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THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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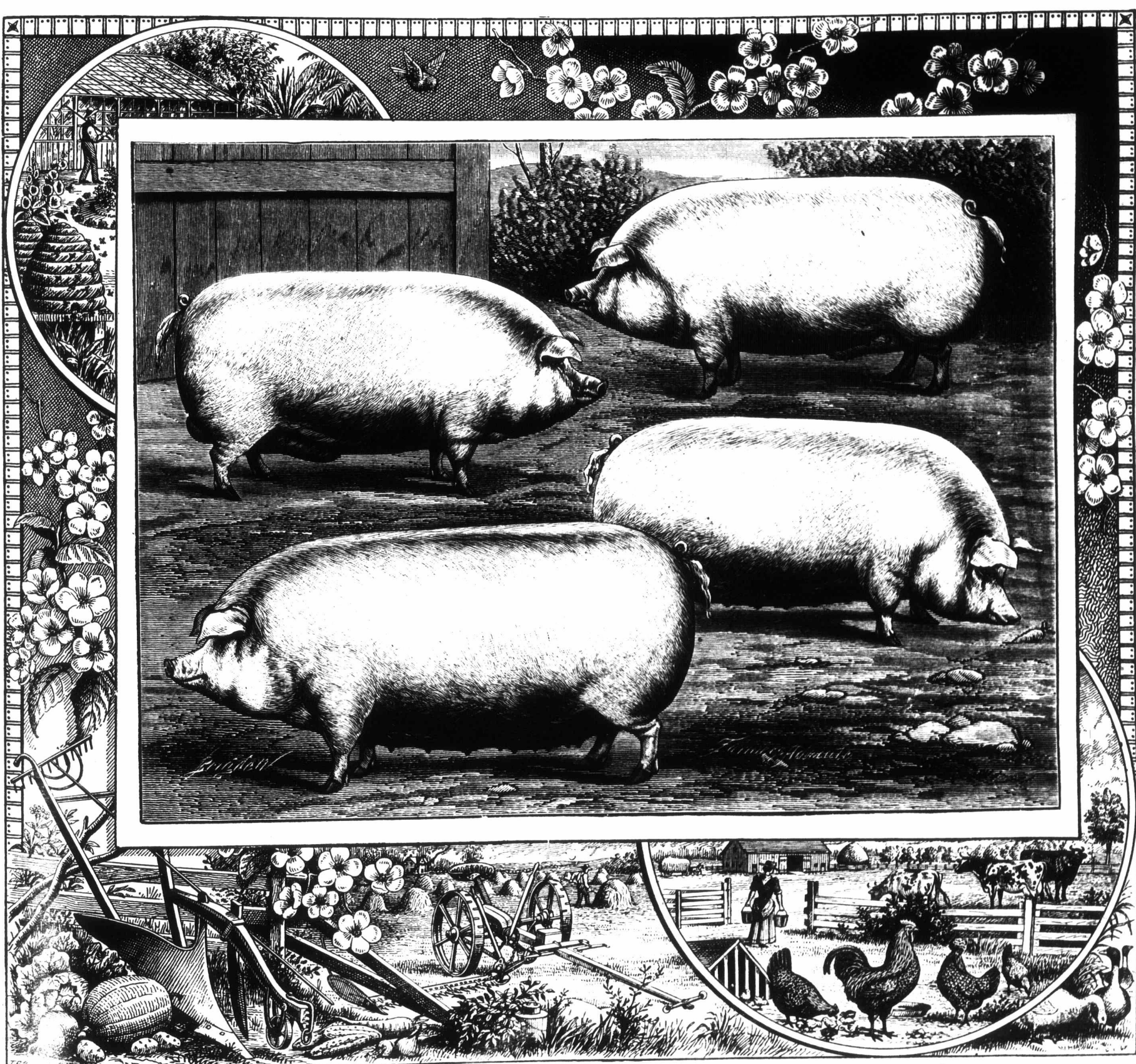
* AGRICULTURE, STOCK, DAIRY, POULTRY, HORTICULTURE, VETERINARY, HOME CIRCLE. *

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VOL. XXX.

LONDON, ONT., AND WINNIPEG, MAN., APRIL 1, 1895.

No. 379.



A GROUP OF TYPICAL CHESTER WHITE SWINE.
THE PROPERTY OF WM. BUTLER & SON, DEREHAM CENTRE, ONT.

EDITORIAL.

The appropriation for agriculture by the Ontario Legislature this year amounts to \$183,486, a slight increase over last year.

The success attending the Ballantyne Shorthorn sale would indicate that the long expected "up turn" in the cattle business had set in.

In consideration of the excellent work carried on by the Ontario Agricultural and Experimental Union, the Government grant, as per the estimates, is increased from \$700 to \$950.

In 1894 four experimental fruit stations were established in Ontario, under direction of the Fruit Growers' Association, in conjunction with the Ontario Agricultural College. This year the number is to be increased, the appropriation being raised from \$1,000 to \$2,000.

In the fruit-growing districts of Canada spraying will be more extensively practiced this season than ever before. In the Province of Ontario the "travelling dairy" idea is to be applied in this direction, the estimates containing an appropriation of \$1,800 for practical instruction in fruit spraying, three well-equipped travelling outfits to be sent on the road.

During these times, of what is termed "agricultural depression," farmers are learning to economize in ways not thought of a few years ago. We find many who always kept their farm teams shod the year round now allowing them to go bare-footed, except one team, which is used to do the road teaming, which do very well with only front shoes. We would say commence every colt without shoes, and in many cases the necessity of shoeing will never show itself.

"Sacaline" is the name of a new and greatly boomed forage plant, said to have been brought to the United States from Russia. Some of the claims made for it are simply marvelous, and for summer soiling it would leave nothing to be desired if all these claims were verified; but we notice that they are disputed by several authorities. We have arranged for some seed and plants, to make a trial of it, and will report results for the benefit of our readers in due course. Mr. Bedford, Supt. of the Manitoba Experimental Farm, is testing it thoroughly.

