it is true enough that beautiful women have influenced men for good—or evil—since the days of Eve, yet we all prefer a helpful neighbor to a beautiful one. As for the people who live in the house with us, they can never keep our love long if they have nothing but outward beauty to recommend them.

wished to perform a deed whose memory should not fail, but which, as the years rolled on, might sound their name and praise far abroad. Omar, with a wedge of rope, lifted a great obelisk on its base, carving its form in beautiful devices, and sculpturing many a strange inscription on its sides. He set it in the hot desert to cope with gales. Ahmed, with deeper wisdom and truer though sadder heart, dug a well to cheer the sandy waste, and planted about it tall date palms, to make cool shade for the thirsty pilgrim, and to shake down fruits for his hunger.

These two deeds illustrate two ways, in either of which we may live. We may think of self and worldly success and fame, living to make a name splendid as the tall, sculptured obelisk, but as cold and useless to the world. Or we may make our life a well in the desert, with cool shade about it, to give drink to the thirsty and shelter and refreshment to the weary and faint. Which of these two ways of living is the more Christlike is easy to decide.—Rev. J. R. Miller, D. D.

## The Quiet Hour.

"THEY HELPED EVERY ONE HIS NEIGHBOR."

Two little old ladies, one grave, one gay,  
In the self-same cottage lived day by day.  
One could not be happy, "Because," she said,  
"So many children were hungry for bread;"  
And she really had not the heart to smile,  
When the world was so wicked all the while.

The other old lady smiled all day long,  
As she knitted, or sewed, or crooned a song;  
"She had not time to be sad," she said,  
"When hungry children were crying for bread;"  
She baked, and knitted, and gave away,  
And declared the world grew better each day.

Two little old ladies, one grave, one gay;  
Now which do you think chose the wiser way?

Surely the prophet Isaiah must have been looking forward to the Millennium when he said: "They helped every one his neighbor, and every one said to his brother, Be of good courage. So the carpenter encouraged the goldsmith, and he that smothered with the hammer him that smote the anvil, saying, It is ready for the soldering." We haven't reached that ideal condition of brotherly cooperation yet, although we are slowly beginning to realize that each man is to some extent his brother's keeper, and that we are bound not only to shoulder our own burdens, but also to lighten, as far as possible, the burdens of others. If the Master "went about doing good," is not that also the business of His disciples? Anyone who is satisfied to go through life minding his own business only, is certainly not obeying the apostle's injunction, "Look not every man on his own things, but every man also on the things of others"; or that still more authoritative command, "Love the neighbor as thyself."

If we really wanted to help every one his neighbor, we should find means of doing it many times a day. The first thing is to find out the answer to the lawyer's question, "Who is my neighbor?" The parable of the Good Samaritan contains our Lord's answer, and it surely teaches that every one who needs help, and can be helped by us, is our neighbor. The wounded man in the parable was probably a national enemy of the Samaritan, but that made not the slightest difference in his kind attentions. Although the Jews would have no dealings with the Samaritans, the lawyer knew—or ought to have known—the teaching of the law of Moses about the duty of helping one's enemy, even in little things: "If thou meet thine enemy's ox or his ass going astray, thou shalt surely bring it back to him again. If thou see the ass of him that hateth thee lying under his burden, and wouldest forbear to help him, thou shalt surely help with him." Of course, if it is necessary to help a neighbor—or even an enemy—in such a trifling difficulty, how much more necessary is it when he is in really serious trouble. As Solomon says: "If thine enemy be hungry, give him bread to eat; and if he be thirsty, give him water to drink."

But, though we may be fortunate



Mr. George Chavignaud, O. S. A.

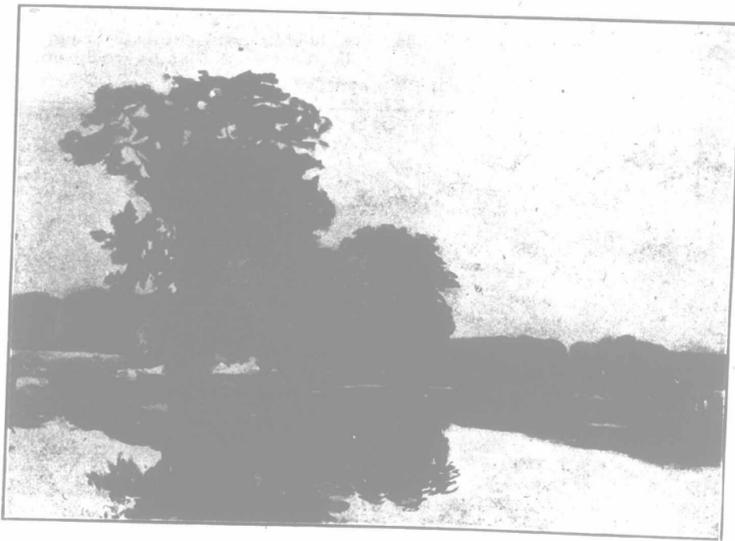
which will not be needed at home; some potatoes or apples which would be a treasure to the big family in the little house over the hill, but will only decay if left in your cellar. Perhaps there is a baby carriage you will never need again, which would gladden the heart of some tired mother who can't afford to buy one, or some treasured baby clothes which were never worn, and will be wasted unless you can make up your mind to part with them. A lady was housecleaning once, and she sent a half-worn-out fluff mat to a poor old woman. It was a very small act of kindness, but the old woman always declared that it saved her life. She had suffered terribly from cold feet as she

"You say that my love is plain,  
But that I can ne'er allow,  
When I look at the thought for others  
That's written on her brow.  
Her eyes are not fine, I allow,  
She has not a well-cut nose;  
But a smile for others' pleasures,  
And a sigh for others' woes.  
And yet I allow she is plain,  
Plain to be understood,  
For every glance proclaims her  
Modest and kind and good.

"You say that you think her slow,  
But how can that be with one  
Who's the first to do a kindness,  
Whenever it can be done?  
Quick to perceive a want,  
Quicker to set it right,  
Quickest in overlooking  
Injury, wrong, and slight,  
And yet I admit she is slow,  
Slow to give needless blame,  
Slow to find fault with others,  
Or aught for herself to claim.

"Nothing to say for herself,  
That is the fault you find;  
Hark to her words to the children,  
Cheery and bright and kind,  
Hark to her words to the sick,  
Look at her patient ways;  
Every word that she utters  
Speaks to the speaker's praise.  
"Nothing to say for herself,"  
Yes! right, most right you are,  
But plenty to say for others,  
And that is better by far.

"You say she is commonplace,  
But there you make a mistake;  
I wish I could think it were so,



Evening.

From a painting by G. Chavignaud. Exhibited at Canadian National Exhibition, Toronto, 1907.

sat all day in her chair, but since the mat arrived the bronchitis had not been so bad, not to mention the "rheumatics."

I am afraid it is true that the spirit of helpfulness is more common among the poor than among the rich. Perhaps it is partly because the poor know better how acceptable a little timely help is. It is easy to give money when we have plenty, but the gifts of the poor are surely more precious is God's sight, for they cost the givers more. "To 'mind' the children of a neighbor while she goes to her daily toil, to send a

For other maidens' sake,  
Purity, truth and love,  
Are they such common things?  
If hers were a common nature,  
Women would all have wings,  
Talent she may not have,  
Beauty, nor wit, nor grace,  
But, until she's among the angels,  
She cannot be commonplace."

HOPE.

### TWO WAYS.

There is an old story of two brothers, Ahmed and Omar. The latter

## Current Events.

Nine hundred Chinese recently sailed for home by the steamer Empress of India, from Vancouver.

The new Russian Duma has decreed that the title "autocratic" shall be no longer used in referring to the Czar.

Very serious attacks, in which first the tribesmen, then the French, were defeated, have occurred at Lalla Maghnia, Algiers.

Mr. G. O. Lesk, Assistant Chief Engineer of the Grand Trunk Pacific, has announced that the new railway will be built through Yellow Head Pass.

A revolution, directed especially against the Premier, Senor Franco, but which may result in the deposition of the King, is in progress in Portugal.

Some of the manufactories in New York and the New England States have resumed full-time working hours—an encouraging sign that the period of industrial depression is on the wane.

The Bank of France has promised to send \$1,000,000 weekly to America until the present financial stress has been relieved. The first consignment arrived recently per steamer Cecilia.

Three new members will be introduced in the Senate and five in the Commons in the coming session at Ottawa, the new Senators being Hon. Messrs. Campbell, Belcourt and Derbyshire; and the new members of the Commons, Hon. Messrs. Pugsley, Graham, Beattie, Owen and Martin.

Secretary Cortelyou, of the U. S. Treasury, has refused to receive any further subscriptions for the new one-year treasury certificates. This announcement is regarded as indicating that the crisis in the money market may be practically over.

As the result of an investigation into the recent railway wreck at Moorlake, the Board of Railway Commissioners will probably issue an order requiring the railway companies to alter the present custom of allowing engineers in charge of locomotives running light to dodge from station to station merely according to general orders, and to observe the time sheets of regular trains. Such engines will probably be required to stop for specific orders at stations, as regular trains are now required to do.

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The new Franco-Canadian trade treaty, concluded last September, was laid down before Parliament the other day, superseding the treaty of 1903. It gives to France the benefit of the intermediate tariff on 93 items, and concessions below that on a few special lines, such as laces, silks, velvets, light wines, etc., but in any case where the British Preferential Tariff is higher, it will be levelled down to the French-treaty rate. Canada, on the other hand, gets the benefit of the French minimum tariff on 152 items, including nearly all the products of the farm, wood goods, pulp, paper, and certain lines of manufactured lines. It is anticipated that similar "favoured-nation" treaties will yet be concluded with other powers.

"THE FARMER'S ADVOCATE" FASHIONS.



6001.—Ladies' Redingote, 6 sizes, 32 to 42 inches bust measure.



4249.—Misses' Costume, 4 sizes, 14 to 17 years.



4276.—Dolls' Set, 4 sizes; dolls 12 to 30 inches long.

The above patterns will be sent to any subscriber at the very low price of ten cents per pattern. Order by number, and be sure to give waist and bust measurement. Allow from one to two weeks in which to fill order.

Address: "Fashion Department," "The Farmer's Advocate," London, Ont. [Note.—Where two numbers appear, ten cents must be sent for each number.]

Children's Corner.

All letters intended for the Children's Corner must be addressed to Cousin Dorothy, 52 Victor Ave., Toronto, Ont.

THE GREEDY BOY'S CHRISTMAS WISH.

I wish my dad was a great big man,  
Six thousand or more feet high,  
With fearful big legs about the space  
Of a half of the bright blue sky.  
I'd hang his golf hose up to-night,  
And fill all the other boys  
With envy at my mad delight,  
As I cornered all the toys.

William Walton's interesting letter has to go to the W. P. B., because it is written on both sides of the paper. Send as many pages as you like, but write on ONE SIDE ONLY.

Be Kind to Your Pets.

Editor, Children's Corner.—Will you kindly allow me to say a few words for the benefit of your little readers? In passing through the country I see many children who are cruel to their pets. Their dogs and cats are often left without water, and sometimes sicker from want of food. In one home, where there was plenty of provisions, a beautiful dog was kept in such a state of half starvation that he became fierce, and almost mad, and while he thus suffered he attacked some children, and nearly caused the death of one of them. If children were trained to act kindly to the lower animals, their benevolence would be cultivated, and, consequently, they would become good members of society, and their kindness would extend also to their relatives and neighbors.

A LOVER OF ANIMALS.

Would you Rather Have a Cat or a Dog for a Pet?

Dear Cousin Dorothy,—It is quite a while since I wrote on a debate in the Children's Corner, so I decided to come again, as I have something to say on "Would you rather have a cat or a dog for a pet?" I do not believe there are many cousins who would like to do without a pet of some kind. I am one of your Cousins who would prefer a dog for a pet. I am almost sure there are more dogs than cats used as pets. Who wouldn't have a nice little Scotch terrier, a water spaniel or a large Newfoundland dog, or almost any kind of a dog? Black, brown, yellow or white colored dogs are pretty. I know a certain girl who has a dog for a pet, and, as she has no sisters to play with, she spends most of her time in training it. It knows many tricks. It will climb a tree, walk a fence, jump a hoop, a rope, and knows other things too numerous to mention. Dogs appear to know more than cats, even if they are not trained. They seem to know when they are doing wrong. I will not write any more on this subject, as I want to leave room for the other Cousins. Before I go, I may say I want to correspond with a Cousin living in Quebec, or some part of New Brunswick. Beausville, Ont. ALICE McLEOD.

Dear Cousin Dorothy,—I have never written to the Children's Corner before, but have been an interested reader. As to which I would rather have for a pet, a cat or a dog, I would prefer the latter, because I think a dog is more company, and can be romped and played with more, as he is not so easily hurt, and can run faster. I will close with a few riddles:

1. Why is a pocket handkerchief like a ship at sea? Ans.—Because it gets many a hard blow, and occasionally goes around the horn.

2. Why is a horse with his head hanging down like next Monday? Ans.—Because its neck's weak.

HOWARD PETTIT (age 12),  
Thamesford, Ont.

Dear Cousin Dorothy,—I saw what the next subject for debate was to be in "The Farmer's Advocate," and I thought I would write on it. I think I

would rather have a dog than a cat for a pet. I am only a child, and you can teach a dog to do so many things that they make quite a good companion. I had a nice little dog that was nearly a brother to me, but he acted as if he was going mad and had to be killed. The loss was partly replaced by four furry little kittens. I kept two, and have them to play with. I like them very well, but, of course, they are not near so nice as poor Carlo. I got three real nice correspondents through this club, and would like more if I could get them. I think I will close for this time. With best wishes for "The Farmer's Advocate."  
ALMA McCUTCHEON,  
Croton P. O., Ont.

Dear Cousin Dorothy,—I have never written on any of the debates in your "Corner" yet. I think the boys and girls are more interested in the Corner when there is some debate. I do not think cats are of more use than dogs. Dogs are helpful on the farm, besides being a good animal for children to play with, but I do not like to see city ladies leading their dogs as many of them do. Of course, cats are some good. They keep mice killed, which, if it was not for them, would do a great deal of harm.  
Ayr, Ont. ELIZA HAY.

Dear Cousin Dorothy,—I cannot stay away any longer. I have been reading the letters from the other Cousins, and I think I must join your cozy corner also. I go to school regularly. We have had a lovely teacher, but he has got to leave, so we will have to get another. I would like very much to take music lessons, but I can't get my school-work and music up properly to take both, so I think I would rather get my school-work up first and take music afterwards. I read the debate, "Which would you rather have, a cat or a dog?" For my part, we have never kept a dog, and I don't know how I would like one, but I am very fond of cats. I think if you take a cat when young you can train it in a number of things. Of course, a cat is not quite as useful as a dog. A cat is a very playful animal, so I prefer having a cat. STARLIGHT.

Dear Cousin Dorothy,—I like to read the letters in "The Farmer's Advocate" very much. We have taken it for a number of years, and father thinks it is a good paper for farmers. I go to school, and am in the Entrance Class, and intend writing on the Entrance examination next summer. I was out hunting hickory nuts October 4th. They are quite plentiful around here this year. There is a lovely church situated about one-half mile from my home; it was dedicated in January, 1904. It seats a large crowd, and they fed about seven hundred at the tea-meeting when it was dedicated. I think Cousin Dorothy has given us a hard debate to decide upon this time, don't you, readers? I am not a lover of a dog, but I like a cat; but, taking it all through, I believe a dog is most useful. It can do many things which a cat cannot, but a dog can do about everything a cat can do. I think it would be a good idea if we could have our letters criticised, don't you? I think it would teach us to be more careful. A COUNTRY GIRL,  
Wheatley P. O., Ont.

You would like your letter criticised? Well, if I were writing in a debate, I should stick to the subject, and enclose a separate letter with everything else I had to say, for the "Letter Box."  
C. D.

Dear Cousin Dorothy,—I thought I would write a letter to the Children's Corner, as I never wrote before. I thought I would send a few lines on the debate. I think a dog is the best. If you have a good dog, it will go after cows and bring them up to the barn quickly, because, I know ours will. I don't like cats, because they are always sitting under the stove. Every kitten I see around our place I cut its tail off. I guess this is all this time. I may write some time again.  
DAVID A. McALISTER,  
Willow Grove, Ont.

I never imagined any boy could be so cruel nowadays as to cut off a kitten's tail. It is dreadful to think of. Did you ever hear of a boy called Nero, who used to pull off flies' wings? When he

was a man, he thought it was fun to burn men and women alive! C. D.

THE BOYS TO THE RESCUE!

[The debate about useful boys is over, but, as we so seldom hear from the boys, I am going to print the following letters.—C. D.]

Dear Cousin Dorothy,—I was reading the letters of our Cousins in the last issue. I think some of them said more than they should have done, to have said the strict truth, yet I admired the girls who brought Eddie Cooke to his senses, when he tried to make dust of them as he did.

Now, Cousins, you need not take Eddie Cooke as the type of person by which to judge all boys. He might have been what he wanted to be, but the knight of old would have turned him out for being unchivalrous. I do not exactly agree with the "Two Kentucky Girls" when they said that a boy would break as many dishes in a day, if set washing them, as a girl would in a year. They would not have written that if they had thought much about it. They need not have said that a girl can milk three cows to a boy's one. I will venture to say that I can milk one cow to either of their one any time. Most of the girls said that boys should have the heavy work because they are stronger. Now, what did Viola Evans say about pitching bundles of peas that her father could hardly lift? I know a girl who is not much bigger than I, and she is as strong as an ox. We had a debate at our school once on the same question, and the boys won, because they cared more whether they won or not than the girls did. A BOY WHO IS A BOY,  
Bond Head, Ont.

Dear Cousin Dorothy,—Your last "Advocate" had a great many letters in favor with the girls. I do not stick up for the girls always. The "Two Kentucky Girls" say that if you set a boy washing dishes he will break more dishes in one day than a girl will in a year. I do not think that is so, because I washed dishes for six months and never broke one, and did all the housework besides, so I think she is mistaken, and I will go against her any day for milking cows. I think all boys should be able to do some girls' work and not be clumsy, as "One of the Girls" said. You generally see when a girl goes out to the barn to pitch back hay or sheaves, they generally laugh and then they are no good. You want to come to Hickson to see the boys work too.

A HICKSON BOY.

Dear Cousin Dorothy,—My father has taken "The Farmer's Advocate" for a number of years. I take great interest in reading the Children's Corner, and the discussion on which is the most useful, "boys or girls." I don't see why girls can't be as useful as boys, but a great many that I know are not; they go to school, and, when they come home, they don't as much as help their mother to wash the dishes. I am eleven years old. I am in the Third Book. I live about a mile from school. I also take lessons on the piano. I sometimes wash the dishes, milk two cows, feed the pigs, rake the hay, build loads of hay, carry in wood, cut the lawn, rake the grass and leaves, and I think I can get up a meal as well as the best of the girls when mother is away. I wonder how many girls can do what I have done, although I am—

ONLY A FARMER'S BOY,  
Omemeo, Ont.

READ THIS ABOUT THE PREMIUMS

The notice regarding our premiums, which appeared on page 1828 of our Nov. 21st issue, was hardly correct, as ANYONE sending us a distinctly new subscription, and \$1.50 to cover same, may secure a premium, whether any member of his family is a subscriber or not. Of course, the sender does not obtain a premium on his own subscription.

Also, "The Farmer's Advocate" knife is given for ONE NEW SUBSCRIPTION. Or any two of the following are given for one new subscription: A mouthorgan, a reading-glass, a mariner's compass and a microscope.