At the beginning of the year the Australasian's correspondent, Thistledown, completed a tour of inspection of the Australian wheat fields, which were in progress of harvesting at that time. As near as could be estimated, the average yield per acre is not more than 9½ bushels. Compared with last year, there is an increase of area under crop of 62,000 acres, while the average yield per acre is half a bushel less than last season. The aggregate yield is put at 13,766,500 bushels.

There are a few teamsters who can keep their horses from losing flesh during the rush of seeding, but many more who are anxious to make the most of every fine day, cannot, or do not, prevent their teams from losing from 50 to 100 pounds each. Now that wheat is so cheap, and also so nourishing, a quart at a feed, fed crushed along with oats, will have a remarkable effect in keeping the horses up. A feed of well-boiled wheat at 8 p. m. is also nourishing and strengthening. As we have said before, wheat should be fed sparingly at first, in order that the animals may become accustomed to it, as there is danger of colic if fed at all liberally at first.

Our wide-awake contemporary, the Scottish Farmer, states that the outlook for the British dairy farmer is not promising, the fact being noted that creameries only give 4d., or at most, 4½d., per gallon for March milk, a low figure, even at the flush of grass, and, if we understand the Farmer aright, this is for the whole milk out-and-out. The increasing volume of imported butter and cheese is viewed with alarm. For example, in January last 50,000 cwt. more butter were imported than in January, 1894. Australian competition is most to be dreaded, the quantity from there having doubled in the past two years. [There is something in that for Canadians to think about, also.] The suggestion is thrown out that the Old Country dairymen should retain and utilize at home the skim-milk in calf and pig feeding, and that they should use in a portion of their herds Polled or other beef-bred sires, for the production of good store cattle. The Farmer warns its readers not to let the ship drift till she strikes the rocks.

About now a great many farmers are wondering what crops to plant or sow on certain fields; how many acres of this, and how many of the other crop had better be put in. There is certainly very little risk in growing a good-sized patch of potatoes, because, if the ground is well manured, and liberal cultivation given, a fairly good crop can be secured. If the price of potatoes happens to be low, the crop can be put to good use in the stable in feeding hogs, cows, and even horses.

The energetic Provincial Board of Horticulture in British Columbia, of which Mr. J. R. Anderson is Secretary, is fortified with a strong Act, carrying heavy penalties, in accordance with which stringent regulations are enacted for the inspection and disinfection of all nursery stock, trees, and plants infested with insect pests or fungous diseases, and for the inspection of imported or home-grown fruit. Standard insecticides and fungicides are also prescribed for use in orchards, etc. The Province is divided into horticultural inspection districts, and every possible effort will be put forth to prevent the entrance of the terrible enemies of the fruit grower. It is felt that prevention will be cheaper than cure, and B. C. bids fair to become a great horticultural Province.

"Raising New Breeds of Cereals."

Year after year brings to us the advent of new grains. How these are brought about is indeed interesting to us, and, we trust, to many of our readers. To make the most of one's opportunities, it is necessary to be able to manipulate the business in hand so as to continually improve and increase the results of labor. This subject is one of special interest at this season of the year, and more particularly is interest awakened by the seed grain reports published in a recent ADVOCATE. The above topic has been exhaustively investigated by A. N. McAlpine, Botanist of the Highland and Agricultural Society, from whose treatise we compile the following, eliminating, as far as possible, unnecessary technicalities:—

A seed of grain has the property of transmitting to its offspring certain peculiarities derived from its parents, or in other words, seed is prepotent. The business of a "breeder" is to produce a strain of seed possessing the most desirable qualities, so thoroughly fixed that they are transmitted without change to the offspring. Unless this fixity of character has been secured, the seed is worthless for crop production by the farmer.

There are four methods used in practice to improve cereals: (1) cultivation in suitable soil and climate; (2) selection; (3) spontaneous variation; (4) crossing of varieties.

Cultivation.—Cultivation has for its main object perfect nutrition of the breed, to secure which special attention must be paid to tillage, sowing, and manuring, for on these three factors depend the water, food and air supply of the plant; defect in any of these respects entails diminished quality and defective breed. The soil should be free from weeds, and as deep as possible; cleanness allows the plant to become luxuriant and fertile, while depth of soil regulates water and air supply. The seed should be sown in rows, but not so thin as to produce giant ears, out of all proportion to the rest of the plant; sowing in rows or drills secures sufficiency of light, and nutrition, so far as carbon assimilation is concerned, is at its best. The manure should be of such a nature and so proportioned that the vegetative parts of the plants are fully developed, yet not excessively favored at expense of the ear and of the seed. As a manure to use in fixing new breeds of grain, dung and lime, at the rate of 20 to 25 tons per acre on a gravelly soil, has given excellent results on one of Scotland's most noted cereal-breeding farms. The rotation used was potatoes followed by four different cereal crops in succession, thus affording appropriate cultivation for cereal improvement.

Selection, as applied to cross-breeds.—The method of selection has full scope only where cross-breeds are being dealt with, as these are especially "sportive" (that is, assuming new and different characteristics from the rest of the plant itself) until their characteristics have become firmly established. By this sportive feature they are recognized as truly crossed. Breeds of cereals in ordinary cultivation are of necessity fixed; here sportive variations are the rare exception, not the rule. Varieties of a new cross may exhibit improvement or deterioration. The skill of the cross-breeder is accordingly exercised in distinguishing improved and suitable from worthless or, at least, less valuable varieties. One variety has to be kept, another cast aside; this is selection—a process of weeding out. Seed produced by the selected plant is sown, and weeding out repeated for a series of years, till the reaction set agoing by the introduction of new pollen has completed itself, till disturbance has subsided, till tendency to reversion has become almost completely annulled, till fixity has been attained—that is to say, till the desired characters have been thoroughly incorporated in the very embryo of the seed.

A series of years must accordingly elapse before an improved breed can be put upon the market, and further selection must still be made before the cross can be utilized by the farmer, since he can only afford to sow seed for crop production, when assured beforehand of the nature of the resultant produce. The golden rule regarding "change of seed" is this: do not change because some one else does, neither because you are advised to do so, but because you know from actual trial that the change will yield a more profitable crop. It is incumbent, therefore, upon our experiment institutions to finish and crown the work of the cross-breeder by testing the value of the fixed cross-breeds, their advantages and disadvantages when grown in the different districts, in various soils and climates.