## The Ingle Nook.

Some time ago, in reply to a correspondent, we published directions for serving a formal dinner. When looking through some Harper's magazines this morning, we came across an article on "Home Dinners Without a Servant," which seemed so admirable as a supplement to that article that we felt we could not do better than quote some paragraphs from it. After all, the occasions upon which it is necessary to serve a strictly formal dinner are, in the country, few and far between, and to know how to conduct an informal one attractively is, for the great majority of farmers' wives, a much more pertinent question. When one cannot keep servants, or chooses "not to be bothered with them," many conventions must necessarily be thrown to the winds; but it is well to understand that this can be done without any sacrifice of refinement or the pleasure of an attractive service.

"But dinner!" this writer says, "Here at least the household must gather about itself what shreds of dignity it possesses, and try to compass a meal that shall not be altogether unworthy of the distinguished name of dinner. And I contend that this is as possible in a household where no maid is employed as in one presided over by a butler—if only one goes about it in the right way.

"In the first place, however the bill of fare may depart from the conventions, there must be no such departure in the spreading of the table. The spotless linen, the shining glass, silver and china, must be as carefully arranged for the entirely domestic meal as for that to which guests are expected. When feasible there should be flowers, or, at least, a growing plant in the middle of the table. No liberties or carelessness may be permitted with the stage-setting. The first look at the table should produce the impression of an orderly and dignified occasion.

"Since there is no maid, the dishes for each course must all be put on the table at once. The meat in front of the carver, each vegetable near someone who will serve it, a piece of bread and a butter ball on each bread-and-butter plate, gravy or sauce, pickles or relishes, may all be in place when the family comes in.

"Once assembled and seated, a like orderliness should be adhered to in serving. If everything is on the table as it should be, there will be no need for constant jumping up to repair deficiencies. Nothing is more disturbing to the calm that should wait upon digestion than such irregularities. The butter has been forgotten, and one person rushes to the refrigerator. There are not enough tablespoons, and a relief expedition flies to the silver drawer. We have all of us known such dinner tables, and our gastronomic memories hold them in bitter souvenir.

"When the table is not large enough to accommodate without crowding the dishes that will be needed at the meal, a serving-table may be pressed into use, and on this may be the overflow supply. Here, too, may be the pitcher of water, the plates for the salad or the dessert, the after-dinner coffee cups and saucers and sugar bowl, and any other adjuncts which it is well to have near the hand of the mistress of the house.

"When the time comes to change the plates, the work should be deputed to one member of the family. The quiet of the earlier part of the meal should not be rudely dispelled by permitting half the persons at the table to be on their feet at once. If there are daughters, each may take her turn at removing the plates, brushing the crumbs from the cloth, and bringing in the next course. Should there be only boys, it will do them no harm to gain a little dexterity in the details of housekeeping.

"And let me emphasize the importance of everything being managed with the same precision when the family is alone as when the guests are expected. In this manner only can the housekeeper be sure that when company comes she will not be taken at disadvantage.

"The woman who does her own work is sometimes in danger of gliding into an attitude of shrinking from guests. Very mistakenly she feels that when she

cannot offer the perfection of employed service to her friends, she does not care to ask them to her table. Thus the man of the house too often has to renounce the privilege, dear to his heart, of bringing home a chance guest.

"It is always a pity when this stage is reached. The man who comes to the point where he is afraid to invite a friend home with him when he pleases has lost something besides the privilege. A certain degree of confidence in his wife's ability to meet emergencies, in her eagerness to give him pleasure, is gone. I say this without any wish to minimize the inconveniences it often causes a wife to have sudden guests, whether announced an hour in advance or entirely unheralded. Yet, after all, it is not such a calamity to have to share with a friend that which the housekeeper has considered good enough for her own, and it is ten to one that if the guest is made welcome and given to feel that his coming brought pleasure and bothered no one he will be as well pleased as if his visit had been planned for days ahead.

"The woman who gives her husband the right—which should have been his already—to bring home a friend when he pleases should have an emergency cupboard to which she can turn if the provision that was enough for six should seem slim for seven. In this closet may be tinned soups that need only heating and a little seasoning to be ready for the table, a few cans of good fish, meat, and preserves, jars of fancy cheeses, a supply of crackers, olives, and a few other things whose addition to the table will help out a plain meal. She may seldom have to draw upon this stock, but the knowledge that it is there will be a comfort to her. In any case let her avoid the pitfall of apologies. Their usual effect is to indicate faults or omissions to a guest who never would have perceived them had not the luckless excuse for their existence forced them upon his attention."

### Mothers' Meetings.

Dear Dame Durden,—So the "mothers' meetings" are still in the minds of some of your readers. I felt quite guilty when I read T. N.'s enquiry to think I had not written ere this, thanking those who offered suggestions, but now, on behalf of the Glen Ogilvie Sewing Circle (the name under which we organized), do hereby tender our thanks and apologies.

To give those interested a faint idea of the way we conducted our meetings, we appointed our officers, and continued on the plans first adopted, meeting every fortnight at the homes of the different members (ten in number). During the winter months, when the days were short, the mothers and children would meet in the afternoon at three o'clock. Then, in the evenings, the husbands and fathers would present themselves. Conversation, music and games were indulged in, until refreshments were served, after which the meeting would adjourn.

Card playing, dancing and smoking were three things prohibited. But now, readers, for your views. Do you not think if some of us "weary mothers" felt light-hearted enough to dance after sitting sewing and minding babies all afternoon this desire might have been gratified? As to card playing and smoking, if some of the fathers found more rest and recreation in this quiet pastime, do you think in such a sedate gathering as ours that the example would be for evil or good?

Our rules, on the whole, were well respected, excepting the tea rule, which was to not consist of more than three things, besides bread, butter and tea. But we all know the hospitality of some of our farmers' wives.

As the days lengthened, and work on the farm increased, our meetings adjourned after tea; but throughout the whole year not a meeting was missed, though some were not so well attended as others. Absence, however, was in every case due to some excusable and just cause.

Now, in regard to the work, we have pieced and quilted five quilts; have, also, filled eight pillows. These are to be given to the "White-ribbon Mission," a home started in Ottawa for elderly women.

In our treasury, there is a balance of

something over \$4, which is to be given to the Bible Society. I might say our fee is only 5c. for each meeting, and out of the proceeds we bought lining, batting and thread. We managed to get enough pieces for patches for the past year, and now have to go a-begging for next year.

I think, in a general way, this about covers everything, and I trust Dame Durden will not be frightened at the length of this epistle; but all the members are very enthusiastic over the meetings, and I am sure were other societies started throughout the country it would tend to keep neighbors more in touch with one another.

Thanking Dame Durden in advance for publishing this outline of our little meetings, also again thanking all who so kindly offered suggestions.

ONE OF THE MOTHERS OF THE G.  
O. S. C.

### Rust on Blanket.

Dear Dame Durden,—Have been taking "The Farmer's Advocate" at our house for several years, but this is the first I have ever ventured to write to the "corner." I was very glad to see another letter from Forget-me-not. She is such a cheerful writer that I hope she will not neglect the "corner" for so long a time again. And now for a little bit of help. Can anyone tell me what will take a rust spot out of a white woollen blanket, which was caused by hanging on to a hook while still damp?

Norfolk Co., Ont.

Can anyone help Peggy in this matter of the rusted blanket? I have plenty of recipes for removing rust from linen or cotton, but perhaps these would not avail for woollen materials.

### OUR SCRAP BAG.

Have you ever tried elbow-length sleeves in working dresses? If not, you have missed a great convenience. Try them.

Mrs. F., Middlesex Co., Ont., sends the following recipe for a gargle for sore throat, which is also a remedy for catarrh if snuffed into the nose while the head is thrown back so that the liquid may traverse the whole nasal passage. She says a man who has used the remedy for chronic catarrh recommends the cure very highly. To make it, simply dissolve one tablespoon salt in one quart water, then add one teaspoon witch hazel; shake together, and bottle.

### Milk Chocolate.

Dear Dame Durden,—If "Briar Rose" will try the following for the milk chocolate she enquires about, I think she will find it satisfactory. I make this chocolate very often, and never find any "left over."

Milk Chocolate.—One cupful rich milk, two cupfuls granulated sugar, five teaspoonfuls any high-grade cocoa or grated chocolate. Mix well, and boil till a small quantity stirred in a saucer becomes of a creamy substance. Remove from the fire, and add a tablespoonful good butter and a little vanilla extract. Beat rapidly till thoroughly cool; pour in a pie-tin, and mark in squares when set.

SYDNEY'S WIFE.  
Carleton Co., Ont.

### Re Miss Currie's Article.

We received a letter highly commendatory of Miss Currie's article on "Modes of Dress," but if I were to eat the Ingle Nook I cannot find it. I am exceedingly sorry it has disappeared, and can only hope that the writer may forgive, and favor us with another contribution.

### An Inexpensive Christmas Gift.

Dear Dame Durden,—May I draw up my chair just for a few minutes, as I came for the purpose of renewing our subscription for another year, as we simply cannot get along without our "Advocate"?

I have appreciated very much the suggestions given for Christmas gifts, and I thought I would like to pass on an idea I got from another magazine a few weeks ago. It was a suggestion for a doll's cradle, and I immediately went to work and made a couple; one for my own wee girlie, and the other for a little niece, and I am sure the wee tots will be delighted with them.

Take a small grape basket, cut off the handle; then cover inside and out with some cheap material (I used pale blue cheesecloth, and pleated it around). Then add a tiny bed and bed clothes, and a small occupant. Cut out a pair of rockers out of some light wood, and nail on the bottom, and you have as cheap and cute a little cradle as one could wish for.

AUNT MARJORIE.  
Wellington Co., Ont.

### Recitations.

We have received several letters asking for the publication of recitations. We are exceedingly sorry that space considerations forbid our complying with this request.

### Christmas Gifts—Mending Rubber.

Dear Dame Durden,—I am glad to see the Ingle Nook progressing so favorably, but I think there are some farmers' wives who have not found time to write. A Christmas gift for "Briar Rose" is a clothes-pin apron. To make it, take coarse linen, and make a small apron with two pockets, and good long ties, and work the pattern of clothes-pins in red on each pocket. Measurements: Apron, 20 inches; pockets, 13 inches.

Did any of the Chatterers know that blue-and-white striped bed-ticking, not too heavily hemmed, and thoroughly washed, makes the best kind of dish-towels? It is absorbent, and has no lint on it. Would someone please tell me how to mend my hot-water bottle, as it has started to leak at the seams?

Perth Co., Ont.

DAISY.

Scientific American gives the following method for mending rubber: "Soften and dissolve shellac in ten times its weight of water of ammonia. A transparent mass is thus obtained, which, after keeping three or four weeks becomes liquid, and may be used without requiring heat. When applied, it will be found to soften the rubber, but, when the ammonia is evaporated, it forms a kind of hard coat, and causes it to become both impervious to gases as well as liquids."

### RODERICK DHU.

You are just a poor dumb brute, my Roderick Dhu,  
And our scientific brethren scoff at you.  
They "reason" and they "think,"  
Then they set it down in ink,  
And clinch it with their learned "point of view."

Even some divines deny you have a soul,  
And reject you from Man's final heav'nly goal;  
Your presence isn't wanted,  
You're not of the anointed,  
You're not upon the Mighty Judgment Roll.

Yet the truth shines from your eyes, my faithful friend,  
And your faithfulness doth that of men transcend;  
You would lie right down and die,  
Without even wond'ring why,  
To save the man you loved—and meet your end.

When my heart was almost breaking,  
Roderick Dhu,  
Who was it gave me sympathy but you!  
Who crept so close to me,  
And you licked me tenderly,  
And not a human friend was half so true.

And would I, reasoning wisely, pronounce you just a beast?  
Your actions "automatic," not "conscious" in the least?  
Set myself so high above you,  
As not to know and love you,  
And toss you but a bone while I shall feast?

My bonnie Collie, such wrong there shall not be,  
Not for me to grasp at Heav'n and leave the Dark for thee.  
You're nothing but a dog,  
Not in Heaven's Catalogue—  
But whatsoever thy fate, the same for me.

—Helen Fitzgerald Sanders.

# Carmichael.

BY ANISON NORTH.

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## CHAPTER VI.—Continued.

When I looked at him again, Carmichael was sitting on the straw watching me with that twinkle in his eyes which, I was beginning to notice, appeared there whenever he spoke to a child.

"Ye may come over here beside me if ye like," he said, and glad enough for the privilege, I went and sat down quite close to him.

In a moment or so he put his arm around me, looking down into my face.

"So ye're scared o' storms, little Gipsy," he said.

I answered him nothing, but, a louder crash sounding, hid my face against his shoulder.

For an instant his arm tightened about me, then he lifted me onto his knee and drew my face close to his neck, smoothing my hair with his great hand, and calling me, in a voice little more than a murmur, his "poor little girl."

Very strange it seemed to be lying thus in Henry Carmichael's arms, and yet, never had I felt so sweet a sense of protection. The lightning might flash and the thunder roll if it would; I felt very safe, and quite happy, and presently I was able to look out through the open door and watch the fields lit up by the great flash-lights, and anon, drenched by the big drops which were now falling in a heavy shower and pattering with a great noise on the roof. What a soothing power there was in the rain! The lightning seemed like the flash of an enemy's sword, and the thunder like the roar of a beast of prey; but the rain, which always seemed to break the force of the storm, was like a good friend who came to tell one that all was well. And what music there was in its pattering on the roof of the shed! Music different yet akin to the gurgle of streams, the rustling of grass, the murmur of pine trees, and all the soft wild sounds one might love.

So satisfied did I become in listening to it, indeed, that presently I looked up into Henry Carmichael's face and smiled.

"That's more like the thing," he said, giving me a little hug. Then, with a sly smile, "D'ye hate me yet?"

"No," I said, and snuggled my face against him.

He said nothing more, but sat looking out of the door until the rain had ceased somewhat. Then he got up, still keeping me in his arms.

"I'll carry ye to the house," said he, "so ye'll not get yer feet wet."

I had never been in Carmichael's house before, but it seemed very pleasant. There was a bright fire in the stove, "boiling the kettle" for supper; and there were flowers in the window; and Dick's fat white cat was curled up very comfortably on a little work table, beside which Mrs. Carmichael sat darning stockings.

"Dear heart, Hal," Mrs. Carmichael said to her husband, "where did you find the little waif?"

And then she held up her face to him to be kissed, and had to hear all about his finding me in the wood. After that, Minnie, the buxom servant girl, had to see that my feet were dry, and give me a cookie to eat, as I sat beside the stove, with Jap panting nervously beside my chair, evidently feeling much out of place and uncertain how to act.

I did not eat the cookie, but kept it in my hand, feeling rather foolish that such a great girl as I should be made such a baby of. But then, I reflected, Mrs. Carmichael wasn't used to little girls, and probably did not understand how to use them. . . . And, besides, how could she possibly know that I was studying hygiene and grammar, and had got as

far as Asia in the geography? . . . . At all events, she was very kind, and, notwithstanding her lameness, looked very happy and very sweet as she sat there beside her husband, smiling at him and then at me as she talked in her clear, even voice, and with a nicety of language not common to our women, with the exception of Miss Tring and the minister's wife.

Upon the whole, I was rather sorry when, presently, Dick and Chris came in laden with rubbers and coat and umbrella for me, and I found that I must go home.

Shortly after arriving there, my father came in, dripping-wet from searching the woods for me. He had found the cows, but, in his anxiety, had left them there.

I was afraid he would not be pleased with me in consequence of my trip to Carmichael's, but he said not a word about it, and, emboldened, I ventured to say that Mr. Carmichael had been "real kind" to me.

My father put his hand very gently on my head.

"It was all right this time," he said, "but remember, I don't want ye to go near Carmichael's again."

And then, without a word, he set off again, all dripping wet as he was, to bring the cows.

That night I thought more than ever about Henry Carmichael. Surely my father must be mistaken about him. Surely a man who could be so gentle to sheep, and who had spoken in such low, tender tones to me, and had been so kind to Yorkie Dodd, could not be all bad! Chris, too, had said that he was a "good sort," and had not Chris as good a chance of judging as my father? Of course, the mystery of the stolen timber was not yet cleared up, but then, might there not be some other explanation of it, as when we blamed Choddy Torrance for hooking Teddy Hall's pencil with a rubber on, and afterward found out that little Jack Skinner, whom nobody would have accused of such a thing, had taken it?

At all events, Mr. Carmichael had been very kind to me, and I now knew that he would never hurt my father, and I would not be afraid of him again, never, never.

My father, too, had ordered me, without explanation, not to go to Carmichael's again. There seems to be a contrary cord in human nature which draws strongly toward that which is forbidden, and I was full enough of human nature. I would not go to Carmichael's, but—not seeing the act in the will—I would have as charitable thoughts of Henry Carmichael as I chose, and I would make it all up by playing with Dick, yes, just more than ever.

## CHAPTER VII.

### The Getting Even.

Is there a more discouraging thing in the world than disillusionment, or a more confidence-shaking moment than that in which a halo with which we have invested our idol drops off, and the rosy mist we have enshrined it with falls away with a brutal suddenness, leaving, perhaps, a skeleton where we had imagined a god? Be the idol a thing abstract or concrete, a hope or a friend, the effect is the same. With the first shock of the reaction we feel that the world has become unsettled, and wonder in what or in whom we can, with surety, place our trust. Afterward, and sooner or later, according to our charity and openness of heart, things, as a rule, adjust themselves, and we become rational again.

It will be seen that Henry Carmichael was by no means an idol to me, the child who watched him with such varying emotions—for children have their emotions, and even to a greater intensity than older folk. It is only when we have had more experience of the world than a child has had that there is a possibility of becoming callous, transformed to such unyielding stuff that we "do not care." Yet, when the

disillusionment of my newly-formed estimate of Henry Carmichael came, I was by no means insensitive to the sense of shock of which I have spoken.

How well I remember every event of the day that preceded that night. It was Sunday, a beautiful warm October day, with the maples flaming in red, and the beeches in yellow, wherever one might look.

I am sure my father enjoyed the quiet beauty of it all, for before breakfast he took me for a little walk up the road, and again and again he stopped to look into the depths of the glowing copses, or at the dull gold of the shorn fields, with a sort of quiet content. Once he said, as though speaking to himself, for he talked little to me:

"Yes, yes, God is very good to us—better than we deserve."

I remember, too, just how he looked when he took down the big black Bible after breakfast and began to read.

The reading that morning was the Twenty-third Psalm, that poem of poems, which has been to the hearts of the faint and the faithful in all generations like dew to the thirsty grass:

"The Lord is my shepherd; I shall not want.

"He maketh me to lie down in green pastures, He leadeth me beside the still waters.

"He restoreth my soul; He leadeth me in the paths of righteousness for His name's sake.

"Yea, though I walk through the valley of the shadow of death I will fear no evil; for Thou art with me; Thy rod and Thy staff they comfort me.

"Thou preparest a table before me, in the presence of mine enemies; Thou anointest my head with oil; my cup runneth over.

"Surely goodness and mercy shall follow me all the days of my life; and I will dwell in the house of the Lord forever."

My father read well, and his full, mellow voice, following the thought and emotion of the passage with a rare feeling and appreciation, left no cadence unturned which could bring out its strength or tenderness.

This morning, after he had finished reading the psalm, Miss Tring began to sing it, in a sweet, low voice, following the old metrical version, and presently we all joined her, even to old Chris, who sat with bowed head.