Selection, when its advantages are fully realized, has thus two phases: (1) selection by the breeder; (2) selection by experimental institutions and by agriculturists.

Selection, as applied to old breeds.—All the cereal breeds in ordinary cultivation at the present time are old and fixed, and not sportive and variable. Selection of the best from these has proved of considerable value in times past. Some of the greatest cereal improvers by this method have, by selecting the best ears from the best fields, increased the yield per ear from 90 to 124 grains. To improve quality, not only are the best heads selected from the field, but the best grains from the head. A certain degree of permanency can thus be given to a selected peculiarity; and a variety already in existence is made to yield its best by skilful selection combined with suitable cultivation.

Spontaneous variation.—This method takes advantage of the fact that cereals in cultivation occasionally yield a few plants with special peculiarities. "Spontaneous variations," always rare, are most in evidence when different breeds of cereals are grown side by side on the same experimental field; under such circumstance, the "spontaneous variations" turn out, as a rule, to be the result of that rare event (though many entertain a different notion) in cereal life—*natural crossing*—and the parentage on the male and female side can actually be traced. "Spontaneous variation" is thus a haphazard method of raising new breeds; improvement obtained by accidents must fall far short of what can be accomplished by the art of the skilful cross-breeder.

Artificial crossing.—As yet, the method of cereal crossing is in its infancy, and has played little or no part in practical agriculture. Cultivation and selection by hand-picking and by the sieve have been the methods relied upon for improvement. Nevertheless, crossing is the most potent improver of all; it not only improves but provides new breeds and new material for improvement; it takes advantage of the sexual character of plants, and combines a portion of one variety with a portion of another. This delicate mechanical operation consists in first removing the unopened anthers, to prevent self-fertilization, and then applying the pollen of the other variety to the stigma of the former. The resultant blend of the two or more selected varieties is the *cross*. Cultivation and selection, however carried out, cannot blend the desirable peculiarities of two or more varieties into one, but crossing can, and therein lies its power, therein its greatness; thereby it is distinguished from all other methods of improvement. Cross-bred cereals may show deterioration side by side with improvement; accordingly, selection by the breeder and by the agriculturist must always be handmaidens of cross-breeds, if their full value in practical agriculture is to be realized.

The Advocate Leads.

Mr. W. J. Haycraft, in a business letter to this office, congratulates us on publishing "the ideal Agricultural paper of the Dominion."

"I think it is the farmer's loss not to take the best Agricultural paper in America, and keep abreast with the times."—[W. C. Huff.]

"Times are hard," writes Mr. J. B. Snyder, Waterloo, Ont., "but still we cannot afford to do without a first-class farm paper such as the FARMER'S ADVOCATE is."

Battery Point, P. Q., January 24, 1895.—"I was much pleased to receive the premium, 'Canada's Columbian Victors,' for which accept grateful thanks. They are truly great beauties, showing what good breeding and care can do."—[A. A. Busteed.]

JAS. DORRANCE, Huron County, February 22.—"I have been a reader of your valuable paper for sixteen or seventeen years, and would not do without it for any money."

J. W. HARTMAN, Grey Co.—"I am much pleased that the ADVOCATE is still keeping up its high standard as an Agricultural paper."

WM. MELROSE.—"I am more than delighted with your new departure; the ADVOCATE fairly teems with good things for farmers."

A Huron County reader writes:—"Allow me to congratulate you on the steady improvement of the FARMER'S ADVOCATE, which I have taken for about twenty years. The Chatty Stock Letter from Chicago is worth the subscription price to any stock farmer."

It is page a the "O White Messrs. Ont. O like way nor has in exhib taken. name(O and Tils the lea village, good la dairying closely A large new add is 128x42 accom room for clover es clover so to stable bad. T chinery-mill, cor and for young A being th being en 50x20 fe producti use was which r butter-w diately 1 the pig upper st side of l it ver supplied heating ings by Messr proved O importing selecting standard During ing the D the latte and bein ties, rapi bred the selection herd. A prize-win selection present t condition Toronto second on first for a Referr Beauty (sire and man—be the left l size (weig fall)—str back; d shoulder, making show ring judge at the best Not only having f and raisi feet as th her winn trial:—F sow and class for at Londo diploma cessfully blue one. them, an full sista sweepsta won first sow of ex is not qu class and Rustler of our il Willis W old when won first don, and beating year. H sire, and in dema of Onta 1891, she first at by an in

Our Frontispiece.

It is with pleasure that we present on our first page a portrait of a group of prize-winners from the "Ontario Central Herd" of Imported Chester White and Duroc-Jersey swine, owned and bred by Messrs. Wm. Butler & Son, of Dereham Centre, Ont. Our artist deserves great credit for the life-like way in which he has portrayed these animals; nor has he flattered them in the least. They were in exhibition condition when the photographs were taken. Dereham Centre, in the township of that name (Oxford Co.), lies between the towns of Ingersoll and Tilsonburg, thereby giving good connection with the leading railways. Their farm, adjoining the village, comprises over two hundred acres of extra good land. The whole section is well adapted for dairying, which is extensively carried on, and closely associated with dairying is swine breeding. A large dairy barn, in the form of a T, with "the new addition," which is in progress of construction, is 126x42 and 150x40, with underground stables to accommodate seventy-five head of cattle, besides room for horses and calves. Mr. Butler advocates clover ensilage, and has several acres of Lucerne clover sown for that purpose, also for soiling, so as to stable the cows in hot, dry weather, when flies are bad. The buildings are well equipped with machinery—a good engine, running plate and roller mill, corn-sheller, threshing machine, cutting-boxes, and for other work. The writer also saw some nice young Ayrshire and Guernsey cattle, the latter being the favorites, owing to Messrs. Butler & Son being engaged in butter dairying. Their creamery, 50x20 feet, contains everything necessary for the production of a first-class article. The machinery in use was a 6-horse power boiler, 4-horse power engine, which runs the De Laval separator, churn, and butter-worker. The skim milk is carried immediately from the creamery through iron pipes to the pig pens. The pens are 36x40, concrete walls, upper story being for straw and meal. The south side of lower story has double glass windows, making it very comfortable for early litters. Steam is supplied from the large boiler for cooking feed and heating water. Water is supplied to all the buildings by pipes from large windmill tank.