"The Lord is my shepherd, I'll not want,

He makes me down to lie  
In pastures green, He leadeth me  
The quiet waters by."

After that we knelt beside our chairs as usual, while my father prayed. But his prayer was not as usual. Even I noted the difference, for this morning he "forgot," as I imagined, to offer "thanks" that, "while some were called upon to mourn and others deprived of the necessities of life, we were enjoying a portion of health and strength," and "basking in His favor." He also "forgot" to petition that we might be led "so to live on this fleeting and transitory earth as to be worthy of the reward in heaven which, in the justice of the Almighty awaited all who served Him in spirit and in truth."

Instead, he prayed in a simple way, thanking God for the beautiful day and the bountiful harvest, and beseeching that we might have the grace to live sweet and honorable lives, walking in the footsteps of "Him, our example," who was so willing to carry us in His bosom, and comfort us with His love.

Perhaps my recent encounter with Carmichael in the wood, and the curious way in which it had recalled the great, glittering window, served to impress this prayer on me. However that may be, I listened to it throughout, instead of, as usual, watching Jap through the "rungs" of the chair, or, with my face plunged reverentially in my hands, thinking of something else, while the

words sounded far away, and came to me as sounds without meaning.

After that we got ready for church, and my father put his "tenth" apportionment into his envelope, as he always did on Sunday mornings. The drive through the glowing woods in the democrat, my mother and father and I in the front seat, Miss Tring and old Chris with his big, green umbrella in the back; the mellow ringing of the church bells over the tree-tops; the faded asters and goldenrod and boneset in the swamp; the people pouring into the stiff, old-fashioned pews—ah, I have but to close my eyes to see it all again!

And it is but a step further to remember how, in the afternoon, we all—at least, my father and mother, and Miss Tring and I, for old Chris had set out immediately after dinner for a three or four day's visit with his nephew—sat out under the trees in the garden, my father reading from his Christian Guide, Miss Tring swinging to and fro in a rocker and looking, for the most part, with a far-off gaze to the distant wood, while my mother dozed in her hammock, raising her plump hand from time to time to brush away an audacious fly that kept settling on her nose. As for me, I was much put to it to keep my attention on my catechism, although I tried hard, in order that, at the preacher's next visit I might retrieve the disgrace I had brought upon us all at his last one, when, in order to be put through my facings in this same catechism, I had been ignominiously drawn out from under a bed whence I had fled for escape.

So the day passed, and night fell.

I was awakened at about one o'clock by a loud crash; and now, if you grow weary of all these storms, I beg you to remember that it is almost impossible to tell of that summer without mentioning them, for indeed there was scarcely a week in which we missed them, and they kept me sorely in dread.

My first thought was to close my window, for the wind was shrieking through it and the rain driving in. It had turned very cold, and the drip from the roof and trees betokened that it had been raining for some time. Hastily I drew the sash down, and in the nick of time, for a blinding glare and a second crash sent me helter-skelter into bed again, where I drew the clothes over my head and cowered in fear. It seemed as if all the witches and hobgoblins of the heavens had been let loose. Around the eaves the wind whistled with a thin, eerie screech; at the windows the panes rattled as though something were trying to get in; outside the trees creaked as they bent before the hurricane, and all the while the rain beat on the roof and against the windows, with, occasionally, a sharp pattering accompaniment that betokened the presence of hail.

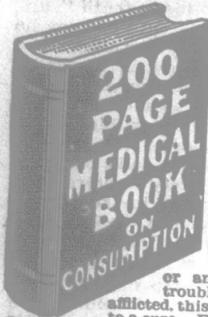
Presently the rain ceased. Then, again came a flash, and, simultaneously, a rushing roar that seemed to be hovering about our very house. I could bear it alone no longer, so, gathering courage, only for want of which I had been prevented from fleeing before, I dashed out of my room and along the narrow corridor leading to my mother's.

When half-way through it, and directly opposite the window, a hesitating, quivering glimmer of lightning illuminated the scene out of doors. It lasted for two seconds, perhaps, but in it, in the tree-bordered lane leading from our barn to the fields, I distinctly saw the huge form of Henry Carmichael going toward his home.

At the next flash, which came almost instantaneously, I saw my father coming toward me, his face, in the glare, seeming very pale; and, as a third terrific crash sounded over our heads, I flew into his arms.

He carried me into the room and placed me beside my mother, then, without a word, went out and down stairs.

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My mother was awake. "Dear, dear!" she said, sleepily, "where's your father off to now? Why can't he stay in his bed?"

A moment later she raised her head, for a strange, continuous, flickering light, not like that of the lightning, was creeping up the bedroom wall.

"Gracious sakes' alive," she said, "what's that?" and sprang out of bed.

Against the window I saw her white-robed form, with the shadow of it black upon the strange, red light.

"Mercy upon us! The barn's a-fire!" she screamed with the next breath; then I was at her side.

In truth, the barn was afire, the flames already bursting forth, in a momentary cessation of rain, from the roof, while dense clouds of smoke, all red from the glow beneath, curled up to the inky sky.

A moment later and we were running, both of us, toward it, our bare feet splashing through the cold puddles that lay shining with the reflection along the path.

We found my father frantically dragging at some piece of machinery that had been run in on the barn floor.

"Call Torrance and Might!" he shouted; but ere we had well turned to obey his behest we came face to face with Carmichael and Dick.

One wrench of Carmichael's mighty arm and the big machine, whatever it was, rolled forth on its wheels and down into the yard.

"Go for Might!" shouted Carmichael, and Dick set off on a run.

Then an awful thing happened. Striding up before Henry Carmichael, my father looked him fair in the face with an expression upon his that made us fear for what was to come.

Slowly he raised his hand, as if in accusation, but the words failed him. Instantly the hand dropped and he clutched at his throat, the white of his face turning, in the red light, to purple.

An instant later his features worked convulsively, then he fell heavily forward on Carmichael, who reached both arms to receive him.

With a low cry my mother rushed forward; then, collecting herself marvellously, she said, "To the house!" and set off, while Carmichael followed, carrying my father as though he had been a child.

Oh, what a sight that was, our little procession moving along with that terrible burden, with the fire-brands flying above our heads, and the red light mounting up behind, and the lightning quivering everywhere, with intervals of double darkness between! And the worst was not yet.

"Merciful Heaven! The house is afire too!"

It was Carmichael's voice, and, looking up between my terrified sobs, I saw that what he said was only too true. Ignited somehow by a straying brand, the fire was already well under way, and the smoke and flames were bursting through the kitchen roof. The higher front part of the house was still intact, with the reflection of the fire shining red upon all its windows facing the barn.

My mother gave a smothered cry, "Miss Tring!" and dashed in through the front door, whence she returned in a moment with the little teacher, who, as it afterward appeared, had been sleeping quietly through all the turmoil.

Carmichael had laid my father on the grass, and was kneeling beside him with a hand on his heart.

"I'll carry him to our house," he said to my mother. "He must be got in out of here!"

But my mother turned on him with a sort of savagery, my placid, gentle mother, in whose eyes there had seldom been any look more angry than that of a playing kitten. Yet there she stood, erect as an avenging goddess, with the flickering glare of the firelight on her white, terrible face, and the burning of a bitter resentment in her eyes.

"Henry Carmichael," she said, and the tone of her voice was enough to make one shudder, so full of determined agony was it, "Robert Mallory will never enter your door, dead or alive!"

"But, Heavens above, woman, he can't lie out here!"

She raised her hands to her head as though dazed, then took them down and spoke again in those harsh, unnatural tones which, surely, were not my mother's.

"He will rest in the apple-house till Adam Might comes," she said.

But she made no objection to Carmichael's carrying my father, and so once more he raised him and carried him to the little outhouse, where my mother, now sobbing wildly, threw herself on the floor beside him, shrieking, "Robert! Robert! Speak to me! Speak to your own little Alice! Robert! Robert!" like one demented.

Scarcely had he been laid on the floor when Miss Tring came in with a lighted lamp, and set it down on a board over an apple-bin. Then, away she went again, only to return with a pillow and blankets.

"Is Dick back?" asked Carmichael.

"I have sent him for the doctor," said Miss Tring.

"Thank Heaven! How did he go?"

"On horseback. He'll be back soon."

(To be continued.)

## About the House.

### CHRISTMAS COOKERY.

**Fruit Cake.**—Three pounds flour, three-quarters pound butter, two pounds sugar, three pounds currants, two pounds raisins, one-quarter pound orange peel, one ounce soda, one ounce cream tartar, two ounces cinnamon, two ounces nutmeg, one and one-half pints milk, no eggs. Mix, let rise half an hour, and bake slowly. This cake will keep a year.

**Fruit Cake No. 2.**—Dissolve a level teaspoon soda in two tablespoons warm water. Add half a pint thick sour cream, stir, turn into a bowl, and add half cup black molasses. Mix, then add half a pint brown sugar, one tablespoon allspice, one of cinnamon, and three and one-half cups pastry flour. The batter must be very thick. Stir in one pound raisins, stoned, cut in two and floured. Turn into a pan, and bake in a very moderate oven one and one-half hours, or steam for one hour, and bake the other half hour. This cake grows better with age.

**Eggless Plum Pudding.**—To one cup sweet milk add one cup molasses, one cup chopped suet, three cups flour, one pound seeded raisins, one teaspoon each of salt, soda, cloves, allspice and cinnamon. Boil in a mould three hours.

**Good Plum Pudding.**—Nearly three cups bread crumbs, half a pound beef suet (chopped fine). Add to the suet two cups small seedless raisins, one cup currants, half cup thinly-sliced citron, grated rind of an orange or a lemon, and one cup sugar. Mix together thoroughly, then add the crumbs, three-quarters teaspoon cinnamon, three-quarters teaspoon cloves, one-third teaspoon mace. When well mixed again, add the well-beaten yolks of four eggs, with half a cup milk, and, lastly, the stiffly-beaten whites of the eggs. Steam six hours.

**Pound Cake.**—One pound butter, one pound sugar, one pound flour, nine eggs, the grated rind and juice of one lemon. Beat the sugar and butter to a light cream; add the yolks (beaten light), the lemon, then the whites (beaten to a stiff froth), and, lastly, the flour. Bake slowly.

**Mince Meat.**—Stew gently two pounds lean beef in a very little water until quite tender, let it get cold, and then chop finely. Add one pound finely-chopped beef suet, four pounds peeled, cored and chopped tart apples, three pounds sugar, three pounds currants, two pounds raisins, one grated nutmeg, half a teaspoon ground mace, the grated rind of two oranges, and one lemon, one-tablespoon salt, and one-half a dozen oranges and two lemons, half pint sherry, and one wineglass brandy. Will keep well in a stone jar in a cool place.

**Lemon Mince Meat.**—Take four lemons, pare thin, and boil the rinds until tender in a little water. Squeeze the juice on one pound sugar, add one pound currants, one pound chopped raisins, one pound apples (baked), three-quarters pound suet. Chop the lemon rind and add, also add the water it was boiled in. Add two grated nutmegs, and any other spice that is desired. Put in candied peel when making the pies.

### STAINING FLOORS AND WOODWORK

Floors or unstained woodwork of any kind may be given a very attractive finish by simply staining them, then waxing to a gloss, or giving a thin coat of white shellac. Oak, walnut—in fact, any of the wood stains—may be bought all ready for use, with directions accompanying each tin, but some of them may be made at home at less expense. For walnut stain, for example, first wash the wood with a strong solution of sulphuric acid, one ounce to a pint of warm water; then stain with a solution made by boiling six pounds of common shag tobacco in a little water until like a syrup. Strain, and use one or two coats, according to the shade desired.

A good spruce stain for a kitchen floor is made of one quart of water, four ounces of glue, and three pounds of spruce yellow paint. Let the glue soak in the cold water over night, then heat in the morning, mix in the coloring, and paint while hot, following the grain of the wood. Let dry for three hours, then oil, and the floor will be ready for use in twenty-four hours.

Very attractive stains in dark green, gray, or wood-brown tints may be made, very inexpensively, as follows, but the stain must be applied while the wood is new. Simply get tube paint of the desired shade, and thin it with turpentine until it will sink into the wood almost as easily as pure turpentine. Apply one good coat, working it into the wood well with a cloth, and, when dry, apply a thin coat of white shellac, or wax, and rub to a gloss.

Before staining any floor or any kind of woodwork, fill all cracks with putty, colored with paint to match the stain, then go over the whole with fine sandpaper, and brush off well to remove any particles of wood dust.

It is well, too, to try the stain on a piece of wood to see if it will be satisfactory.

To wax a floor, melt a piece of beeswax the size of an egg, and add a pint of turpentine, warmed by setting it in an open dish in a pan of hot water. As turpentine is volatile and inflammable, this operation should be done with care. When blended, apply to the floor with a paint brush, following the grain of the wood, and, when dry, polish with a horse brush. If you do not care to go to this trouble, get one of the prepared floor waxes and follow directions.

### THE OPEN ROAD.

Afoot and light-hearted I take to the open road,  
Healthy, free, the world before me,  
The long brown path before me, leading  
wherever I choose.

Henceforth I ask not good-fortune—I am  
good-fortune,

Henceforth I whimper no more, postpone  
no more, need nothing,

Strong and content, I travel the open  
road.

—Whitman.

### LESSON FOR HUSBANDS.

The late Mary A. Livermore liked to tell a story of a young friend of hers in Melrose, for she believed that in this story lay a lesson for husbands.

Mrs. Livermore's friend was passing a month alone, her mate having been summoned to Europe on a business matter.

"And you are very lonely without your husband, now?" the elder said to the younger woman one morning.

"A little lonely," was the qualified answer.

"But surely," said Mrs. Livermore, "you miss your husband very much, now he is away?"

"Oh, no," she said. "At breakfast I just stand his newspaper up in front of his plate, and half the time I forget he isn't there."

Meat Inspection Regulations Discussed and Modified.

At the request of A. B. McCoig, M. P., West Kent, Ont., Hon. Sydney Fisher addressed a farmers' meeting at Chatham, Saturday, Nov. 23rd, on the regulations recently passed by the Dominion Department of Agriculture for the enforcement of the Meat Inspection Act. There was a large attendance from Kent and Essex. J. G. Kerr presided, and D. A. Gordon, M. P., and Mr. McCoig, M. P., spoke, and requested a frank and non-political discussion of the situation. Several agreed in their disapproval of the clause requiring shipment of dressed hogs with the vital internal organs attached for inspection at the packing houses. In case of the mild weather in that section, the hogs could not, in that condition, be shipped in safety. Moreover, the farmers desire to retain, for their own use, the heart, liver and lungs, for which the packer does not allow anything. They did not wish to offer diseased hogs for sale.

A. J. Green, a buyer from Windsor, said no dressed hogs were exported from Canada, they being used in the lumber camps, the fisheries and by the butchers, and are sent for these purposes to Toronto, Montreal, Quebec, Halifax and St. John.

Hon. Mr. Fisher doubted whether such shipments would come within the purview of the regulations, which applied only to packing establishments exporting the products abroad or into another Province.

The suggestion made by Mr. Hea was received favorably to the effect that there be a provision excluding overweight hogs from inspection, as these are not intended for bacon. Especial attention was given to a suggestion made by Mr. John Clyde, of Chatham, that the inspection take place in the immediate neighborhood at convenient points of shipments.

Hon. Mr. Fisher expressed much satisfaction of receiving the views expressed by those who earnestly sought a solution of the difficulties, and reviewed the reasons which led to the passing of the "Meat and Canned Foods Act"—the satisfaction created in England by the Chicago investigation, the timely warning given by the report of Chief Medical Health Officer of London intimating the intention of the London authorities to pass stringent regulations permitting only the entry of meats which have been submitted to a thorough examination. It had become certain that the new Act was necessary to maintain our ground in England, now that the United States had made their own inspection doubly stringent, and were enforcing this very regulation concerning shipment with the internal organs attached. The United States farmers were suffering from a much larger loss in percentage of diseased animals; running as high as five per cent., against the half of one per cent. to one per cent., upon the inspection so far made in Canada. The organs had to be retained for the inspection, because certain diseases, such as tuberculosis, hog cholera, swine plague, etc., could not be surely detected without them. The law and regulations did not apply to dressed hogs intended for local consumption and that were not handled by the export establishments. He had come to Chatham to get information as to the working of the regulations, and to receive practical suggestions for their improvement to facilitate the hog industry. It was his aim to remove as many obstacles as he possibly could, consistent with the maintenance of the present position of the Canadian product in the British markets.

As early as Tuesday, the 26th, three days after this meeting, the Deputy Minister of the Department of Agriculture, Ottawa, made an official announcement in the Chatham and Windsor newspapers that "Arrangements are being made for the inspection, at various shipping points in said counties, of the dressed carcasses of hogs with the head, heart, lungs and liver attached, destined for establishments in which inspection is maintained under the Meat and Canned Foods Act. In fixing the points of inspection, regard will be had for the conveniences of the shippers and the extent of territory that may be served by each point of inspection.

The next day, the 27th, posters were distributed in these counties announcing that, "on and after Monday, the 2nd

of December, shippers of dressed hogs from thirty-one different points (specially named) in the counties of Kent and Essex may, upon giving forty-eight hours' notice to Dr. M. B. Perdue, Dominion Veterinary Inspector, Chatham, specify consignee and destination, have their shipments inspected at the railway stations at the points of shipments mentioned.

Inspection is required only of such carcasses as may be destined for packing establishments, in which inspection is maintained under the above Act (such establishments with their addresses being hereafter given.)"

QUESTIONS AND ANSWERS. Miscellaneous.

VARIETIES OF APPLES TO PLANT.

What kind of apple trees would be the best to put on land of a light gravel nature? The land grows a fair crop on a damp season, and on a dry season, not so well. Also state what kind of apples is the best for the market, as I want to put out about ten acres of an orchard.

F. W. A.

Ans.—The selection of varieties to plant in an apple orchard depends a great deal more upon the locality than upon the nature of the soil. As a guide to one who intends setting out an orchard, I would recommend you to consult Bulletin 147 on the "Fruits Recommended for Planting in Ontario," as determined by experiments at the various fruit experiment stations of the Province, which may be obtained from the Ontario Department of Agriculture, Toronto. There is no fruit-experiment station in your immediate district, but in Durham County you are intermediate between the one at Burlington and that at Trenton. It would be well to compare the list of varieties recommended by the experimenters at each of these stations. In the bulletin mentioned, you will find lists giving varieties recommended for commercial planting and domestic use.

Some recommend restricting the number of varieties to as few as four of the leading kinds, while others prefer a larger list to extend the season of harvest, and not have all ready for picking at once. If restricted to four varieties, for your district I would suggest the following: King, Greening, Baldwin, and Ben Davis. If the list were extended to twice that length, I would include a few varieties of better quality than the last two named, and would suggest McIntosh, Gravenstein, Ribston and Northern Spy. H. L. HUTT.

APPLES FOR COWS AND SOWS.

If sour apples are fed to milking cows, will they dry them up, or are they of benefit to them? Are they a benefit or not to milking sows? What would be the difference between sour and sweet apples for cows' feed?

A. A.

Ans.—There has been comparatively little experimental work with apples for dairy cows. Some seven or eight years ago, Prof. Dean conducted a few experiments with apples and apple pomace for dairy cows, and the results would indicate that apples certainly will not cause cows to dry off, provided the cows are fed liberally with other foods. It must be remembered, however, that apples contain a great deal of water, and they are more or less a substitute for roots. It must also be remembered that apples tend to give a peculiar flavor to milk and its products, which is objected to by some. I do not know of any experiments comparing sweet with sour apples. At this time of year, however, nearly all the apples have become more or less mellow, and I do not think there would be any marked difference in results. I would expect, however, that if there was any difference, it would be in favor of the sweet apple. I would not recommend sour apples for feeding to sows while they are nursing their pigs, nor for some time before. The sweet apples would not be so objectionable, but I do not think it is a good plan to allow sows to run in the orchard, eating all the apples they can take, though probably it would do them no harm for a couple of months after their pigs are weaned. Would advise personal moderation in the feeding of apples to any class of stock. G. E. DAY, Ontario Agricultural College.

HOLIDAYS, SUNDAY CHORES, AND HOURS OF LABOR.

In case of anyone hired for a year (verbal agreement), with no mention as to holidays, etc., whatever: 1. How many holidays, if any, is he allowed by law, and is it compulsory for you to do chores on these holidays? 2. How does the law treat Sunday chores (only one hand kept)? 3. Is there any limit to the hours per day one may be compelled to work?

ANGLOAMER.

Ans.—1 and 2. Ordinarily, eight, besides Sundays, viz.: New Year's Day, Good Friday, Easter Monday, Victoria Day, Dominion Day, Labor Day, Thanksgiving Day, and Christmas, and any day that may be proclaimed by the Governor-General or Lieutenant-Governor as a public holiday. When one of the above holidays (other than Sunday) falls upon the Sabbath, the man is entitled to the day before or after that may be legally fixed for its observance. All the above holidays, including Sundays, are generally to be taken, subject to the doing of such routine work (chores) as must of necessity be attended to every day. It is not unusual for an employer to have an understanding with his employee that each is to look after the main share of the chores on alternate Sundays.

2. We are not aware of any prescribed limit as to regular hours of labor on the farm in any Canadian Province. Custom, prudence and reasonableness rule in such matters. A little good nature and give-and-take spirit is worth infinitely more than legal restrictions or means of redress.

SPRAYING APPLE TREES—PROTECTION FROM MICE.

I have a large orchard of sixty-five acres of young apple trees, from four to six years old—which I am thinking of spraying with lime and lye; that is, slacking the lime with lye. Will it hurt the trees? Would the addition of a little grease be any help to the wash? I do not like to undertake the lime and sulphur, as I have no appliances to boil it. There is no disease in these trees, but I think just a wash would do them good. I have seen the statement that greasing the trunks of trees with axle grease would protect them from mice. Would the grease hurt the trees? J. L.

Ans.—With such a large orchard to spray, it would certainly pay you to procure the necessary appliances for thoroughly making and spraying any spraying mixtures you may need. Before spraying, however, you should know definitely what you are spraying for. If the trees have no insects or diseases affecting them, it is only labor lost to spray at all. It is not at all unlikely, however, that the trees may be affected more than you are aware of with one or more of the insects and diseases so common in most sections of the country. The oyster-shell bark-louse is the principal insect affecting the apple against which spraying is directed at this time of the year. The lime-sulphur mixture is an excellent remedy for this, and, also, for fungous diseases, such as apple scab, which is always more or less present upon the foliage and bark, although the trees may not yet be in bearing. The lime alone, however, applied at this time of the year, has been found to be quite effective with the bark-louse in loosening the scales so that they are blown from the trees before spring. We have never used lye for slaking the lime, but believe there would be no harm in using it, if not made too strong. Nothing would be gained, however, by use of grease of any kind; in fact, this might prove a serious injury to the trees, as anything of this kind is likely to fill up the pores of the bark and cause more or less injury. The best means of avoiding injury from mice is to be sure that there is no grass or dry material near the trunks of the trees in which they could harbor and make their nests. If there is any likelihood of mice being in the orchard, it would be a wise plan to wrap the trunks of the trees with building paper, preferably one in which tar is used. The tarred side, however, should be turned in towards the tree, for, when exposed to the sun, the black surface often absorbs so much heat as to induce sun-scald. The wrapping paper should fit closely at the ground, and extend up a foot or more to protect that part of the trunk underneath the snow.

O. A. C.

H. L. HUTT.

READY IN DECEMBER

The Scottish Farmer Album For 1908

Containing numerous articles of real world-wide interest to agriculturists, and illustrated with upwards of 100 handsome portraits of the prize-winning stock of the year. This annual publication is the book of reference for farmers everywhere. Take advantage of the low magazine rate of postage, and order a copy direct from the office of

THE SCOTTISH FARMER

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N.B.—THE SCOTTISH FARMER, the leading agricultural weekly, will be mailed to any address in Canada for 36c per annum, payable in advance. Subscriptions to be remitted by money order, made payable to Archd. MacNeillage.



Advertisements will be inserted under this heading, such as Farm Properties, Help and Situations Wanted, and Pet Stock. TERMS—Three cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order. No advertisement inserted for less than 50 cents.

TATTOOING outfit for sale—A complete outfit; manufactured in London, Eng. B. Beck, Spring Bay, Manitoulin Island.

WANTED by married man, cattle feeding; no milking; separate house. Will live by year if wanted. G. Burroughs, Preston Ont.

WANTED—Farmers in every district to sell Anglo-Saxo Stock Food and specialties on commission. Apply: Post-office box 529, London, stating city references.

WANTED—A few good subscription agents for The Farmer's Advocate and Home Magazine. Liberal terms. The William Weld Co. Ltd., London, Ont.

WANTED—An indoor servant. One qualified to take charge Small family. Comfortable home and highest wages. Address: Mrs. E. Gunn, Danrobin Farm, Beaverton, Ont.

WANTED—Experienced man as head herdsman. Also good man or two for farm. Cottages provided. Address James Smith, Mgr., Pine Grove, Rockland, Ont.

Wanted! I want to see your hides, skins and furs soft and pliable; never get hard. Also to make and line your robes, or make your fur coats. Try me for best of satisfaction. I am to please you. Address: B. F. BELL, Delhi, Ont.

POULTRY AND EGGS

Condensed advertisements will be inserted under this heading at two cents per word each insertion. Each initial counts for one word, and figures for two words. Names and addresses are counted. Cash must always accompany the order for any advertisement under this heading. Parties having good pure-bred poultry and eggs for sale will find plenty of customers by using our advertising columns. No advertisement inserted for less than 30 cents.

BARRED Roc s only—Extra good cockerels for sale. Miss Emily Spelabury, Colborne, Ont.

CANADA'S best exhibition and laying White Leghorns for sale. Grand utility hens, cockerels, pullets, one dollar each. Must sell at once, hence low prices. Write to-day. Jas. L. McCormack, Brantford.

INGLE NOOK Poultry Farm offers a few choice cockerels in White and Brown Leghorns (heavy-laying strains), Rhode Island Reds (single and rose comb). It will pay to order your breeders from the above, as they will be sold very cheap, and the birds are choice. W. H. Smith 41 Spruce St., Toronto.

MAMMOTH Bronze turkeys. Bell's strain. Toms, \$3; hens, \$2.50. S. L. Anderson, Crossland, Ont.

MAMMOTH Bronze turkeys—Healthy young toms for sale. Geo. H. Tolchard, Chesley, Ont.

MAMMOTH Bronze turkeys—Fine heavy birds, good plumage; 1st flock headed by Fisher's tom, full brother to first-prize winner St. Louis; 2nd flock headed by W. J. Bell's Canadian strain; won 1st at Lockport, N. Y., and from 20 lb hens; pairs mated not akin. J. H. Robson, Telfer, Ont.

THE following good fowl for sale: One Embden gander, \$3; pair Cayuga ducks, \$1.50; pair Black Javas, \$3; pair White Rocks, \$3; one male, two female Blue Andalusians, \$3; pair rose-comb Brown Leghorns, \$3; pair Buff Wyandottes, \$3. Satisfaction guaranteed. Alf. Robson, Norwood, Ont.

Hatch Chickens by Steam with the EXCELSIOR INCUBATOR OR WOODEN HEN. Simple, perfect, self-regulating. Hatch every fertile egg. Lowest priced first-class hatching made. GEO. H. STAHL, Quincy, Ill. Send for free Catalogue.

## DOCTORS THOUGHT BABY WAS CONSUMPTIVE

A LETTER TO ANXIOUS MOTHERS is written by Mrs. F. W. Kittle, of Kirkdale, P. Q., who says: "My little four-year-old boy suffered since he was eighteen months old from a bad leg. I tried many salves, and had doctors attend him, but none did him any good. The doctors told me it was in the blood, and he was in consumption. I only wish now I had had more faith in Zam-Buk, for it immediately healed the boy's leg. He is now nearly four years old and looks far from being consumptive. He is now a strong, healthy boy, thanks to Zam-Buk. I hope this letter will help a good many anxious mothers."

**Mothers Take Heart.** Don't be discouraged because everything has failed to heal your child until you have tried Zam-Buk. Zam-Buk is Nature's Healing Balm, and quickly overcomes and removes all skin diseases. It is equally good for young and old.

For all skin diseases, Zam-Buk is without equal. It cures ulcers, festering sores, ringworm, cuts, bruises, chapped hands, boils, eczema, etc., etc. All stores and druggists sell Zam-Buk at 50c. a box, or postpaid from the Zam-Buk Co., Toronto; three boxes, \$1.25.

## DR. W. A. McFALL

Special attention given to the treatment of rheumatism. Address:  
168 Spadina Avenue, Toronto.

## Tobacco Habit.

Dr. McTaggart's tobacco remedy removes all desire for the weed in a few days. A vegetable medicine, and only requires touching the tongue with it occasionally. Price \$2.

## Liquor Habit.

Marvellous results from taking his remedy for the liquor habit. Safe and inexpensive home treatment; no hypodermic injections, no publicity, no loss of time from business, and a cure certain.

Address or consult Dr. McTaggart, 75 Yonge Street, Toronto, Canada.

## SHOE BOILS

Are Hard to Cure,  
yet

## ABSORBINE

will remove them and leave no blemish. Does not blister or remove the hair. Cures any puff or swelling. Horse can be worked \$2.00 per bottle, delivered. Book 6-C Free. ABSORBINE, JR., for mankind, \$1.00 per bottle. Cures Boils, Bruises, Old Sores, Swellings, Varicose Veins, Varicocele, Hydrocele, Allays Pain. W. F. JONES, P.D.F., 73 Monmouth St., Springfield, Mass. Canadian Agents: LITMAN BROS. & Co., Montreal.

## BOOK REVIEW.

### AMERICAN BREEDERS' ASSOCIATION.

Students of plant and animal-breeding problems will welcome the appearance of Vol. 3 of the proceedings of the American Breeders' Association, of which Hon. James Wilson, U. S. Secretary of Agriculture, is President, and Hon. W. M. Hay, Washington, D. C., Secretary. Recognizing to what an extent heredity in animals and plants lies at the foundation of progress, this organization seeks to band together students, investigators and others for the common weal, and with what success its mission has appealed to the public mind may be gathered from the fact that there are now 1,000 annual members, 55 life members, and two honorary members—Luther Burbank and Francis Gaeton. The volume before us records the papers, addresses and debates of the last meeting, held at Columbus, Ohio, covering a vast range of subjects—some technical, others popular, but all bearing in some way or other on the problem of plant and animal improvement, and its perpetuation. A praiseworthy effort is being made to increase the membership of the Association, which "The Farmer's Advocate" trusts will be successful, since in that way its records become more widely disseminated.

Mr. Joshua Lawrence, Oxford Centre, Ont., makes a change in his advertisement of Berkshire pigs, of which he has a herd of the correct type and the best of breeding. Sows bred, young boars ready for service, and younger pigs are offered at moderate prices.

## GOSSIP.

Mr. J. L. Cooper, Nashville, Tenn., a noted breeder of Jersey cattle, claims the unique distinction of having bought but one Jersey cow, yet the descendants from that individual on the record books now number more than 650. Of course, he bought bulls, and good ones, which accounts for the acknowledged excellence of his herd.

## SALES DATES CLAIMED.

Dec. 18th.—Fairbairn & Wallace, Maple Lane, Ont., Shorthorns, at Mount Forest.

Dec. 20th.—W. S. Carpenter, Simcoe, Ont., Shropshire sheep.

Jan. 6th, 1908.—Estate of Wm. Hendrie, Hamilton, Ont., Shorthorns.

Jan. 8th.—H. M. Vanderlip, Cainsville, Ont., Berkshires.

The Wisconsin Holstein cow, Colantha 4th's Johanna, in less than 12 months, has broken all yearly official records, both in milk and fat production. Her record for 10 months and 9 days is 23,981.4 lbs. of milk, containing 875.7 lbs. of fat. She is still giving 65 lbs. of milk per day, testing 4 per cent. or better.

At a sale of Shorthorn cattle last week, from the herd of B. H. Hakes & Son, Williamsburg, Iowa, satisfactory prices were realized. The top price, \$315, was paid for the cow, Scottish Countess, imported by W. D. Flatt, Hamilton, Ont. A dozen head sold for \$200 and over, and the forty head sold made an average of a fraction less than \$150.

Attention is called to the advertisement in this paper of an auction sale of Shorthorn bull calves, the property of Messrs. Fairbairn & Wallace, of Maple Lane, Ont., to be held at Mount Forest on December 18th. These are sired by the excellently-bred bull, Sir Wilfred Laurier (imp.) =36114=, by Scottish Victor, dam Rosa Bell, tracing to the great bull, Champion of England, that more than any other made the Cruickshank herd famous.

Ten cars of Alberta cattle were sold on the Chicago market last week. They were shipped by Hunter Bros., of Olds. One hundred and forty steers, weighing 1,200 to 1,367 lbs., sold at \$4.15 to \$5 per cwt., and seven cows at \$3.60 to \$4.20. The distance being great, and the railway run very slow, the cattle shrunk heavily. The results shows that with good cattle, and a good run, fairly satisfactory returns may be realized in shipping from the Canadian West to Chicago.

Mr. D. Milne, Ethel, Ont., in ordering a change in his advertisement, writes: "My herd of sixty-two head of Scotch Shorthorns are now comfortably housed in their winter quarters, in fairly good condition. Amongst them are a number of very promising young bulls, from imported and home-bred cows, and all got by the imported Cruickshank Broadhooks bull, Broadhooks Prince (imp.) =55002=, which, as a stock bull, I have not seen his equal as a getter of low-down, thick, smooth, stylish, good-doing stock of right color. But, as his heifers are about ready to breed, he will be for sale in a short time. I will also offer cows or heifers, with calves at foot or in calf, or younger heifers, singly or in car lots, at surprisingly low figures, and on the buyer's own time to pay for them. Anything in the herd is for sale. Now is the time to buy, when good stock can be had at your own price. I have recently made the following sales of Leicester sheep: To Oliver Turnbull, Walton, Ont., one ram lamb; to J. S. Cowan, Donegal, Ont., two ram lambs; to Miller Bros., Brussels, Ont., one ram lamb; to B. Jackson, Ethel, Ont., four aged ewes and one ram lamb. I also have a few young Yorkshire sows, out of imported sow, for sale at right prices."

"He occasionally says things that are wonderfully apropos," said one statesman.

"Yes," answered the other; "he's like our parrot at home. It doesn't know much, but what it does know it keeps repeating until some circumstance arises that makes the remark seem marvellously apt."

## TRADE TOPIC.

RELIABLE BINDER TWINE.—The Dominion Government deserves the earnest congratulations of every Canadian citizen, because of the earnestness with which it enacts and enforces laws for their protection. The Government intends that each citizen shall secure at all times full weight, full measure and full quality in his purchase. This brings to mind that some infractions of the laws were prosecuted in connection with the selling of short binder twine to our farmer citizens during the last harvest. There were some convictions, and some heavy fines imposed and collected. While certain Canadian and American twine manufacturers suffered conviction under this law, we understand that the twine of the International Harvester Company, whose advertisement appears in this issue, has always met the Government requirements in all respects. Their advertisement points out some very interesting facts on the subject of binder twine, and offers the Canadian farmer a guarantee which should be gratifying, to say the least. We commend it to the attention of our readers.

## QUESTIONS AND ANSWERS. Veterinary.

### COLIC FOLLOWED BY DIARRHEA.

Young mare took colic suddenly, and in a few days diarrhea set in and has continued. She drinks a great deal. She is fat and strong.

R. J. K.

Ans.—The colic and diarrhea are both due to some indigestible food. As she is still fat and strong, give her a laxative of one and one-half pints raw linseed oil. Give her small quantities of water, and give often, and add to it one-quarter of its bulk of lime water. If the diarrhea continues for more than thirty-six hours after the administration of the oil, give two ounces laudanum and four drams each of catechu and prepared chalk in a pint of cold water as a drench every four hours until diarrhea ceases. Feed on good hay and oats in moderate quantities.

V.

### CYSTIC CALCULUS.

My mare has urinary trouble. Sometimes she does not urinate from morning until night, and when she voids it, it is brine colored, or sometimes milky. My veterinarian treated her, and he says she has a stone in the bladder. I have given her saltpetre, but she is no better.

H. W.

Ans.—If your veterinarian's diagnosis is correct, and the symptoms indicate that it is, it is probable an operation will be necessary to remove it. In some cases they can be removed by manipulation without any cutting, and when this can be done, it is much better, as incising the bladder is a serious matter in our patients. Medicinal treatment consists in giving about two drams dilute muriatic acid, mixed with a pint of cold water, and given on food or as a drench three times daily, but it is seldom that drugs do any good, unless the calculus is very small.

V.

### CHRONIC SCRATCHES.

I bought a young mare over a year ago, and she had scratches, and I have failed to get them cured. Between fetlock pad and hoof the skin is raised in hard, dry ridges, destitute of hair. If driven regularly, these ridges crack open and become sore. Give me a complete cure.

W. C.

Ans.—I am afraid a complete and permanent cure cannot be effected now. The hair will probably not grow properly. Purge her with eight drams aloes and two drams ginger. Follow up with one ounce Fowler's solution of arsenic, twice daily, every alternate week for six weeks. Apply hot linseed-meal poultices to the heels for three days and nights, and, after that, dress three or four times daily with an ointment made of six drams boracic acid, twenty drops carbolic acid and two ounce vaseline. If the parts become too soft, dress, a few times, with a lotion made of one ounce each of sulphate of zinc and acetate of lead, mixed with a pint of water. Be sure to apply a little ointment before taking her out in cold weather. Do not wash. If she gets muddy, allow the mud to dry and then brush it off.

V.

## IMPERFECT MASTICATION.

Aged horse cannot chew his food properly. His manger is always full of half-chewed hay, and he slavers a great deal. I had his teeth dressed, but it did little good.

SUBSCRIBER.

Ans.—The trouble is undoubtedly in the mouth. In some cases, the teeth are practically worn out, and, of course, nothing can be done, except to feed on soft food that does not require mastication. Get your veterinarian to examine the mouth, and if he cannot dress the teeth so as to do good, he will tell you so, and you will have to cut his hay and mix chopped grain with it. It may be there is a tooth or two that will have to be shorn.

V.

## LUXATION OF PATELLA— TONGUE LOLLER.

1. Spring colt is stifled.
2. Horse lolls his tongue. R. I.

Ans.—1. I presume you mean the stifle bone becomes partially dislocated, as, if complete dislocation occurred he could not lift the foot at all. Clip the hair off the front and inside of the joint. Get a blister made of one and one-half drams each of biniodide of mercury and cantharides, mixed with two ounces vaseline. Tie so that he cannot bite the parts. Rub well with blister once daily for two days. On the third day wash off and apply sweet oil. Turn loose in box stall now, and oil every day. Keep as quiet as possible, and blister once monthly all winter.