Messrs. Butler have been breeding the Ohio Improved Chester Whites for the past eight years, importing the best to be obtained; also carefully selecting until they have now a large herd of good standard quality.

During the past two years they have also been breeding the Duroc-Jerseys. Before commencing breeding the latter, they bought some grades for fattening, and being impressed with their easy feeding qualities, rapid gaining, and quietness, they decided to breed them as thoroughbreds. They made several selections from Canadian breeders, obtaining a good herd. A pair was purchased from Mr. Bennet's prize-winning stock at Chicago; also several other selections since the exhibition last fall, and at the present time they have a very fine herd, all in good condition, especially the fat pigs. They won at the Toronto Industrial the sweepstakes for best herd; second on boar and sow under six months; second for sow under one year; first for boar under year; first for aged sow.

Referring now to our illustration: Ontario's Beauty (115) was bred by Messrs. Butler & Son, the sire and dam—Prince Alexander 3rd and Lady Tillman—being both imported. She is represented in the left lower corner, and she is a sow of immense size (weight, 720 lbs., when shown as a yearling last fall)—straight, very long, broad, well-rounded back; deep, broad and square hams, smooth shoulder, deep sides, small head, and drooping ears, making up a sow difficult indeed to surpass in the show ring. That famous breeder, Mr. S. H. Todd, judge at the Toronto Industrial, said that she was the best sow he knew of in America of the breed. Not only is she a show sow, but also a breeder, having farrowed two litters of twenty-three pigs, and raising them all. She stood as straight on her feet as the day she was born. The following were her winnings during the past year at Toronto Industrial:—First for sow under two years old; first for sow and four of produce, and first in sweepstake class for best boar and two sows; first in aged class at London; first in aged class at Ottawa, and first for diploma at Ottawa, thus competing six times successfully for red tickets. She has not received a blue one. Dereham Belle, No. (536), was imported by them, and bred by F. A. Branch, Medina, O. She is full sister to the yearling sow which won first and sweepstakes in Chicago; also sired by a boar which won first in Ohio and Illinois State Fairs. She is a sow of extra quality, her only fault being that she is not quite lengthy enough. She won first in the class under one year in Toronto, also sweepstakes. Rustler 115, the large pig in the right background of our illustration, was imported, being bred by Willis Whinney, Winona. He was eleven months old when shown last fall, and weighed 550 lbs. He won first for boar under one year at Toronto, London, and Ottawa; also shown in sweepstake class, beating the aged sweepstake boar of the previous year. He has every indication of making a useful sire, and is the stamp which will produce stock now in demand by pork-packers. The young boar is one of Ontario's Beauty's last litter, farrowed March 7th, 1894, shown in the class under six months, winning first at Toronto, London, and Ottawa. He was sired by an imported boar, bred by S. H. Todd. Luck of

space prevents allusion to other meritorious members of this herd. This herd, as already indicated, was very successful at the shows last fall, and it was their first year out. They competed for ten firsts in Chester White class, winning eight of them. Last fall they disposed of everything they had for sale, and for that reason were compelled to discontinue their advertisement at that time. They sent stock to all parts of the Dominion; also some to the U. S.; and their fall pigs are in extra good condition. They have about one hundred fine spring pigs. The prospects are that this herd will make as good a record the coming season as it did in 1894.

United States Regulations re Importing Stock.

The U. S. Department of Agriculture, under a date of February 7th, issued fresh regulations (which embody several heretofore existing) for the inspection and quarantine of cattle, sheep, and other ruminants, and swine imported into that country. The Atlantic ports named are Boston, New York, and Baltimore, and on the United States-Canadian boundary line the customs ports in the collection districts of Aroostook, Bangor, Me.; Vermont, Vt.; Buffalo Creek, Niagara and Oswegatchie, N. Y.; Detroit and Port Huron, Mich.; Minnesota, Minn.; Puget Sound, Washington, San Diego on the Pacific Coast, and several points on the Mexican border. All cattle, sheep, and other ruminants imported into the United States from any port of the world shall be accompanied by a certificate from the local authority of the district where they have been for the year preceding shipment, stating that no pleuro-pneumonia, foot and mouth disease, or rinder-pest has existed there for the past year, and a similar certificate for swine, regarding foot and mouth disease, like cholera and erysipelas. They also must be accompanied by an affidavit from the seller, stating that they had been in the district for one year prior to the sale, and that none of the diseases named have existed among them, or animals with which they have come in contact, and that no inoculation has been practiced among them for the past two years. Also by an affidavit from the importer, or his agent in charge of the shipment, that they have not passed through infected districts, and that they have been shipped in clean, disinfected cars and vessels. The certificates and affidavits must accompany the animals and be presented to the Customs Collector, and by him given to the Inspector for the Bureau of Animal Industry. Stringent inspection regulations are also continued.

The ninety-day quarantine for cattle from any port of the world, excepting from Mexico, Central and South America, and fifteen days for sheep and swine, except from North, Central and South America, continues. The prospective importer of animals, except North, Central or South America, or all cattle from the Dominion of Canada, is required to get certificates from the United States Secretary of Agriculture—one as to the number, and kind of animal to be shipped, and the port and probable date of shipment, and the other as to the port of landing, etc.

Cattle and sheep from Canada, for export from the United States, may now be entered at the ports of Island Pond and Becher Falls, Vt., in bond from Portland, Me., for export from the latter port only, provided they are accompanied by the health certificate and affidavits referred to above; the railway companies to provide suitable pens at the port of entry for unloading and inspection.

Abolishing the Agriculture and Arts Association.