2. The only way to prevent this is to wear a bit especially designed for the purpose. It consists in a straight bit, with either a flat piece of steel or a wire in the shape of a D extending upwards so as to prevent him getting his tongue over the bit. Your harness-maker can supply you, or get one for you.

V.

## PROGRESSIVE PARALYSIS.

I had a two-year-old Clydesdale colt castrated last June, and he apparently thoroughly recovered from the operation. In about two months afterwards, he began to lose power in his hind legs, and he has been gradually getting worse. He wobbles badly, and strikes his legs together, and has great difficulty in rising, and appears to be a little stiff in the neck.

J. L.

Ans.—This is a case of progressive paralysis, and the castration had no connection with it. The case is due to spinal trouble, and a recovery is doubtful. It may be due to a growth upon the spinal cord, and if so, he will not recover. If due to congestion of the vessels, he may recover. Keep him as quiet as possible in a box stall, and give a purgative of eight drams aloes and two drams ginger once every month. In the meantime give two drams nux vomica, and one dram iodide of potassium three times daily. If this decreases his appetite and desire for water, reduce the dose of potassium to thirty or forty grains.

V.

## Miscellaneous.

### INDUCING OSTRUM.

Is the remedy for bringing sows in heat, mentioned in August 22nd issue, page 1342, an authorized one?

SUBSCRIBER.

Ans.—Not to our knowledge, and we should be skeptical of its efficacy.

### HOGS QUARRELSOME—WORMS.

What is the cause of fattening hogs fighting a single one of the bunch, and trying to eat him? They are fed corn on the cob, and plenty of drink, and are in a roomy pen. What will rid fattening hogs of large or small worms, or is it natural for hogs to have worms?

Ans.—It is probably owing to a lack of variety of food, too much heating food, causing an inordinate craving of the system. A moderate allowance of salt and some sulphur fed in swill would probably help to overcome this, as also would charcoal, or even coal ashes, or gravel, placed where the hogs could take it at will. The same treatment will destroy worms in pigs.

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**MILITARY COURSES.**

Kindly inform me as to date of commencement of winter course at Military School, London. What are the requisites and terms of tuition? To whom should I apply for admission? M. B.

Ans.—The term "Military School" is incorrect and misleading. No such place, in the general acceptance of the words, exists. In connection with the detachment of the Royal Canadian Regiment at Wolseley Barracks is the Royal School of Infantry for the training of officers and non-commissioned officers who already belong to the active militia (such as the 7th and 26th Regiments, etc.), and for them only. There are no fees, but the officers are paid \$1, and non-commissioned officers fifty cents per diem, whilst undergoing a course, which lasts three months. The next one commences January 3rd, 1908. Application for admission is made through the commanding officer of the corps to which the applicant belongs.

J. C. MacDOUGALL, Lt.-Col., R. C. R. Wolseley Barracks, London.

**QUESTIONS AND ANSWERS.**  
Miscellaneous.

**PRUNING AND CULTURE OF GRAPEVINES.**

Please let me know the best time of the year and manner of trimming grapevines and cultivation.

**SUBSCRIBER.**

Ans.—The following directions, furnished by Prof. H. L. Hutt, of the Ontario Agricultural College, to experimenters conducting co-operative experiments with grapes, in various parts of the Province, give concise information regarding pruning, cultivation and other matters concerning grape-growing.

**Site.**—Select a high, well-drained site, protected, if possible, from the strong prevailing winds, and prepare the land deeply and thoroughly.

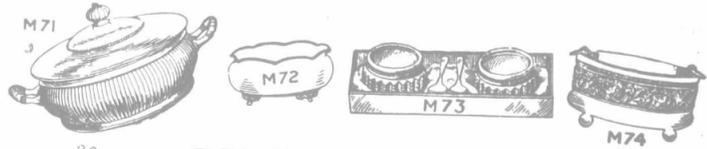
**Transplanting.**—When transplanting, cut back all torn or injured roots, to fresh, sound wood; avoid exposure of the roots to the sun or drying winds; dig the holes large enough to admit the roots without cramping; cover with moist, mellow surface soil, and tramp firmly.

**Trellising.**—For convenience of trellising it is best to set the vines about ten feet apart in continuous rows. For a couple of years, the vines may be allowed to run along the ground, but as soon as they make canes four or five feet in length, they should be trained to a trellis. A good trellis can be made of No. 10 galvanized wire, nailed to cedar posts. The posts should be about 20 feet apart, and four or five feet out of the ground. The number of wires necessary will depend upon the system of pruning and training adopted. For the "Fuller System," described below, four wires will be necessary, the lowest one about a foot from the ground, and the others equally spaced between that and the top of the post. The Kniffen System requires only two vines, one half way up, and the other at the top of the post.

**Pruning.**—The "Fuller System" is recommended for those sections of the country where the vines have to be laid down for winter protection. With this system the vines are cut back at the time of planting to one or two buds, and only the strongest one of these is allowed to grow. At the end of the first year this cane is cut back to within a foot of the ground. The second year, two of the upper buds are allowed to grow, producing two branches, which are trained each way along the lower wire of the trellis. At the end of the second year, these branches are cut back to within four or five feet of the main vine, and become the two permanent arms. From these arms, new canes are produced about a foot apart, and are tied up as they grow to the upper wires. Every year these are cut back to within two or three buds of the permanent arms, leaving not more than about three dozen buds on the whole vine when it is pruned.

The "Kniffen System" of pruning, as described below, is recommended for those sections of the country where the vines may safely be left on the trellis all winter. At the time of planting, the vine is cut back to a couple of buds, and at the end of the first year it is again cut back to one or two buds. The next year, the stronger of these is allowed to grow, forming a long straight cane. At the end of the second year this cane is cut back to about five feet in length, or enough to reach the top of the trellis, which by this time should be ready for it. This upright cane becomes the permanent part of the vine. The next year four arms should be allowed to grow from it, one on each side at both the upper and lower wires. These, at the end of the season should be cut off just beyond the sixth or seventh bud. This upright vine of old wood with its four arms of new wood makes the full-grown vine, as it is left each year after pruning. From each bud on the arms laterals are sent out in the spring, upon which the fruit is borne. These may be allowed to hang free without tying. The annual pruning now consists in renewing the four arms by cutting out the old ones as close as possible to the main upright, and training in their places the strongest laterals nearest to the main

**Winter Protection.**—In the colder sections of the Province, where the vines are liable to winter-killing, they should be pruned in the fall, and be laid down



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and covered with a few inches of earth before winter sets in.

**Cultivation.**—Do not allow adjoining crops to encroach upon the vines. To insure good growth it is best to give clean, thorough cultivation from early spring till about midsummer, after which the vines should mature their wood for winter.

A cover crop of some kind, such as rye, clover, or hairy vetch, sown after

the last cultivation in midsummer, is valuable for root protection in winter, and to enrich the soil when it is plowed under next spring.

The fertility of the soil about the vines may be most economically maintained by the judicious use of leguminous cover crops, and occasional applications of unleached wood ashes, spread evenly over the ground as far out as the roots extend.

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"Better there than here," said the landlord, consolingly; and proceeded to execute the desired lease.  
In due time the children returned from the cemetery, whither they had been sent to play, but it was too late to amend the contract.

**QUESTIONS AND ANSWERS.**  
Veterinary.

**DIFFICULT BREATHING.**

Cow has difficulty in breathing. Her respirations can be heard at a considerable distance, and her body jumps at each expiration. She eats and looks well, and appears all right, except as stated.  
G. T.

Ans.—It is probable she has tubercular deposits in either the throat or lungs, or both, and, if so, nothing can be done. I would advise you to get your veterinarian to test her with tuberculin, and if she reacts, do with her as he suggests. If she does not react, I would advise you to fit her for the butcher, as, if she is not tubercular, there is a tumor pressing upon the windpipe, and if this cannot be seen and removed, it will, in all probability, enlarge and cause death.  
V.

**UNTHRIFTY MARE.**

Mare's hair is dry, bowels loose, and excretions of a fetid odor. She sweats in stable, stocks in hind legs, passes whitish urine, and is generally out of condition.  
D. L.

Ans.—Have her teeth dressed by a veterinarian. Purge her with 8 drams aloes and 2 drams ginger, and follow up with the following: Take three ounces each of sulphate of iron, gentian, ginger and nuxvomica, and six ounces nitrate of potassium. Mix, and make into twenty-four powders. Give a powder night and morning. Feed fairly liberally on good hay and oats, with a few carrots at noon, and a feed of dampened bran, with half a teacupful of linsed meal twice weekly. See that she gets regular exercise. Repeat the prescription as often as necessary.  
V.

**DISCHARGE FROM SOLE.**

My team ran away a year ago. One leg was cut at fetlock joint, making an open joint. The other leg was also cut. The open joint healed, but the other foot became raw around the frog, which has since grown out, leaving the hoof soft around the frog, with a slight discharge.  
J. W.

Ans.—There is some irritation to the sensitive sole, which makes the formation of the horny sole imperfect. The horse must be given a long rest. All the soft sole and frog should be cut away, exposing the sensitive structures. Then this should be dressed three times daily, with carbolic acid, one part, sweet oil, thirty parts, and, after dressing, a poultice of linsed meal, mixed with warm water, applied. This will cause the secretion of a healthy sole and frog.  
V.

**MISCELLANEOUS.**

1. Give treatment for bog spavin so as to leave no blemish.
2. What can be done for a horse that gaunts when driven?
3. What will make the mane grow on a horse whose mane is short, and thin?

N. N. P.

Ans.—1. Make a blister of two drams each biniodide of mercury and cantharides, mixed with two ounces vaseline. Clip the hair off the parts. The head so that he cannot bite the joint. Rub well with the blister once daily for two days; on the third day wash off and apply sweet oil. Turn loose in box stall now, and oil every day until the scale comes off, when you will trim up and blister again as at first, and after this, blister every four weeks, as long as necessary. In many cases it is almost impossible to remove the puff.

2. Horses that are naturally washy will become gaunt when driven under mostly all circumstances. Feed on good hay and oats, and avoid driving soon after a meal. Feed little at a time, and often, when possible. Medical treatment is not advisable.

3. When a horse naturally has a thin mane, it is practically impossible to make a good one. Make an ointment of one dram cantharides to one ounce vaseline, and rub a little well in once weekly.  
V.

Grinding, like butter, does not improve with time, though it may increase in strength.

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Any person, however inexperienced, can readily cure either disease with Fleming's Fistula and Poll Evil Cure—even bad old cases that skilled doctors have abandoned. Easy and simple; no cutting; just a little attention every fifth day—and your money refunded if it ever fails. Cures most cases within thirty days, leaving the horse sound and smooth. All particulars given in Fleming's Vest-Pocket Veterinary Adviser.

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## Stanfield's Unshrinkable Underwear

Fits perfectly. Every garment is tested on models and the exact size determined. All sizes from 22 to 70 inches.

3 winter weights.

Your dealer can easily get all desired sizes and weights, if he should not have them in stock.

Mrs. Newlywed.—Doctor, that bottle of medicine you left for baby is all gone. Doctor.—Impossible! I told you to give him a teaspoonful once an hour. "Yes, but John and I and mother and the nurse have each to take a spoonful, too, in order to induce baby to take it."

## I Cured My Rupture I Will Show You How To Cure Yours FREE!

I was helpless and bed-ridden for years from a double rupture. I wore many different kinds of trusses. Some were tortures, some positively dangerous, and none would hold the rupture. The doctors told me I could not cure it without a surgical operation. But I fooled them all, and cured myself by a simple method which I discovered. Anyone can use it, and I will send the cure free by mail, postpaid, to anyone who writes for it. Fill out the coupon below and mail it to me today.

### Free Rupture-Cure Coupon

CAPT. W. A. COLLINGS, Box 63 Watertown, N. Y.

Dear Sir:—Please send me free of all cost your New Discovery for the Cure of Rupture.

Name \_\_\_\_\_

Address \_\_\_\_\_

### Prince Edward Island Notes.

I think the oldest person now living in this Province cannot remember a season in which such unlimited quantities of rain fell as has fallen during the past four or five months. We were watching, with much interest, the three last days of the old moon, hoping they would prove fine and dry; but Sunday night, Nov. 3rd, brought more rain, which gave us to understand that we might look out for plenty more during the next three weeks, and we had not to wait long, for the night of the sixth and all the following day, it poured as though it had not rained for months.

So much wet weather has interfered very much with the fall work. There has been little frost, however, and, if we should have open weather for some weeks, farmers may be able, by working between the showers, to get things pretty well into shape for winter after all. The hundreds of acres of plowed land now to be seen through the country everywhere, are evidence that preparations are well under way for another year's crop. Taking it on the whole, this year, we have had a bountiful harvest, for which we should feel thankful. The crop, at this writing, is now about all gathered, except a few turnips, which are generally left out as long as it is thought safe, for turnips will grow more in one fine week in November than they will in two or three weeks in September. Feed for stock will be plentiful this winter. Hay will be a little short, but the straw will help it out. The present very high prices of grain of all kinds is going to require the very best management in feeding it to any kind of stock this winter, and, yet, perhaps, it will pay to feed liberally this winter, as everything is high in proportion. With pork at from 8c. to 8½c., dressed, and cheese 13c., and factory butter 28c. to 30c. per pound, it hardly pays to stint the cow of her grain ration. Yet it is very tempting when a farmer can get a hundred dollars for a couple of loads of oats from his produce dealer. The farmers who are doing a milk trade in Charlottetown and Summerside have advanced the price of milk one cent per quart for the winter months. The condensing factory will pay in the neighborhood of \$1.50 per hundred for milk this winter. It is important, on account of the high price of butter, that our creameries be kept running all winter. Several of the cheese factories have already shut down for the winter. A great many schooners are now loading oats and potatoes at our wharves. The buyers complain considerably of the rot in the potatoes. The price has kept at about 25c. for potatoes, but is now advancing a little, as farmers are slow offering at this low figure, for almost everyone is predicting very high prices in the spring. Poultry of all kinds is not as plentiful this fall as last, and the American buyers say that when they pay such prices here, take them to their country and fatten them, that they are then too expensive for the consumer. It looks as though the price of poultry must drop a little. We often hear the farmers of this Island say: "If we could only get the prices that the farmers of Ontario are getting." Well, when it comes to poultry, we are getting as much, and more, than the Upper Provinces.

Since writing the first part of my notes, the price of pork has dropped to 7½c. for good fat hogs up to 180 lbs. This is quite unexpected, and will mean a great loss to us. In order to make it balance up right, pork ought to be at least 8½c. this fall. There is a probability, however, that pork will advance again when the rush is over and the hard weather is come to stay. Oats have also dropped to about 15c. per bushel. The immense crop of Island grain this year has crammed every warehouse and box car full on the line of railway, and it is impossible to get it away from the Island fast enough. This is another proof of the need of a tunnel to connect us with the markets of Canada. After all, there is perhaps no branch of farming that has paid, is paying, and will continue to pay, as well as dairying. There is money in producing milk, and the farmer who is working himself into a good herd of dairy cows, is certainly making no mistake, but don't overdo it. It is much better to feed better than to increase the number of (Continued on next page.)

## First Aid in Cooking

It is really surprising the uses to which Bovril can be put in cooking. It enriches soups and gravies, and adds flavor to stews.

# BOVRIL



is more than a mere emergency food.

A Good Cook Appreciates Bovril.

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Purveyors to the King.

### W. R. BOWMAN, MT. FOREST.

Durham bulls roans and reds, sired by imported Newton Prince. \$75. Shropshire ram and ewe lam s. \$10 to \$15 each, sired by our stock rams—Prolific (imp.) a Chicago winner, and Dickius (imp.). A few choice breeding ewes at \$12 to \$15 each. Yorksire sows due to farrow in February, sired by an imported boar, weighing over 300 pounds, at \$20 each. One boar ready for service at \$15. A Jersey bull, two years old, a winner at London; quick sale \$50.



ROCK SALT for horses and cattle, in 1 lb. and car lots.

TORONTO SALT WORKS, TORONTO.

Earn \$75 to \$150 per month as Brakeman or Fireman.

Just study an hour a day for 8 or 10 weeks and we guarantee to assist you to a position on any railway in Canada. Hundreds of men wanted in the next few months. If you want the above salary, ask for our booklet.

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## Aberdeen - Angus Cattle

FOR SALE!

Young bulls, also females of various ages. Good, growthy, quick-feeding animals, of excellent breeding and type. Come and see them or address: WM. ISO - E. P. O. and G. T. B. Stn., Sebringville, Ont.

## ABERDEEN - ANGUS

For sale, 50 head to pick from, males or females by imported sire. Drumbo station. WALTER HALL, Washington, Ontario.

## THE SUNNYSIDE HEREFORDS

To reduce herd will sell: 10 cows at \$100 each, 10 heifers at \$60 each, 10 bulls from \$50 to 100 each. Come and see them or address: M. H. O'NEIL, Southgate, Ontario.

ROSE COTTAGE STOCK FARM—2 Short-horn bulls for sale—14 and 20 months—one red and one roan. The red a Matchless. The roan, sired by Royal Prince is a full brother to Fair Queen and Queen Ideal, the two champion females of two continents. H. K. Fairbairn, Thedford, Ont.

## Scotch Shorthorns

Our breeding females are very heavy milkers, also good individuals. For sale are a few young bulls and a few choice heifers, all from imported sires, and a number from imported dams. The imported Bruce Mayflower bull, Royal Bruce 55088, heads the herd. R. J. DOYLE, Box 464, OWEN SOUND, ONT.

## Salem Herd of Shorthorns

We offer: Ten high-class bull calves, Ten high-class heifer calves.

As well bred as they can be.

J. A. Watt, Salem P.O. Elora, G. T. and C. P. R.

## SHORTHORNS

For want of stable room will sell cheap 10 heifer calves, 12 yearling heifers, 4 two-year-old heifers, 1 calf, and 3 red bulls about 14 months old. Right good ones. OLYDESDALES.—Two-year-old mare in foal, and a good pair 4 and 5 years old. Write, or come and see them. JAMES McARTHUR, GOBLES, ONTARIO.

## T. DOUGLAS & SONS

STRATHROY, ONT. Breeders of Short-horn and Clydesdales. 15 bulls, 50 cows and heifers, 1 imp. stallion, imp. and home-bred sires. Write us what you want or come and see our stock. Farm 1 mile north of town.

Shorthorn Bulls—I have for sale four choice young bulls ready for service. One a Marr Elythesome, one from imp. Bessie of Wenlock, will make a show bull. Have also a number of young sires from Matchless, Crimson Flower, Miss Ramsden, Rosemary, Diamond and Lady Fanny dams, and the get of Chancellor's Model. A splendid lot of good feeders. Prices to suit the times. Come and see them. ISRAEL GROFF, Elmira, Ont.

SCOTCH SHORTHORN BULLS—Woodfield Prince, sire the \$9100 Goldcup, imported, =50039 = (83064), dam Trout Creek Missie 20th =65067 =; red, little white; calved July 6th, 1906; a show bull. Also four extra bull calves, 8 to 10 months, by the Lavender bull, Trout Creek Wonder =56167 = (247851), out of Scotch cows; imported by W. D. Flint; eligible for American Herdbook. Write for pedigrees Gibbs' Woodfield Stock Farm, St. Catharines, Ontario.

LOCHABER STOCK FARM offers several choice Shorthorn Bulls at different ages for sale. And a nice lot of Berkshires. Also M. B. turkeys, Barred Rocks, W. S. L. and R. Wyandottes and imp. Pekin ducks. Stock Al. D. A. GRAHAM, instead Ont.

MAPLE GROVE SHORTHORNS Scotch and dairy bred; up to-date in type; prize winners at the local shows. A number of 1 and 2 year old heifers 1 year old bull, and one 5 mo. old—the last will make a show bull Flora bred—will be sold easy L. S. POWELL, Wallenstein P. O. and Stn. C. P. R.

Brown Lee Shorthorns! Nonpareil Victor =63307 = at head of 'erd. Young stock for sale at all times. Prices very reasonable. Arr. C. E. R.; Drumbo, G. T. B. DOUGLAS BROWN, Arr. Ont.

ELM PARK STOCK FARM Shorthorns, Clydesdales and Berkshires. Stock for sale at all times. Herd headed by British Flag (50016) (62971). JOHN M. BECKTON, Glencoe, Ont. G. T. R., C. P. R. and Wabash R.

# LISTEN!

We are offering **Special Bargains in Shorthorns** just now. The Reason is that we have a **Large Stock** and **Feed is Scarce**. Most of you know the **Kind of Cattle** we have, so that it is useless repeating the usual formula. In order to **Reduce Our Stock**, so that we may be able to pull through the winter, we **Will Sell at Prices** which will **Well Repay the Purchaser** who has feed to keep them until spring. We have pretty nearly anything **You** want. If you can not come to see, write and tell us as nearly as possible what it is, and we will frankly tell you whether or not we can supply.

**John Clancy, Manager.** **H. Cargill & Son, Cargill, Ont.**



**Ring-Bone**

There is no case so old or bad that we will not guarantee

**Fleming's Spavin and Ringbone Paste** to remove the lameness and make the horse go sound. Money refunded if it over fails. Easy to use and one to three 45-minute applications cure. Works just as well on Sidebone and Bone Spavin. Before ordering or buying any kind of a remedy for any kind of a blemish, write for a free copy of **Fleming's Vest-Pocket Veterinary Adviser**

Ninety-six pages of veterinary information, with special attention to the treatment of blemishes. Durable, bound, indexed and illustrated. Make a right beginning by sending for this book.

**FLEMING BROS., Chemists,**  
75 Church Street, Toronto, Ontario

**1864 Maple Lodge Stock Farm 1907**

An exceptionally choice lot of heifers and young bulls for sale now. Best milking strains.

**A. W. Smith, Maple Lodge P.O., Ont.**

**SHORTHORNS AND LEICESTERS.**

For sale: Young bulls, age 7 to 18 months, by Imp. sire, and from grand milking dams. Leicesters: A number of choice rams and ram lambs, also a choice lot of shearing ewes now bred to a good ram of the finest type and breeding, at easy prices for quick sale. **W. A. DOUGLAS,** Caledonia station. **W. A. DOUGLAS, Caledonia P. O.**

**Glen Gow Shorthorns**

Our present offering is 9 bulls, from 6 to 14 months of age, sired by Imp. Ben Loman and Imp. Joy of Morning, and out of Imp. and Canadian-bred cows. Also a number of very choice heifers. No fancy prices asked. Long-distance phone.

**WM. SMITH,** Columbus P.O.  
Brooklin & Myrtle Sts.

**WILLOW BANK Shorthorns and Leicesters.**

ESTABLISHED 52 YEARS.

Have a special good lot of either sex to offer in Shorthorns of various ages. Also a few choice Leicester sheep. Write for prices, or, better, come and see. Choice quality and breeding.

**JAMES DOUGLAS, CALDONIA, ONT.**

**Shorthorns, Cotswolds, Berkshires**

On hand: two yearling bulls and a n mber under one year, also females of all ages. In Cotswolds, about 30 lambs. Have also a few young Berkshire boars

**CHAS. E. BONNYCASTLE,** P. O. and Station, Campbellford, Ont.

**PLEASANT VALLEY SHORTHORNS**

For sale: 3 young bulls by Old Lancaster Imp. from Imp. dams, including Lancaster Victor, first prize sr bull calf at Dom at Sherbrooke, second at G. N. E., Toronto. Correspondence solicited. Inspection invited.

**Geo. Amos & Son, Moffat Stn. & P.O., C. P. R. Farm 11 miles east of City of Guelph.**

**Valley Home Shorthorns AND BERKSHIRES.**

Our herd numbers sixty-five head. We are prepared to give bargains to suit all who wish to buy from one animal up to a carload of females, and 19 bulls from 9 to 18 months old. Also 55 Berkshires of prolific strains.

**S. J. PEARSON, SON & CO., Meadowvale, Ont. Stations: Meadowvale, C.P.R.; Brampton, G.T.R.**

**Scotch Shorthorns**

Representing the choicest strains. Young stock of both sexes for sale.

**F. W. Ewing, Salem P. O., Elora Stn.**

ews in order to increase the supply of milk. The horse business is quiet just now. A great many horses have been shipped away from the Island this year, at high prices. The quality of horses here is improving, perhaps faster than any kind of live stock, and, with the foreign buyers, there is nothing quite so good as a P. E. Island horse, and they are willing to pay for the quality.

East Prince, P. E. I. C. C. C.

**GOSSIP.**

F. W. Ewing, Salem, Ont., near Elora Station (G. T. R. and C. P. R.), and 15 miles north of Guelph, advertises for sale Shorthorn cattle of the following excellent Scotch families: English Lady, Mildred, Nonpareil, Claret and Stamford, and offers young stock, sired by the good-breeding bulls, Springhurst and Mildred's Royal. A careful breeder and judicious feeder, Mr. Ewing's herd will be found well up to the standard of the best in the country.

Messrs. John Watt & Son, Salem, Ont., write: "Our Shorthorns have gone into their winter quarters in good shape, and we will price about twenty females of the most up-to-date breeding. The two bulls we are offering are a real good pair, sired by Heatherman, a grandson of the good-breeding bull, Lovat's Champion, and they are out of our best-breeding cows. These calves are in good-breeding shape, and will be sold at bargain prices. We recently sold an extra good bull calf to Mr. David Campbell, Clifford, Ont., sired by Duke of Richmond, and out of Imp. Merry Lass 8th. This calf will be a valuable addition to Mr. Campbell's herd."

**SUMMER HILL BERKSHIRES.**

Messrs. D. C. Flatt & Son, Millgrove, Ont., write: "Our Summer Hill herd of English Yorkshire hogs was never so complete as it is to-day, and we say without prejudice that we never had better individuals nor more of them. Our motto has always been when buying: 'The best is not quite good enough,' and we use the same motto when filling orders entrusted to us by mail and otherwise, in the interest of the buyer. Our ambition is to make friends, and we are constantly adding more to our list, not by meeting them face to face, but we rely on the quality of our stock to make friends for us. At present we have over 300 to select from, and below we will give you an idea of how they are bred. Our main stock boar, Duke of York 14769 (imp.), was three times champion and medal boar at Toronto, which was never done before by any one animal. He is in excellent breeding condition to-day, and will weigh over 900 pounds. Second in service is Champion 20102, a grand son of Duke of York. Champion this year succeeded in winning the medal and championship at Toronto in his yearling form. He is a wonderful boar, with great bone, and all the quality that could be imagined. Another is Summer Hill Chester (imp. in dam). He is a massive, smooth fellow. His sire is the great Park Royal, first-prize boar at the Royal Show, England, and his dam was also champion and medal sow at Toronto, 1905. Summer Hill Captain is another that we expect a great deal from. He will, no doubt, be shown in 1908, and will be heard from then. Our stock of 60 breeding sows are all imported, with the exception of six, and they are a credit to any show-ring. With the blood of these boars and sows, which is the best we could find in England and Scotland, we feel we are able to offer to the Canadian farmers the best blood that the world produces, and at moderate prices."

**Queenston Heights SHORTHORNS**

All Scotch. The thick-fleshed, early-maturing sort. Special prices on young stock, either sex. Ask for catalogue with sample pedigrees.

**Hudson Usher, Queenston, Ont.**  
Farm three miles north of Niagara Falls.

**SCOTCH SHORTHORNS!**

We now offer four heifer calves 10 and 11 months old. All reds. Bred from Imp sire and dams. Will be sold right **C. RANKIN & SONS,** Wyebridge P. O., Wyevale Sta.

**Greengill Herd of High-class SHORTHORNS**

We offer for sale choice young bulls from 6 to 12 months old, sired by Imp. Lord Roseberry, also cows and heifers, with calf at foot or bred, either Imp. or Canadian-bred.

**R. MITCHELL & SONS,**  
Nelson P. O., Ont., Burlington Jct. Sta.

**IMPORTED SHORTHORN BULL,** Royal Kitchener = 60084 =, five years; quiet; active; sure. Will sell or exchange. Also young stock sired by him, and out of Imp. and home-bred cows, for sale. **Ira B. Wannatter, Salsinad P.O., Erin, C.P.R.; Georgtown, G.T.R.**

**LIVINGSTON'S OIL CAKE MEAL**

**OLD PROCESS**

Nothing is better for fattening steers quickly and putting them on the market in prime condition than Oil Cake Meal. Thousands of Canadian and English stockmen use Livingston's, and would have no other. It is equally good for milk cows. They give more and better milk when fed Livingston's Oil Cake Meal. Also used for horses, sheep and hogs. Write for information regarding prices, etc., etc., to

**DOMINION LINSEED OIL CO., LIMITED**  
Montreal, Que. **Baden, Ont.**

**Clover Lea Stock Farm SCOTCH SHORTHORNS**

Superior breeding and individual excellence. For sale: Bulls and heifers—reds and roans, some from Imp sire and dam. Visitors met at Ripley station, G. T. R.

**R. H. REID, PINE RIVER, ONTARIO.**

**FLETCHER'S SHORTHORNS & YORKSHIRES**

Present offering: My \$3,000 stock bull, Imp. Joy of Morning = 3370 =, 8 years old, winner of 1st prize at Dominion Exhibition, Toronto. Quiet, active and sure. Will sell or exchange. Also young stock of either sex. In Yorkshires: choice sows bred, and boars fit for service, from Imp. sire and dam, at your own price. **GEO. D. FLETCHER, Sinkham P.O., Ont. Erin station, C. P. R.**

**MAPLE SHORTHORNS**

Winners at the leading shows have been sired by bulls bred here. We can sell you a good bull to head your herd of SHORTHORNS, or for use on your good grade cows. The bull catalogue explains the breeding. Write for it.

**John Dryden & Son, Brooklin, Ont.**  
Stations: Brooklin, G. T. R.; Myrtle, C. P. R. Long-distance telephone.

**SHORTHORNS AND LINCOLN SHEEP.**

Two bulls, 11 and 19 months old—a Miss Ramsden and a Bessie, both by the good breeding bull, Proud Gift = 50077 = (imp.), also cows and heifers in calf by him. Inspection solicited. Always have some choice Lincoln sheep for sale at reasonable prices.

**J. T. GIBSON, DENFIELD, ONTARIO.**

**A. EDWARD MEYER, BOX 378, GUELPH, ONT., BREEDS Scotch Shorthorns**

exclusively. Herd bulls: Scottish Hero (imp.) = 55042 = (90065), a Shethin Rosemary; Gloster King = 58703 = 28304, A. H. B., a Cruickshank Duchess of Gloster. Young stock for sale. Long-distance phone in house.

**Shorthorns! BELMAR PARC.**

**John Douglas, Manager.** **Peter White, Pembroke, Ont.**

Calves for sale by our grand quartette of breeding and show bulls:

Nonpareil Archer, Imp. Proud Gift, Imp. Marigold Sailer. Nonpareil Eclipse.

Females. Imported and from imported stock in calf to these bulls.

An unsurpassed lot of yearling heifers.

**SHORTHORNS Maple Grove Shorthorns**

One roan Shorthorn bull highly bred—will sell at a great bargain. One pure white, two months old, cheap for quick sale. Cows and heifers all ages. Also a number of Chester White pigs that I will sell cheap if sold at once, as I have not the room to winter them.

**D. ALLAN BLACK, Kingston, Ont.**

Herd headed by the grand show bull, Starry Morning. Present offering: Imported and home-bred cows and heifers, also a few young bulls. Terms and prices to suit the times. **C. D. WAGAR, Enterprise Stn. and P.O. Addington Co.**

**Pure Scotch Shorthorns!**

Our herd is headed by Imp. Prime Favorite, grand champion bull at the Canadian National Exhibition, at Toronto, and at the New York State Fair, at Syracuse, for 1907, assisted by Imp. Scottish Pride. If you want a choice young bull do not fail to ask for one of our bull catalogues. A number of females in calf, or with calf at foot, also for sale. Correspondence solicited. Visitors always welcome. Long-distance phone.

**W. G. PETTIT & SONS, Freeman P. O., Ont., Burlington Jct. Sta.**

**Spring Valley Shorthorns**

Bulls in service are: Bapton Chancellor (imp.) = 40359 = (78286), Clipper Chief (imp.) = 64220 =.

Stock for sale at all times.

**KYLE BROS., Afr. Ontario.**

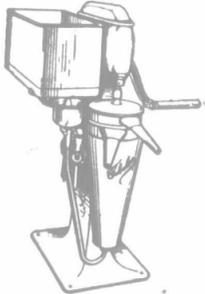
**John Gardhouse & Sons**

Importers and breeders of Scotch Shorthorn cattle, Shire and Clydesdale horses, and Lincoln sheep. Call and see us.

**Highfield P. O., Weston Station 3 1/2 Miles. Telephone.**

Because You Need The Money

It's your business and if you don't attend to it, who will? You cannot afford to keep cows for fun. That isn't business, and, furthermore, it isn't necessary. There is money in cow raising if you go at it right, and besides there is more fun in going at it right than there is in staying wrong.



You need a Tubular Cream Separator because it will make money for you; because it saves labor; because it saves time; because it means all the difference between cow profits and cow losses.

Look into this matter; see what a Tubular will do for you and buy one because you need it.

How would you like our book "Business Dairying" and our catalog B. 12 both free. Write for them.

The Sharples Separator Co. West Chester, Pa. Toronto, Can. Chicago, Ill.

Success Dairy Feed.

Corn, peas and oats contribute to its composition. Splendid value. \$24 per ton in sacks, on cars Woodstock.

Woodstock Cereal Co. (LIMITED), Woodstock, Ont.



J. BRYDONE,

Breeder of pure Scotch Short horns. Breeding females imported. Headed by the pure Cruickshank (Duthie-bred) bull, Sittytton Victor (Imp.) -60038- (87397). Young stock from Imp. dams for sale



Shorthorns—Sweepstakes herd at London, Ayrmer, Wallace town, Rodney, Ridge town and Highgate, 1907. We have for sale at reasonable prices 3 choice young bulls, 1 red and 2 roans, of grand type and quality. All sired by the good breeding bull, Ridge wood Marquis -48935-, a son of the old champion, Spicy Marquis. Also a few young cows and heifers. JNO. LEE & SONS, Highgate, Ont.

J. Watt & Son

For sale—2 high-class bull calves of the richest breeding; 30 young cows and heifers a number of which are well gone in calf to Imp. Pride of Scotland. Moderate prices. Correspondence invited.

Salem P.O., Elora Sta. G.T.R. & C.P.R.

MAITLAND BANK SCOTCH SHORTHORNS! 7 bulls, superior breeding, 11 to 15 months; 5 high-class bull calves 5 to 8 months; and a number of cows and heifers and calves; at half prices formerly asked. DAVID MILNE, Etne., Ont.

Maple Leaf Shorthorns Chancellor's Model now heads the herd, which contains Crimson Flower, Lady Fanny, Miss Ramsden, Rosemary, Matchless, Diamond, and Imp. Bessie Wenlock. Now offering a lot of choice calves, both sexes. Israel Groff, Alma Ont.

High-class Shorthorns Royal Chief, a son of Mildred's Royal, at head of herd. We are offering a few choice heifers of show-ring form. Pure Scot h. Terms reasonable. A. DUNCAN & SONS, Carleton Place, Ont.

AYRSHIRES Young bulls from producing dams and same sire, from 7 months up to 2 years. Rare good ones and will speak for themselves. N. DYMENT, Hickory Hill Stock Farm, Clappison, Ont. Dundas Station and Telegraph.

QUESTIONS AND ANSWERS. Veterinary.

ERYSIPELAS.

When I went to the field for my yearling colt, I found a diffused swelling on the bottom of the abdomen near fore legs, and another in front of the hind legs. These swellings, if pressed, will retain the imprint of the finger for some time.

Ans.—This is erysipelas. Purge with five drams aloes and two drams ginger; follow up with three drams hyposulphate of soda, three times daily. Feed on easily-digested food. Keep comfortable. Bathe the swollen parts well with hot water every few hours, and, after bathing, rub well with camphorated liniment.

PARTIAL PARALYSIS.

1. Mare, sixteen years old, had foal in August, and she is raising it. She has difficulty in rising. She gets up on hind feet first, and sometimes cannot get on her fore feet without assistance. She is all right when up, but is thin. She is supposed to be in foal again.

2. Is enclosed condition powder any good?

Ans.—1. This is a partial paralysis, and it is doubtful if treatment will be successful. Aged animals occasionally go this way, and the cause often is some pressure upon the spinal cord or some of the main nerves that supply the limbs. Gray, cream-colored or light chestnut horses suffer more frequently than those of other colors. Keep her well bedded in a large box stall. Give two drams nux vomica and one dram iodide of potassium, twice daily. Feed liberally on good hay, bran, crushed oats and a few roots, and, if possible, give regular exercise.

2. While it would require an analytical chemist to tell the exact constituents of the mixture, I am of the opinion it is a good tonic or condition powder.

Miscellaneous.

FOXHOUND WANTED.

Please advise me, through the columns of your valuable paper, to where I could get a foxhound trained, or a pup not trained.

Ans.—A reply is invited through our "Want and for Sale" advertising columns. Private replies will not be forwarded.

BATTERY FOR ELECTRIC LIGHTING.

1. Would a battery of two or three cells, in series, furnish enough current to light an incandescent lamp for an hour or two daily?

2. If so, which would be better, wet or dry cells, and how long would they last?

Ans.—1 and 2. No. It would take from 55 to 100, according to kind, to light one incandescent lamp, such as are in ordinary use.

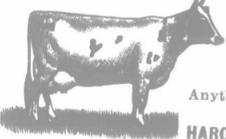
HORSE INSURANCE.

We have bought an entire horse, and would like to insure him. Can you please tell us if there is an agent or an insurance company in Canada that insures entire horses?

Ans.—We are not aware of any company in Canada that insures horses. An English company, known as Lloyd's, has, or had a Canadian agency some time ago, but they do not advertise, and, we understand, are not seeking business. The address of the agent was: Major Harbottle, Confederation Life Building, Toronto.

Mr. John Miller, Brougham, Ont., writes: "I have had a very good trade in Shropshire and Cotswold rams this fall, having disposed of over one hundred, besides quite a number of ram lambs. Have sold sheep to go to six different States, and quite a number to stay in Ontario. Am now offering a choice lot of young ewes of both breeds, in lamb to the best rams I could buy, and some ewe lambs that can be made winners at the shows next fall. We also have the best lot of young Shorthorn bulls to sell this winter (an even dozen) we have had in a long time."

STONEYCROFT STOCK FARM, St. Anne de Bellevue, Quebec.



(Adjoining the new Macdonald College.)

Breeders and Importers of High-class

Ayrshire Cattle, Clydesdale Horses, Yorkshire Swine and Collie Dogs

Anything for sale. We offer especially a few select young bulls to clear cheap. Orders booked for spring pigs.