A bill has been introduced in the Ontario Legislature according to which the Ontario Agriculture and Arts Association and its Council will cease to exist on January 1st next; all its property and effects, real and personal, to become vested in the Crown, for the public uses of the Province. The keeping of registers of pure-bred stock is transferred from this Council of the A. and A. to the various associations, as bodies heretofore engaged in such work conjointly with this Council; but the Lieutenant-Governor-in-Council may from time to time appoint a person, or persons, on behalf of the Department of Agriculture, to assist in such registration; his salary to be payable out of the Government grant for agriculture. The method of keeping the registers, the issuing of the herd and stud books, and the responsibility for the pedigrees will rest with the breeders themselves entirely, as is the case in the United States.

The new act makes the method of organizing all agricultural societies uniform. Following is a list of the organizations to be bodies corporate under it: Ontario Fruit Growers' Association, Entomological Society, Eastern and Western Dairymen's Association, Ontario Creameries Association, Ontario Poultry Association, Eastern Ontario Poultry and Pet Stock Association, Bee-keepers' Association, Agricultural and Experimental Union, Sheep Breeders' Association, and Swine Breeders' Association, the membership of each being not less than fifty, each paying not less than \$1.00 as an annual membership fee.

Hereafter the Minister of Agriculture is to appoint an auditor to audit the accounts of all the associations, to report to the associations, and also to the Minister.

Poultry Associations will not receive a grant if they hold a show two years successively in the same place.

The Dominion Grange.

At the recent annual meeting of the Dominion Grange, held in Toronto, it was decided that no amalgamation with the Patrons could, at present, take place. A Patron delegation was present to convey fraternal greetings to the members of the Grange, and discuss matters of common interest. Master Dawson Kennedy said the Grange owned many halls and considerable property throughout the country, and while its membership is not large, it is increasing. While the Grange puts up no candidates in the political field, its members can be depended upon to support farmers against professional men, and always stand by the Patron candidates.

The Agricultural Committee's report, in referring to the action of the Dominion Government, commended the work which was being done by Prof. Robertson, in placing the product of our creameries on the English market for experiment during two months of this season, in the best condition possible, and under favorable circumstances. The Government was urged to arrange for better transportation service.

The following recommendations were endorsed by the Grange:—That the tariff be reduced to a revenue basis, and that bonusing any industry at the expense of the country be done away with. They disapprove of the subsidizing of a line of steamships to Australia, as the products of that country are very similar to those produced in Canada, and at a much less cost. They consider that the Franchise Act of the Dominion is more cumbersome and expensive than is necessary. The Committee also expressed the belief that a considerable portion of the Provincial grant to the Agriculture and Arts Society and Central Farmers' Institute might be better employed in assisting Local Institutes, and aiding the agricultural interests generally. This, it will be remembered, is the ground the FARMER'S ADVOCATE took in a recent issue.

The officers elected for the coming year were: Worthy Master, Dawson Kennedy, Peterboro, re-elected; Secretary, R. Wilkie, Blenheim, re-elected; Overseer, George E. Fisher, Freeman; Treasurer, P. Hepinstall, Fordwich, re-elected; Lecturer, W. F. W. Fisher, Burlington; Chaplain, J. M. Syne, Dalston; Steward, Samuel Elder, Banda; Assistant Steward, P. McDuffe, Omagh; Gate-keeper, Lyman Henry, Sombra, re-elected; Executive, Henry Glendenning, Manilla; Jabel Robinson, Middlemarch; Auditors, J. Fallis, Newbridge; R. R. Mowbray, Kinsale.

It was decided that the Grange should meet in London next year.

The Great Horse Show.

All the leading horsemen throughout Canada and the United States are now turning their eyes towards the Canadian Horse Show in the new Armories, Toronto, on April 18, 19 and 20, for which all arrangements are well forward. It promises to eclipse anything of an equine or social nature ever attempted in Canada heretofore. A large party is coming over in special cars from New York and other U. S. points. As we stated in last issue, the prize list now amounts to some \$5,000, several important additions having been made lately. Write Mr. Henry Wade, 12 Elm street, Toronto, for any information desired.

The Price of Salt in Car Lots.

In an article on "The Use of Salt," in our last issue, Mr. Coleman (T. T. Coleman estate), Seaford, Ont., was quoted as saying the price per ton, in car-load lots of fifteen tons, F. O. B. cars, at the works was \$5 per ton, whereas \$2.50 was the figure intended.

The appropriation for the services and travelling expenses of lecturers at Farmers' Institutes (including the new Superintendent, Mr. F. W. Hodson, formerly of the FARMER'S ADVOCATE) is placed in the Ontario estimates this year at \$5,000, an increase of \$2,000, further steps being taken to improve the system. There is also an item of \$1,000 for the expenses of Agricultural College professors attending Farmers' Institutes, conventions, etc. We note that the vote of \$800 for the Central Farmers' Institute has been dropped, Hon. Mr. Dryden, the Minister of Agriculture, expressing in the House what has been frequently pointed out in these columns and elsewhere, viz., that its existence and work in the past could not be justified on the grounds of utility.

An Eastern Ontario reader writes us as follows: "Would you please use your influence to get the names taken off the entry tickets at the Toronto Industrial Fair, and let the grain get the prize, and not the man. I was at the Fair last year with grain and did not receive anything; I exhibited at Ottawa against the same grain, and received first, the other second; because it was the grain that was judged at Ottawa, and not the man."

STOCK.

A Day at the Smithfield Cattle Show.

BY A CANADIAN.

Having occasion to visit the Old Country some time ago, my friend and I considered ourselves lucky to find our arrangements would take us to London during the Cattle Show week, so that we might combine business with pleasure.

Out into the cold, grey street, where tradesmen of every description are hurrying around following their morning vocations, and we reckon ourselves in luck at having just missed the proverbial pea-soup fog, as it gave us the opportunity of seeing something on our three-mile drive to the North End, where the Agricultural Hall is situated.

Past Charing Cross we rolled along, or rather squeezed, for the traffic in the congested parts of the city is enormous, and it must strike every thoughtful observer that the circumstances which brought ruin to the demand for a certain class of horse in our own country (namely, electric motor power) will never apparently prove applicable here.