HAROLD M. MORGAN, Prop. E. BJORKELAND, Manager. Bell Phone connection.

Hillview Herd of Prizewinning AYRSHIRE CATTLE.

All animals bred and carefully selected for size, constitution, long teats and deep-milking qualities. Select animals of both sexes for sale at reasonable prices. For further information and prices write

A. KENNEDY & SON, Hillview Stock Farm, Vernon, Ont. Winchester Station, C. P. R.

STOCK FOR SALE—At Springburn Stock Farm, Williamsburg, Ont. 5 1-year old Ayrshire bulls. Females any age. 13 Oxford Down ram lambs and a number of young ewes. Prices reasonable.

H. J. WHITTEKER & SONS, Props.

D. M. Watt, St. Louis Station, Quebec, breeder of HIGH-CLASS AYRSHIRES Canadian and Scotch-bred. All of deep milking qualities.

SHANNON BANK STOCK FARM FOR AYRSHIRES AND YORKSHIRES Young stock of both sexes for sale from imported stock.

W. H. TRAN, Cedar Grove, Ont.

AYRSHIRES FROM A PRIZEWINNING HERD Have some nice bull and heifer calves for sale at reasonable prices. For particulars, etc., write to W. M. STEWART & SON, Campbellford Sta. Menie P.O., Ont.



AYRSHIRES! SEE STOCK NOTES.

To dairymen:—We offer cheap 3 young bull calves, bred from large, heavy-milking cows with good teats. To breeders:—We have several very choicely-bred young bull calves, combining showing and dairy qualities; 3 young bulls fit for service; spring females, any age, either milking or dry. Orders taken for importing in 1908. Our J. Retson is now in Scotland.

Phone Campbellford. ALEX. HUME & CO., Menie, Ont.

Holsteins and Yorkshires.



R. HONEY, Brickley, Ontario,

offers a very choice lot of young bulls also boars and sows fit to mate.

"THE MAPLES" HOLSTEIN HERD

Is made up of Record of Merit cows and heifers with large records and headed by Lord Wayne Meeshilde Calamity. Bull calves from one to five months old for sale.

Walburn Rivers, Falden's, Ont.

SPRINGBROOK Holsteins and Tamworths.—Will offer for quick sale 30 choice young Tamworth pigs, sired by imported prizewinning boar, Knowle King David, and one of first-class sows. Will ship at 6 weeks old. Express paid to any express office in Ontario for \$8 apiece, with registered pedigree. Satisfaction guaranteed. Pigs ready to ship by 1st and 15th Dec. A few very choice bulls to offer from 8 weeks to 15 months old. Be quick if you are after bargains. A. C. HALLMAN, Breslau, Waterloo Co., Ont.

Grove Hill Holstein Herd Offers high-class stock at reasonable prices. Only a few youngsters left. Pairs not sold. F. R. MALLORY, Frankford, Ontario. G. T. R. and C. O. Railway connections

HOLSTEINS

We must sell at least 25 cows and heifers at once in order to make room for the increase of our herd. The best way to arrange to come and look the herd over, if you cannot, we will do our best for you by correspondence. Also a few young bulls, 100 head to select from. Imported Pontine Marquis, son of Hengerveld De Kol, world's greatest sire, head of herd. All leading breeds represented. H. E. GEORGE, Orampton, Ont. Pussum station, near Ingersoll.



Lyndale Holsteins

Bull calves for sale out of cows with records of from 18 to 30 lbs., and sired by a grandson of Pietertje Hengerveld's Count De Kol.

BROWN BROS., LYN, ONTARIO.

HILTON STOCK FARM—Holsteins, Cotswolds and Tamworths—Friesian offering: Some young cows; a nice lot of young pigs; few boars six months old, and sows in pig. H. G. MCGORROW & SON, Hilton P. O. Brighton Tel. and Stn.

Imperial Holsteins

Bull calves for sale.

W. H. SIMMONS, New Durham P. O., Ont.

Annandale Great Dairy Herd

Holsteins and Ayrshires

RECORD OF MERIT HOLSTEINS

Herd 110 strong. Over 40 head now in the Record of Merit. Two of the richest-bred bulls in Canada at head of the herd. For sale: 18 bulls, from 3 months to 1 year of age, all out of Record of Merit cows and sired by the stock bulls.

P. D. EDM. Oxford Centre P.O. Woodstock Station.

RIVERSIDE HOLSTEINS

For sale: Eight young bulls from 3 to 8 months old, out of Record of Merit cows, sired by Johanns Bue 4th's Lad and Sir Pietertje Pouch DeBoer, whose dam and sire's dam average in official test 35.87 lbs. butter in 7 days, and 87.6 lbs. milk 1 day.

J. W. RICHARDSON, Caledonia, Ont.

STEVENS DAIRY FARM HOLSTEINS

I have now for sale two bull calves 6 months old sired by a grand son of Pietertje Hengerveld's Count De Kol; also four choice young cows due to calve in February.

W. C. STEVENS, PHILLIPVILLE P.O., DELTA STATION.

MAPLE GLEN HOLSTEINS

Herd of 35 head with A. B. O. breeding, backed up by butter tests of over 16 lbs. as a 1-year-old to over 26 lbs. as a cow. A good herd to select from. Two spring bull calves on hand. A. B. O. test of one is over 26 lbs. for dam and s. dam. Come and inspect the herd. Any animal will be offered for sale.

G. A. GILROY, GLEN BUELL, ONT.

ONLY BULLS, 4 to 10 months old, for sale at present. Bred from great producing ancestors. Bred right. Fed right.

GEO. RICE, Tillsonburg, Ont.

FAIRVIEW HERD is the place to buy your next bull. I can furnish you with a bull sired by our great herd bull, PONTIAC KOENIGER, who has 19 daughters in the last year's report that made official records from 13 pounds at four years, and the whole number averaged over 4 1/2 fat. No other bull in the world has ever made such a showing in one year. I have just tested another of his daughters that made 26.40 pounds butter in seven days with second calf. I have over 80 cows and heifers in calf to him. Come and look my herd over before making your selections elsewhere. E. H. OELER, Havelton, St. Lawrence Co., N. Y., near Prescott

Maple Hill Holstein-Friesians

Bull calves from No. 1 dams, sired by bulls with great official backing. Write for prices.

G. W. Clemons, St. George, Ont.

**SIMPLE HOME RECIPE.**

Get from any prescription pharmacist the following:

Fluid Extract Dandelion, one-half ounce; Compound Kargon, one ounce; Compound Syrup Sarsaparilla, three ounces.

Shake well in a bottle and take a teaspoonful dose after each meal and at bedtime.

The above is considered by an eminent authority, who writes in a New York daily paper, as the finest prescription ever written to relieve Backache, Kidney Trouble, Weak Bladder and all forms of Urinary difficulties. This mixture acts promptly on the eliminative tissues of the Kidneys, enabling them to filter and strain the uric acid and other waste from the blood, which causes Rheumatism.

Some persons who suffer with the afflictions may not feel inclined to place much confidence in this simple mixture, yet those who have tried it say the results are simply surprising, the relief being effected without the slightest injury to the stomach or other organs.

Mix some, and give it a trial. It certainly comes highly recommended. It is the prescription of an eminent authority, whose entire reputation, it is said, was established by it.

A druggist here at home when asked stated that he could either supply the ingredients, or mix the prescription for our readers, also recommends it as harmless.

The teacher was endeavoring to explain the meaning of "egoism" to the class.

"Who is it," he said, "who expects never to be neglected, who expects the best of everything, imagines that he is the center of everything, who never thinks of nor does anything for anybody else, but expects everything done for him?"

"Please, teacher," said a small boy, one of a large family, "the baby."

**Reinforce Your DAIRY HERD with the Blood of the Winners. DON JERSEY HERD**

can furnish you with young bulls sired by Golden Lad of Thorncliffe, who was the sire of the herd winning first prize for the progeny of one bull at the Toronto Exhibition 1907. If you want practically money-making Jerseys secure one of these well-bred bulls. **D. DUNCAN, Don, Ont., Duncan Station, C. N. O.**

**Brampton Jerseys**

Unbroken record of several years success at all leading Canadian exhibitions is unequalled by any other herd of any kind or breed of live stock on the American continent. When buying a family cow, a stock bull or a dairy heifer, buy only the best. Our public record proves what we have them. **B. H. BULL & SON, Brampton, Ont.**

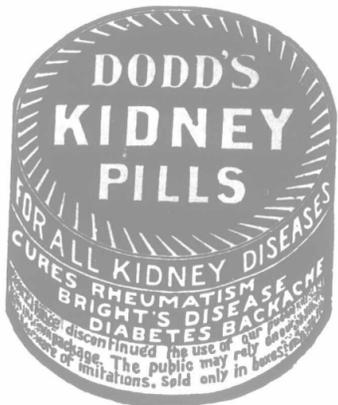
**HIGH GROVE A. J. C. G. JERSEYS**

Arthur H. Tufts Tweed, Ont. (Successor to Robt. Tufts & Son.) On account of scarcity of winter feed he'd must be reduced. Mal. and females, all ages, for sale cheap, quality considered.



**Cattle and Sheep Labels**  
If you want to improve your stock, these labels will interest you. Write for circular and sample, free. **F. G. JAMES, Bowmanville, Ont.**

"Can you tell me the secret of predicting weather months ahead?"  
"In confidence, yes," answered the hoary prophet. "You guess at it. If the guess is correct you call the attention of people to the fact, and if it isn't, you let them forget it."



**Programme for Meetings at the Ontario Winter Fair, Guelph.**

Hon. Nelson Monteith, Minister of Agriculture, will act as chairman at each of the following meetings, in the Lecture-room of the Winter Fair building:

Tuesday, Dec. 10th, 8 p. m.

**POULTRY.**—"The Principles of Incubation and Their Application to Successful Poultry-raising," by W. H. Day, Lecturer in Physics, O. A. C.; "Winter Egg Production," by L. H. Baldwin, Deer Park; "The Colony House: An Economical and Effective Plan of Housing Poultry," by F. C. Elford, Manager Poultry Department, Macdonald College, Ste. Anne de Bellevue, Que.; "Rearing and Fattening Chickens," by W. R. Graham, Manager Poultry Department, O. A. C., Guelph.

Wednesday, Dec. 11th, 10 a. m.

**SEEDS.**—"The Improvement of Ontario's Pasture Crops," by C. A. Zavitz, B. S. A., Professor of Field Husbandry, O. A. C.; "Advantages of the Special Seed Plot as a Source of Seed," by J. M. McCallum, Shakespeare, Ont.; "Hill Selection of Seed Potatoes," by T. G. Raynor, B. S. A., Ontario Representative of Seed Branch, Ottawa.

Wednesday, Dec. 11th, 1.30 p. m.

**GOOD ROADS.**—"Good Roads Right Now," by D. Ward King, Originator of the Split-log Drag, Maitland, Mo.; "Observations on Work of the Split-log Drag," by A. W. Campbell, Deputy Minister of Public Works, Toronto.

Wednesday, Dec. 11th, 3.30 p. m.

**DAIRY CATTLE.**—"The Operation and Results of Practical Work in Testing Cows," by E. Hawthorne, Warsaw, A. Dunn, Ingersoll; W. H. McNish, Lyn (members of the Cow-testing Association), and by C. F. Whitley, Department of Agriculture, Ottawa; "Co-operation Between Milk Producers and Owners of Cheese Factories and Creameries," by Frank Hens, Chief Dairy Instructor for Western Ontario, London; "The Sanitary Handling of Milk and Milk Products," by H. H. Dean, Professor of Dairy Husbandry, O. A. C., Guelph.

Thursday, Dec. 12th, 10 a. m.

**HORSES.**—"Selection of a Stallion and Proper Type in Mating," by Wm. Smith, Columbus, Ont.; "Horse Markets," by C. A. Burns, Manager the Repository, Toronto; "The Most Profitable Class of Horses for the Farm," by H. G. Reed, V. S., Georgetown, Ont.

At 2.30 p. m.—A discussion based on the information and suggestions contained in the report of the investigation into the horse-breeding industry of Ontario. A number of points suggested by the Directors of the Ontario Horse-breeders' Association will be presented for discussion by the President, Mr. Wm. Smith, Columbus, Ont.

Thursday, December 12th, 7.30 p. m.

**CATTLE, SHEEP AND SWINE.**—"The Necessity for Amending the Act for the Protection of Sheep and to Impose a Tax on Dogs, Followed by a Discussion of the Amendments Suggested by the Dominion Sheep Breeders' Association," by Robert Miller, Stouffville; "The Economical Feeding of Live Stock": (a) "Swine," by T. H. Mason, Stratfordville; Prof. G. E. Day, O. A. C., Guelph; (b) "Sheep," by Lt.-Col. Robt. McEwen, Byron; Prof. R. W. Wade, O. A. C., Guelph; (c) "Beef Cattle," by John Campbell, Woodville; Prof. J. H. Grisdale, Central Experimental Farm, Ottawa.

Friday, Dec. 13th, 10 a. m.

**HORSE TRAINING.**—"The Horse and His Master," by D. Ward King, Maitland, Mo. This address will include a practical demonstration of obtaining absolute control of an unbroken horse. The plan advocated is original, and will be demonstrated in the large cattle-ring.

**ANNUAL MEETINGS.**

All meetings, unless otherwise specified, will be held in the north-west wing of the City Hall, Guelph (upstairs, opposite the council chamber).

Western Ontario Poultry Association, Thursday, December 12th, at 1.30 p. m.  
American Leicester Breeders' Association, Tuesday, December 10th, at 7 p. m.  
Orpington Club of Canada, Wednesday, December 11th, at 10 a. m.  
Canadian Barged Plymouth Rock Club, (Continued on next page.)

**DISPERSION SALE OF THE**

**"Model Farm" Flock of Shropshires**

I will sell at public auction on **DECEMBER 20TH** my well-known "Model Farm" flock of Shropshires, comprising 52 ewes, all bred to "The Dream," the sire of the Zenoleum Trophy winners at the International Show last year; 19 Yearling Ewes, bred to a ram bred by Jukes, and imported this year by Oak Park Stock Farm Bradford, Ont., and 46 ewe and Ram Lambs, sired by "The Dream," which are cooled from tip of nose to heels and carry beautiful dense fleeces and pink skins. There are no culls in this bunch. This flock has never suffered defeat in the show-ring. Commissions executed. Trains on the Wabash and Grand Trunk Railroads both east and west will be met.

**W. S. CARPENTER, SIMCOE, ONTARIO**

**Farnham Farm Oxford Downs**

We are now offering a number of select yearling rams and ram lambs, sired by imported ram, for flock headers; also yearling ewes and ewe lambs. Price reasonable.

**Henry Arkell & Son, Arkell, Ontario.**  
Arkell, C. P. R.; Guelph, G. T. R.

**Sheep Breeders' Associations.**

American Shropshire Registry Association, largest live-stock organization in the world  
G. Howard Davidson, Pres., Millbrook, N. Y.  
Address correspondence to **MORTIMER LEVY BRING, Secretary, Lafayette, Indiana.**

**SHROPSHIRE**

Choice breeding ewes for sale at reasonable prices. White Wyandottes at all times.  
**W. D. MONKMAN, BIRDHEAD, ONT.**  
Subscribe for "Farmer's Advocate"

**HAMPSHIRE SHEEP DOWN**

"Reserve" for Champion in the Short-wool Classes, Smithfield, London, 1905, 1906 and 1908.

**SPLendid MUTTON GOOD WOOL GREAT WEIGHT**

This highly valuable English Breed of Sheep is unrivalled in its

**Wonderfully Early Maturity.**

Hardiness of constitution, adapted to all climates whilst in the quality of mutton and large proportion of lean meat it is unsurpassed, and for crossing purposes with any other breed unequalled. Full information of

**JAMES E. RAWLENCE,**  
Secretary Hampshire Down Sheep Breeders' Association.  
Salisbury, England.

**RAW FURS!**

Consignments Solicited. Write for Prices. We are the Best Market in Canada or United States.

**E. T. Carter & Co., 83-85 Front St., E. TORONTO, ONT.**

**Try Dorset Ram on your GRADE FLOCK.**

They produce the very choicest butcher's lamb. I have several on hand at very reasonable prices. For particulars apply to:

**R. H. HARDING, Mapleview Farm, Telephone connection, Thorndale, Ont.**

**Leicesters** A few choice ram lambs and ewes of various ages. Also **DUROC JERSEY SWINE, MAC. CAMPBELL & SONS, Harwich, Ontario.**

**DORSET - HORN SHEEP**

Registered ram lambs and breeding ewes for sale. Most profitable sheep to breed. Write at once to **FURSTER FARM OAKVILLE, ONTARIO**

**LEICESTERS**

For sale, different ages; either sex.  
**JOHN LISHMAN, Hagersville Ont., P. O. & Stn.**

**SHROPSHIRE**

Can sell about 20 Ram Lambs. Mostly by an Imp. Buttar-bred ram.  
**GEO. HINDMARSH, Ailsa Craig, Ont**

**71 Years WITHOUT CHANGE MEANS**

that in 1836 we made an importation of sheep, that Shorthorns followed very soon, that we have been importing and breeding them ever since, and that this year I have made an importation of **Shorthorns, Shropshires, Clydesdales and Welsh Ponies** as good as could be bought. They, with high-class home-bred ones, are for sale, write me. **ROBERT MILLER, STOUFFVILLE, ONTARIO.**

**Shropshires and Cotswolds**

I am now offering 35 shearing rams and 50 shearing ewes, also an extra good lot of ram and ewe lambs from imported Minton ewes and Buttar ram.

**JOHN MILLER, Brougham P.O. Claremont Stn., C.P.R.**

**SPRINGBANK OXFORDS.**

**SPECIAL OFFERING:**  
20 ram lambs; 3 shearing rams by an Imp. Hobbs Royal Winner.  
The above are choice, and will be sold worth the money.  
**WM. BARNET, Fergus, G.T.R. & C.P.R. Living Springs P.O.**

**Southdowns**

FOR SALE: 2 imported prizewinning rams, and 60 home-bred and imported ewes. **COLLIES.**—Puppies by champion sire, and out of prizewinning dam.

**Robt. McEwen, Byron, Ont.**

**FAIRVIEW SHROPSHIRE.**—Now offering: Ewes bred to our champion rams at St. Louis World's Fair and the International. Also a limited number of ewe lambs, sired by above and other choice rams. Show shearings in prospect among ewe lambs **J. & D. J. CAMPBELL, FAIRVIEW FARM, WOODVILLE, ONT.**

**When Writing Advertisers Please Mention this Paper.**

# More Terrible Than War!

More terrible than war, famine or pestilence is that awful destroyer, that hydra-headed monster, Consumption, that annually sweeps away more of earth's inhabitants than any other single disease known to the human race.

"It is only a cold, a trifling cough," say the careless, as the irritation upon the delicate mucous membrane causes them to huck away with an irritable tickling of the throat. When the irritation settles on the mucous surface of the throat, a cough is the result. To prevent Bronchitis or Consumption of the Lungs, do not neglect a cough however slight as the irritation spreading throughout the delicate lining of the sensitive air passages soon leads to fatal results. If on the first appearance of a cough or cold you would take a few doses of

## Dr. Wood's Norway Pine Syrup

you would save yourself a great deal of unnecessary suffering. Dr. Wood's Norway Pine Syrup contains all the life-giving properties of the pine trees of Norway, and for Asthma, Croup, Whooping Cough and all Throat and Lung affections it is a specific. Be sure when you ask for Dr. Wood's Norway Pine Syrup to get it. Don't be humbugged into taking something else. Price 25 cts.