The amount of horseflesh used up in London must be enormous. What strikes the casual observer at first sight is the great percentage of horses over at the knees, to be accounted for by the slippery condition of the asphalt streets during the greater part of the year.

On arriving at the "Angel," one of the few remaining hostleries which mark the zenith of the old coaching days, before the steam whistle was heard, we leave the 'bus, and make a slight detour to have a look at the Metropolitan Meat Market.

This is held in an immense block of buildings, some 650 feet long by 240 feet broad, traversed by numerous avenues, and containing over 200 stalls or shops for dealers in meat—mostly country killed. Here the wholesaler supplies the retailer, for it must be borne in mind the greater part of the retail butchers in London are merely cutters of meat.

Frozen mutton from Australia hung alongside refrigerated beef from America, then a dozen carcasses of prime Scotch, but unless informed to that effect it would be hard for the ordinary individual to detect the latter from American (Liverpool killed). Quotations for the day for the last named ranged from 3s. 2d. (75 cents) to 3s. 6d. (80 cents) per eight pounds by the carcass.

We then resumed our journey to the Hall, and at last find ourselves at our destination. It is needless for me to give a detailed description of the winners and their outstanding merits, as most readers will have seen reports to that effect already, but will give a few general impressions instead.

The Agricultural Hall is an immense covered-in space, with a wide gallery running round the four sides. These galleries are apportioned to and were fully represented by agents of machinery and implements of every kind, also grain and seed exhibits, besides a host of other advertisements pertaining to agriculture too numerous to mention, but well worth a stroll around.

But what commotion is this at the upper end of the building? With the curiosity natural to mankind in such a case, we elbow our way into the crowd to find the champion of the show, Benton Bride (portrayed in the February 1st ADVOCATE), complacently chewing her cud, and not taking the slightest notice of the embarrassing attention and comment showered on her by the crowd. She was

an ideal specimen of a butcher's animal, with flesh as hard and firm to the touch as a piece of gutta-percha, and as my friend put it—"a living monument dedicated to high class feeding": of the Polled-Angus breed, weight 1,850 pounds, age two years eleven months. I hear since that on being slaughtered she dressed over 1,300 pounds, or over 70 per cent. carcass to the live weight.

The Herefords were next in order, and a fine, even lot they were, and as an early maturing breed, can hold their own with any.

Nor were the Galloways and Highlanders without their admirers. What with their shaggy robes (the only remaining substitute for the departed buffalo) and their pecuniary value as beef breeds, I fail to see why they should not become popular on the Western prairies. There is certainly an objection to the Highlander as a shipper, but with a liberal use of the dehorner, that might be obviated.

The cross-bred section was the last to claim our attention, and, as regards general excellence from a butcher's standpoint, I think they were the strongest class all through. Big, sappy, thick-fleshed fellows they were, red roans and blue roans being the predominating color, showing the excellent results from the Shorthorn-Polled-Angus cross.

I have met quite a few who are prejudiced against this cross, but these cross-bred steers were proof enough to convert the most skeptical, the majority of them hailing from the "land o' cakes," particularly Aberdeenshire, which is synonymous with Shorthorns, Polled-Angus, and turnips. The animal receiving first award in this class was a fine, compact, blocky roan, weighing over 1,900 pounds at the age of two years eleven months.

Taking the exhibit all through, it was well worthy a visit, and, although we went there with high expectation, for it is the cream of the fat stock of Great Britain that meet here, we were not disappointed. With a farewell stroll around the beauties, we tore ourselves away, and retraced our steps homewards after a fatiguing day, feeling that we had not spent it for nothing; moreover, had earned a night's repose.

Experience with Dehorning.

In our list of special inquiries sent out some time ago to crop correspondents was included the following questions: "Has dehorning been practiced in your locality; on what classes of stock, and with what results?"

Replies from thirty-two correspondents, writing from twenty-two counties in which dehorning has been practiced, speak of it favorably. Many of them state that it has been practiced on cattle of all ages, of both sexes, with satisfactory results in all cases. Some writers consider the destruction of the embryo horn by means of caustic a more humane method than that of waiting until the animal is grown up. Where calves have been dehorned between six months and a year old, stubs are apt to grow up again. It is, therefore, wise to allow calves, whose horns have not been treated with caustic while very young, to carry them until they are about two years old.

Says one of our Huron correspondents: "We have dehorned cows of all ages up to ten years with very satisfactory results. With the exception of a few seconds during the process of operation, it is not accompanied by much pain, and it renders the animals more gentle and docile. Having dehorned our cows during the milking season we could notice no difference in their flow of milk."

An Ontario man says: "I am raising a herd without horns, by using Gillet's Lye. I have used it for the last two years and have a fine lot of mulley heifers."

An Oxford writer says dehorning has been extensively practiced in his vicinity, as 75 per cent. of the cattle are already done, and none but good results have followed.

From Martintown, Glengarry, we learn that fully one-half of the dairy herds of that section are dehorned, with no apparent bad results.

The above is a fair synopsis of the answers received, which goes to show that the practice of dehorning, wherever tried, is entirely beneficial. Some who have not done it, nor seen it done to any extent, consider it cruel and unnecessary, which, of course, cannot stand beside the testimony of owners of dehorned herds.

Chatty Stock Letter from the States.

(FROM OUR CHICAGO CORRESPONDENT.)

Exporters are doing a heavy business now in both live cattle and sheep. The prices, however, are rather discouraging the cattle shippers, as values need to harden a good deal on the other side to let them out at a profit.

Receipts of all kinds of live stock are running lighter than they were. The hog supply holds up better than anything else, but they are not now as plenty in any part of the country as was expected, and there are many sections in Iowa and Nebraska that have none.

Extreme top prices now, compared with one and two years ago:—

Table with columns for CATTLE (1895, 1894, 1893) and SHEEP (1895, 1894, 1893). Rows include various types of cattle (Mixed, Heavy, Light, Pigs) and sheep (Natives, Western, Texas, Mexican, Lambs, May Corn, Wheat, Pork, Lard).

A year ago thirty-three 1,602-lb. steers sold at \$1.20, but the next highest was \$3.90, with most of the beef cattle at \$3.20@3.80. Compare that with the present prices when the bulk of the beef cattle are selling at \$5.00@6.00.