Miss Lena Johnston, Toledo, Ont., writes: "I have used Dr. Wood's Norway Pine Syrup for throat troubles after taking numerous other remedies, and I must say that nothing can take the place of it. I would not be without a bottle of it in the house."

### LARGE ENGLISH YORKSHIRES

Pigs of the most approved type of both sexes all ages, for sale at all times. We have more imported animals in our herd than all other breeders in Canada combined. We were first prize at the large shows this year than all other breeders combined. We were every first but one and all silver medals and Bacon prizes at Toronto and London, and at St. Louis we furnished all the first-prize hogs in the breeding classes except two; also supplied both champion and grand champions. Prices reasonable.

D. O. FLATT & SON, Millgrove, Ont.

### PINE GROVE BERKSHIRES!

Bred on aristocratic lines and from high-class show stuff, sired by the Toronto winner, Willow Lodge Leader. For sale are young animals of both sexes—4 and 6 months of age; of choice bacon type and showing form. W. W. BROWN, RIDGE, Ashgrove P. O., Milton Sta.

### MAPLE GROVE YORKSHIRES

Never looked better than they do at present. We have the breeding, the size and the quality. Our type is the show-ring type, and we are very careful in mating sows and boars. Pigs of all ages for sale. Pairs not akin. Prices very reasonable.

H. S. McDIARMID, Fingal P. O., Sheddin Stn.

**EAST BAY HERD**—Large English Yorkshire and Berkshire Swine, Shorthorn Cattle, Barred Rock Poultry.—To make room I will sell suckers of choice breeding and quality at \$5 each—registered. Also sows to sows bred and ready to breed, and boars fit for service. Prizewinners, the get of prizewinners and capable of producing prizewinners. Shorthorn cows of good quality; also two choice calves. Everything as represented. Write, call or phone **IRAL HOWLETT, Keldon P. O., Shelburne Sta., C. P. R.**

**NEWCASTLE TAMWORTHS.** Oldest established herd in Canada. For sale: 12 young sows sired by Colwell's Choice and Newcastle Warrior, both Toronto champions, and bred to Imp. Cholderton Golden Secret, also younger ones, both sexes, by him, and out of dams by above. Chas. sires. Several boars fit for service. Will sell right for quick sales for service. **A. A. COLWILL, NEWCASTLE, ONT.**

When Writing Advertisers Please Mention this Paper

Wednesday, December 11th, at 1.30 p. m. Aberdeen-Angus Breeders' Society of Canada, Commercial Hotel, Guelph, on Wednesday, December 11th, at 1.30 p. m. Canadian Leghorn Club, Wednesday, December 11th, at 3.30 p. m. Canadian White Wyandotte Club, Thursday, December 12th, at 10 a. m. Turkey and Water-fowl Club, City Hall (main hall), Guelph, on Thursday, December 12th, at 10 a. m.

#### QUESTIONS AND ANSWERS. Miscellaneous.

**CONCURRENT TERMS.**  
If a man is sentenced to seven years in penitentiary for bigamy and three for theft, and the sentences to run concurrently, how many years will he have to serve?  
Ontario.  
Ans.—Seven.

**SELLER AND BUYER.**  
1. If I sold a stack of hay, and the buyer paid me \$10 down, and I was to board the hands, and draw it to the station, and help to press it, and it got burnt before it was pressed, who would lose it?  
2. If I sold a horse for \$150, and I was to keep the horse for a month, and the horse died before I delivered him, the buyer having given me \$15 down on him, who would be the loser?  
Ans.—1 and 2. In each case, the buyer.

**RINGWORM.**  
I have some steers that have white scabby patches around their eyes and ears, and on several other parts of body. The tops of same are, at first, powdery. I used sheep dip, then they turned into dry and cracked hard crusts. Now a bull calf, one month old, has it. It usually appears first around eyes and ears, and about the size of a pea. Can you tell me what it is, cause of same, treatment, and whether infectious?  
OLD SUBSCRIBER.

Ans.—We should judge it is ringworm, which is infectious, but not dangerous. Ringworm can usually be cured by the application of a mixture of lard and sulphur. A little coal oil in the mixture makes it even more effective. It is well to first wash the affected parts with warm soapsuds to soften the scale, and if the scale is scraped off with the nails or a corn brush, the ointment will do its work more quickly; but, generally, if treated two or three times with the ointment alone, a cure is certain. It is good practice to wash the walls and stalls of the stable with lime whitewash, with carbolic acid added, as ringworm is a parasitic disorder, and spreads by contact.

**RECOVERING COSTS.**  
About a year ago I was duped into one of those "Get rich quick" schemes, giving my order for goods, but, finding the goods to be worthless, refused to pay. Plaintiff threatened to sue in his own Division Court. One clause in order was to the effect that I waived my right to such, which is illegal. Defendant, under legal advice, had his lawyer make application to have a transfer to his Division Court. Judge in plaintiff's Division Court reserved judgment, afterwards deciding in plaintiff's favor. Following the same legal advice, defendant put in a motion for prohibition in High Court, in Toronto, Chief Justice—deciding in his favor. Plaintiff put in an appeal, which was then dismissed with costs. It now transpires that, upon search being made, plaintiff is worth nothing, he having assigned everything over to his wife. Defendant, on the other hand, although he has shaped himself the same, is anxious to have the thing settled.

1. Can defendant's lawyer in this case collect his costs from him, if he is worth it?  
2. Can he not garnish plaintiff?  
3. What is the next best procedure to follow?  
DEFENDANT.  
Ontario.  
Ans.—1. Yes.  
2 and 3. We do not see that garnishing proceedings are in order, but would suggest that you consult your lawyer regarding same and generally as to how you may realize upon your judgment against plaintiff for costs.

## YORKSHIRES of Choicest Type and Breeding.



I have on hand 75 brood sows of Princess Fame, Cinderella, Clara, Minnie, Lady Frost and Queen Bess strains. My stock boars are true to type and richest breeding. For sale are a large number of sows bred and ready to breed, boars fit for service, and younger ones of both sexes. Pairs and trios not akin. **J. W. BOYLE, P. O. Box 563, Woodstock, Ont.**



**Large White Yorkshires!**  
An offering at the present time a choice lot of boars ready for service, from imported stock also young pigs of both sexes, not akin. Prices right, and quality of breeding unexcelled. Write or call on **H. J. DAVIS, WOODSTOCK, ONT.**

**MONKLAND Yorkshires**  
Imported & Canadian-bred  
We keep 35 brood sows, and have constantly on hand between 100 and 200 to choose from. Can supply pairs and trios not akin. Quality and type unsurpassed. Prices right.  
**JAS. WILSON & SONS, FERGUS, ONT.**  
G. T. R. and C. P. R. Long-distance Phone



**Maple Leaf Berkshires.**—Large English breed. Now offering Doctor sows bred to British Duke (Imp.). Also young boars and sows for sale, 10 and 12 weeks old.  
**JOSHUA LAWRENCE, OXFORD CENTRE P. O., WOODSTOCK STATION.**



**FAIRVIEW BERKSHIRES**  
are second to none. Have now for sale some sows bred, and boars fit for service, a so younger ones from two to four months old, bred from show stock. Also Leicester shearling rams, ram and ewe lambs of finest type.  
**John S. C. wan, Donegal P. O., Atwood and Milverton stations.**

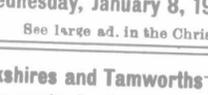
**Glenburn Herd of Yorkshires.**  
Winner of gold medal three years in succession. 6 young boars from 6 to 9 months; also 75 young sows, from 6 to 12 weeks old.  
**David Barr, Jr., Box 3, Renfrew, Ont.**



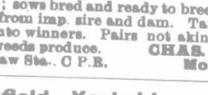
**100 BERKSHIRES 100** Catalogues Ready Dec. 1st.  
Dispersion Sale of the Elmhurst Herd on Wednesday, January 8, 1908, at 12 o'clock.  
See large ad. in the Christmas number.  
**H. M. VANDERLIP, Importer and Breeder, Gainsville, Brant Co., Ont., Can.**



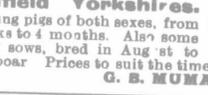
**Yorkshires and Tamworths**—Either breed any age, both sexes; sows bred and ready to breed. Yorkshires bred from Imp. sire and dam. Tamworths from Toronto winners. Pairs not akin. As good as the breeds produce. **CHAS. CURRIE, Sehaw Sta., C. P. R., Morriston P. O.**



**Elmfield Yorkshires.**  
50 young pigs of both sexes, from 4 weeks to 4 months. Also some young sows, bred in August to Imp. boar. Prices to suit the times.  
**G. B. MUMA, Ayr, Ont.**



**Meadowbrook Yorkshires.**  
Young stock of both sexes. A number of sows old enough to breed, all sired by Imp. Daimeny Topman. Everything guaranteed as represented.  
**J. H. SNELL, Hagersville P. O. & Station.**



**For Sale**—Ohio Improved Chester Whites, the largest strain, oldest established registered herd in Canada; young sows in farrow; choice young pigs, six weeks to six months old; pairs not akin; express charges prepaid; post notes and safe delivery guaranteed. Address **E. D. GEORGE, Putnam, Ont.**



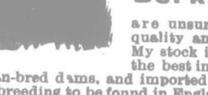
**DUNROBIN S OCK FARM** Clydeedale, YORKSHIRES, Shorthorns. We are booking orders for breeding stock from our grandly-bred Yorkshire sows. Twenty five sows to farrow in the next few weeks. Unrelated pairs a specialty. Write for prices and particulars. **DONALD GUNN & SON, Beaverton, Ontario.** Inspection invited. G. T. R., C. N. O. R. stations 1 1/2 miles from farm. Customers met on notification.



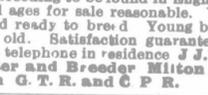
**FAIRVIEW BERKSHIRES**  
Bred from imported and Canadian bred sires and dams, and bred on prize-winning lines. My brood sows are large, choice animals. Young stock of both sexes. Some sows bred to Imp. boars. **HENRY MASON, SCARBORO P. O., Street cars pass the door.**



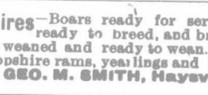
**Willowdale Berkshires**  
are unsurpassed for quality and breeding. My stock is bred from the best imported and Canadian-bred dams, and imported sires of the richest breeding to be found in England. Young stock all ages for sale reasonable. Young sows bred and ready to breed. Young boars 3 and 4 months old. Satisfaction guaranteed. Long distance telephone in residence **J. J. WILSON, Importer and Breeder, Milton P. O. and Station G. T. R. and C. P. R.**



**MAPLE GROVE YORKSHIRES**  
Imported and Canadian bred boars and sows of the best possible breeding, with lots of size and quality. We are winning at the leading Canadian shows. A fine lot of both sexes and all ages. Everything guaranteed as represented. Prices reasonable. **H. S. McDIARMID, Fingal P. O., Sheddin Sta.**



**SUNNYMOUNT BERKSHIRES!**  
Boars fit for service. Sows bred and safely in pig. Sows fit to be bred. Young pigs just weaned.  
**JOHN McFOD, Milton P. O. and Sta., C. P. R. & G. T. R.**



**OAKDALE BERKSHIRES** Largest Berkshire herd in Ontario. Stock boars and several brood sows imported. For sale: Sows bred and ready to breed, boars ready for service, and younger ones, all ages, richly bred on prize-winning lines and true to type. Everything guaranteed as represented. Long distance phone. **L. E. MORGAN, Miliken P. O., Co. of York.**



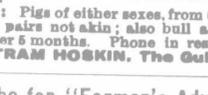
**LARGE ENGLISH YORKSHIRES.**—We have a limited number of choice young pigs for sale, bred from our choicest sows and got by the imported boars, Daimeny Joe 1877 and Broomhouse Beau 14514. Pigs from the latter won all the first prizes at the Ottawa Fat Stock Show last March for the best dressed carcasses, and sweptstakes over all breeds or grades. We guarantee satisfaction in all mail orders. **JOSEPH FEATHERSTON & SON, STREETSVILLE, ONT.**



**Mount Pleasant Tamworths and Holsteins.**  
For Sale: Pigs of either sexes, from 6 weeks to 1 month; pairs not akin; also bull and heifer calves under 5 months. Phone in residence **BERTRAM HOSKIN, The Gully P. O.**



**ENGLISH BERKSHIRES**  
Boars ready for use. Sows bred to farrow in March. Shorthorn bull. Barred Rock cockerels.  
**JOHN RACEY, Lennoxville, Que.**



Subscribe for "Farmer's Advocate"

# STRENGTH AND HAPPINESS FOR WEAK MEN



If you are losing the strength of youth and can see evidence, from day to day, that your physical system is going to decay, you should, in common justice to your future happiness, take steps to check this.

Don't make the mistake of thinking that this can't be done; it can and has been done in thousands of cases.

Don't deceive yourself into believing that it is natural for any person to thus exhaust his power.

Nature is appealing to you every moment to save yourself. The slight pains that you feel; the momentary spells of weakness; the periodical loss of memory, dullness of brain, drowsiness—all point to the necessity of curing yourself now. I have a positive cure for you in my

## Dr. McLaughlin's Electric Belt

It will make you strong. It will send the life blood dancing through your veins, you will feel the exhilarating spark warm your frame, the bright flash will come to your eye, and a firm grip to your hand, and you will be able to grasp your fellow man and feel that what others are capable of doing is not impossible to you. This grand appliance has brought strength, ambition and happiness to thousands of men in the past year.

It is a quick and lasting cure for all Nervous Debility, Weakness, Rheumatism, Pains in the Back and Hips (Sciatica), Lumbago, Constipation, Indigestion, Weak Kidneys, Failing of Memory, and all evidences of breaking-down. It cures when all else has failed.

My arguments are good, my system is good, but I know you haven't time to study these. You want proof, and I give you that and lots of it. When your own neighbors tell you I cured them you will know I did it.

Here are a few of the many cures I am making daily. Why not be on the list of strong men?

**MR. JAMES JOHNSTON, J.P., Ottawa, Ont.**, writes as follows: The Belt I purchased from you in August, 1903, cured me of heart disease, and I am able to work and attend to my business as well as ever, and my pulse is quite normal. I highly recommend your Belt for indigestion and all stomach troubles, from which I also suffered greatly. If your patients would pay attention to the advice you give them, they would not be long ailing.

**F. W. NEWCOMBE, Box 366, Montreal, Que.**, says: I purchased a Belt from you last year, and am pleased to say it did all that was required, getting all right, and I am feeling much better every way.

**MR. G. W. PRICE, Madoc, Ont.**, has this to say: As regards my health, I am improving every day, and I am not sorry I invested. My nerves are ache any more, and have developed a lot of muscle and strength. Thanks for your help.

**JEROME SCANLON, Ancaster, Ont.**, writes: In one month's use of your Belt I have gained seven pounds. No bladder trouble, constipation or headache any more, and have developed a lot of muscle and strength. Thanks for your help.

**T. J. SWEENEY, Care of Seaman's Institute, St. John, N.B.**, cured of weak back, varicocele and vital weakness.

**ALEX. COULTER, Sault Ste. Marie, cured of stomach trouble.**

**N. C. RUSHOE, Loch Manor, Man., cured of weak back, kidney and stomach trouble.**

**JAMES BROWN, Hallville, Ont.**, cured of losses and stomach trouble, and finds life a pleasure.

**J. D. RAESBACK, Vankleek Hill, Ont.**, cured of sciatic rheumatism.

## NO CURE, NO PAY

is the offer I am making to any man who wishes to regain his strength and vitality. All I ask is security for the Belt while you wear it. Men, arouse yourselves, break the chain that is to ever hold you bound to an existence of misery. If you are sceptical I can send you evidence that will convince you beyond a doubt that there is a complete cure for you in my Belt. One of my patients writes that my Belt is the production of a man who is a friend to suffering humanity in a true way. I have hundreds of just such expressions of gratitude from patients all over the country. Let me know where you are and I will give you their names, that they may tell you their experience.

WRITE TO-DAY FOR MY FREE ILLUSTRATED BOOK AND FULL INFORMATION

**Call To-Day**

If You Can't Call  
Send Coupon for  
Free Book.

**DR. M. S. McLAUGHLIN, 112 Yonge St., Toronto, Canada.**

Dear Sir,—Please forward me one of your Books as advertised.

Name.....

Address.....

Office Hours—9 a.m. to 6 p.m.; Wednesday and Saturday till 9 p.m.  
Sunday, 10 a.m. to 1 p.m.

Write Plain.

### GOSSIP.

We call attention to Mr. M. H. O'Neill's special advertisement in this issue, in which he names prices on choice Herefords.

Mr. Andrew Stewart, of Robb, Ont., has recently purchased, from D. C. Flatt & Son, of Millgrove, Ont., a pair of Yorkshires (boar and sow), which promise to be something out of the ordinary. The boar is by Champion 20102, the silver-medal and champion boar at Toronto, 1907, and from an imported sow we prize very highly as a producer of show stock. The sow is also out of an imported sow, and by Summer Hill Chester, and he is by the great Park Royal 7505, champion boar of England and Scotland in 1901, and out of the silver-medal sow at Toronto, 1905. Mr. Stewart is to be congratulated upon securing this pair.

Mr. T. J. Berry, of Hensall, Ont., has recently sold to Mr. James Campbell, of Cargill, Bruce County, the three-year-old imported Clydesdale stallion, Lord Armstrong (13594), by Baron's Fashion (10973), by the great sire of champions, Baron's Pride. Lord Armstrong is a bay three-year-old, with three white feet and stripe on face, is of smooth type, with a grand quality of bone and feet, and will weigh close to 1,900 lbs. now. The price paid was \$2,000. Mr. Berry has also sold to Messrs. Kay & Ratchiffe, near Exeter, the stallion colt, Thomas Carlyle, by King Thomas (imp.) (12625), by the great Prince Thomas (10262). This colt, a dark bay, with stripe on face, and one white hind foot, is an extra thick, soggy-built yearling, with the best of quality in feet, legs and body, and will make a great horse when matured. Mr. Berry, who has imported many

grand horses, has now in his stables the great brown seven-year-old, Lord Lowther (12650), a full brother to the premium stallions, Lothian Again and Lord Lonsdale, being by Lord Lothian (5998), by Top Gallant, by Darnley (222), and the dam of Lord Lowther, Kate Darnley, was by Darnley Again (9182), granddam by Macgregor, breeding second to none. Mr. Berry purchased these fine horses from Mr. John Kerr, of Red Hall, Wigton, Cumberland, who ranks among the best breeders of Clydesdales in Scotland.

### IMPORTANT SHROPSHIRE SHEEP SALE.

On December 20th, as advertised in this paper, Mr. W. S. Carpenter, of Simcoe, Norfolk County, Ont., will hold a dispersion sale of his noted Model Farm flock of Shropshire sheep, comprising 70

breeding ewes, bred to imported prize-winning rams, also 46 ewe and ram lambs, typical of the best of the breed, and sired by imported rams. This flock has made a fine reputation in the showing, and is up-to-date in type and character, and the sale affords a rare opportunity to secure choice breeding stock for founding or strengthening a flock. See the advertisement.

Israel Groff, Elmira, Ont., makes a change in his advertisement of Short-horns, in which he offers for sale four young bulls ready for service, also a number of young things, by Chancellor's Model, and from cows of favorite families. Look up the advertisement, and write or call on him. His stock will meet the views of the most exacting.