Fed Texas cattle sold at \$4.00@5.15. Good store cattle are in very strong demand. A 2,000-lb. bull sold at \$5.50.

Forty-five cattle, averaging 1,674 lbs., sold at \$6.40 to Eastman; were fed by J. B. Keller, Taylorsville, Ill., and shipped by J. E. Lord, Edinburg, Ill. Standard Cattle Co., Ames, Neb. (R. M. Allen, manager), marketed 65 1,494-lb. steers at \$5.60.

C. B. Ekelberger, of Denton, Texas, marketed 19 fed Texans, 1,331 lbs., at \$5.15, also a 1,200-lb. cow, same price.

Cattle are fully 40 per cent. higher than a fortnight ago, and the tendency is decidedly upward. Buyers are holding back, and trying to keep prices from going up too readily, but they are having a hard time doing it.

A buyer for a Boston hog-slaughtering concern, who keeps in close touch with Western markets, thinks hog receipts will decrease very materially during the next six months, and he expects prices to go to \$6.50 before the end of next August.

Armour's head hog-buyer now says good hogs are going to be very nearly as scarce as cattle. Armour is now a strong bull on hog and hog product.

The sheep market is in very good condition. Among the sheep sales were 981 Mexican yearlings, 75 lbs., at \$4.50; 441 yearlings, 91 lbs., \$4.90; and 382 Mexican sheep, 96 lbs., at \$4.30.

White & Son, of Salt Lake City, had in 214 Utah lambs, averaging 90 lbs., that sold at \$5.65; and 187 sheep, averaging 132 lbs., at \$4.60.

A string of 1,082 Western sheep, averaging 131 lbs., sold at \$4.45.

Joe Greenbaum paid \$1.35 for 1,084 Western export sheep, averaging 138 lbs.

A lot of 400 Texas sheep, averaging 82 lbs., sold at \$4. They were straight from the Southwest, and had been fed some on sotol.

Horses are being marketed in large numbers, and are selling better than they were. A nice five-year-old, 1,100-lb. bay gelding sold for exportation at \$175. Poor to good drivers are selling at \$60@200, with carriage teams at \$250@600 for fair to good quality.

Jug-handled Reciprocity in Horses.

At the recent annual meeting of the Clydesdale Horse Society of Great Britain and Ireland, a request from Col. Holloway, of the United States Clydesdale Association, was read, asking that provision be made for in future accepting American pedigree as a basis for registration in the British book. Secretary McNeillage explained that Mr. Wm. Montgomery had bought a horse in America and cabled to know if he would be accepted for the Scottish Stud Book, to which he had to reply in the negative, so the horse remained in Canada. A lengthy discussion was evoked, in which Mr. McCaig, among others, remarked that they were in "no hurry to have American horses coming over to this country." Our British friends believe in selling all the horses and other live stock abroad possible, but when the trade turns it becomes a "horse of another color." The matter was finally referred to the council for careful consideration, to be reported upon at a future general meeting.

The usual sale took place at the close of the London (Eng.) Shire Horse Show, when 41 stallions and colts changed hands at prices ranging from 35 to 200 guineas, with an average of a little over 65 guineas. Sixty-two mares and fillies realized an average of 60 guineas, ranging between 30 and 175 guineas. Just two geldings were disposed of at 47 and 48 guineas respectively.

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THE FARMER'S ADVOCATE & HOME MAGAZINE

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CONTENTS.

- EDITORIAL:—129—Illustration. 130—Editorial Notes: "Raising New Breeds of Cereals"; "The Advocate Leads"; "Our Frontispiece"; "United States Regulations re Importing Stock"; "Abolishing the Agriculture and Arts Association"; "The Dominion Grange"; "The Great Horse Show"; "The Price of Salt in Car Lots."
- STOCK:—132—A Day at the Smithfield Cattle Show; Experience with Dehorning; Chatty Stock Letter from the States; Juggled Reciprocity in Horses. 133—Restoring the Records; Regina Fair; A Few Mistakes of Shorthorn Breeders; No Pleuro in Canada—Another Challenge. 134—Our Scottish Letter.
- FARM:—134—A Self-Feeding Pig Trough; Interesting Points Raised. 135—How to Build a Round Silo.
- DAIRY:—135—To Patrons of Cheese Factories; Farm Buttermaking. 136—Instruction for Western Ontario Cheesemakers; A Representative Canadian Cheese Factory; Setting Milk in Deep Cans.
- GARDEN AND ORCHARD:—136—Spraying Calendar; Raspberry Anthracnose—Experience in its Treatment. 137—The Cauliflower.
- APIARY:—137—Who Should Keep Bees? Bees in Spring.
- VETERINARY:—137—Milk Fever vs. Milk Chill.
- POULTRY:—138—The Ontario Agricultural College Poultry Building.
- QUESTIONS AND ANSWERS:—138—Veterinary. 139—Miscellaneous.
- FAMILY CIRCLE:—140.
- CHILDREN'S CORNER:—141.
- QUIET HOUR:—142.
- SOCIAL CORNER:—142.
- UNCLE TOM'S DEPARTMENT:—142.
- NOTICES:—143, 146.
- BOOK TABLE:—145.
- STOCK GOSSIP:—
- ADVERTISEMENTS:—143 to 148.

Restoring the Records.

Mr. Henry Wade, Secretary Agriculture and Arts Association, Toronto, writes us that he desires breeders to send in female pedigree certificates for the Clydesdale Stud Book from 1886 to 2106, inclusive, as the manuscript was destroyed in the fire. The swine breeders are asked to send in all their certificates registered during 1894 and 1895, and they will be returned as soon as copied.

Regina Fair.

We learn that the contracts are let for the erection of the buildings for this great Territorial Exhibition, and that arrangements are rapidly being made for the carrying out of the project. At present the date of opening is fixed for July 29th, but as this will leave an awkward gap of a week between this and the closing of the Winnipeg Industrial, it is earnestly to be hoped that for the welfare of both fairs, these dates will yet be rearranged so as to overcome this difficulty.

A Few Mistakes of Shorthorn Breeders.

[A paper prepared for the Dominion Shorthorn Breeders' Association, by A. W. Smith, Maple Lodge, Ont.] It is probably too emphatic to say that a man has made a mistake, when other people are willing to endorse what he has done, and follow in the same line or repeat with enlargements the actions with which I may find fault. But there are a few things which many Shorthorn breeders do which I think are mistakes, and wish to suggest the possibility of the correctness of my idea to the breeders assembled. I will mention only three.

It appears to me that a mistake is often made with regard to color. Shorthorn breeders, like other human beings, are liable to go to extremes. A few years ago the fashion was for red. At the beginning of that phase of fashion, a beautiful, rich cherry red was the color par excellence—and what a pity breeders were not satisfied with a large percentage of that color—but according to the nature of the breed, a roan would come occasionally and often, so they must be darker, until many verged on the dark brindle of some of the old woods or native cattle.

Now, a revolution has taken place, and I am sorry to know some of our most prominent breeders are willing to advertise that they like white so well they intend breeding from bulls of that color (but of that I think there is very little danger). And they would, indeed, succeed in making the white as fashionable nonsense as was the dark red a few years ago, were it not for the deep-rooted prejudice against white cattle prevailing among the farmers of our country. And this prejudice is not without some foundation. It is generally believed that white cattle are not so hardy as those of a darker color; that they do not stand roughing so well; that they are more affected by vermin—not more liable to have them, but showing the effects of them worse.

And I believe those holding this opinion to have some good grounds for their belief. I do not believe that the color of the hair, be it white or red, is directly the cause of this weakness, for white may be as hardy as red, and we find the same fault, namely, weakness in standing hardships or pests, in the other colors; but it is the white, thin, papery-skinned animal that fails when exposed; and what farmers have found out is, that there are a larger number or greater percentage of white cattle have that peculiar kind of skin than of the darker colors. Shorthorn breeders are possibly making a mistake in trying to make the general farmers, who comprise our markets, believe that white is a color much to be desired, when many years' experience have proved the contrary.

It is true a great many white animals have been successful in the show-ring, but this only proves that pampering and forcing and constant care and attentions of the very best kind will successfully combat even a thin, papery-white skin, which very often encloses a weak constitution.

Next, I would like to call attention to the pedigree fallacy. There is no more firm believer in the great value to an animal, otherwise good, of a line of good ancestors, than myself. I would insist upon having it, but at the same time I have always been surprised at the shortsightedness or utter blindness of shrewd business men, endowed with the full complement of common sense, fancying that all the good qualities of Shorthorns were bound up in one particular tribe of the breed, and notwithstanding the object lessons we have had of the disastrous consequences in the past,—breeders narrowing themselves down to few families of the breed, and considering that every atom of their success depended upon excluding all other blood from their herds. We find some of those who should be our best breeders following the fad in even narrower lines, only in another direction. I refer to the using of Scotch blood to the exclusion of all other. Mr. Gibson, in a paper on Cruickshank Shorthorns, about two years ago, unveiled a very disagreeable fact when he pointed out that the steers of our country are not as good now as a few years ago, because of the use of too many Scotch bulls. And it is undoubtedly a fact. We have lost the weight; we have lost the stylish appearance that enhances the value of the beast in the eye of almost any buyer (unconsciously in some, perhaps), even if the animal be only a steer or a butcher's beast. And these qualities we have lost to a great extent where a number of crosses of unadulterated Scotch-bred bulls are on the grade cows of the farmers.

Nor is there any saving in the cost of production, for the little steer generally carries as large a paunch and capacity for food as the heavier one. This difficulty may be overcome by blending the Scotch and English blood, and the Scotch cattle may be as much improved by an infusion of English blood as have been the English stamps by the Scotch cross. Some years ago, when the Cruickshank herd was at its zenith, they were simply grand cattle, and those of them introduced into herds differently bred did wonderful good, and the Scotch cattle of to-day undoubtedly do great good in certain herds, or when used on the English or old-fashioned type. In fact, it may be said they have been the salvation of the breed. But before Mr. Cruickshank had begun to reap the evil effects of believing that he had all the good in the Shorthorn race in his own herd, and allowed no infusion of fresh blood, his cattle were grand in themselves—such animals as Royal Barmpton, a show bull of the first order himself, and as a sire, famous, had he never sired another than Barmpton Hero; but the dam of Royal Barmpton was a choicely bred Bates cow. We have other very celebrated Scotch bulls as sires

to-day, but their celebrity has generally come through crossing on cows with a large percentage of English blood, or through their sons when so used.

The third mistake I would like to point out, and which I have no doubt is the most important of the three, is that of allowing the grand milking qualities of Shorthorns to disappear to a very large extent in great numbers of the breed. This has been effected through many causes, but particularly through the extreme carelessness of those breeders in whose hands were the largest herds of the breed. Probably it was found desirable to have the herd in very high flesh, then the cows would be dried off when in milk two or three months, and the calves either raised artificially or nurses provided. This custom continued for three or four generations and milking qualities of the best order would be almost ruined. Then the dairy interests of the country were in very poor condition, and the prices of the products were correspondingly low, consequently the incentive was lacking which is always the strongest, namely, profit. But this matter is all changed now, and dairying qualities of a high order in a cow are at a premium, and the dairy interest is very largely in the hands of the general farmer of the country, and those gentlemen have found out long ago that the Shorthorns are the best general purpose cows; that is, either the pure-bred or the cows with a large percentage of that blood, that they will readily fatten, when dry, up to a heavy weight of good beef, and their produce is nearer the butchers' ideal beef type than any other breed; that there is a greater weight for the same feed than in any other breed that can compete with them in the dairy, and also when competing very favorably with the special dairy breed in the dairy, they at the same time have improved largely in weight. The Shorthorns are naturally grand dairy cows; this quality was one established with the breed, and all the strength of atavism is at hand for the assistance of the breeder who is endeavoring to re-establish this grand quality in his herd. And I do not believe the ability to give a large quantity of milk or butter is confined, as some suppose, to any particular tribe of the breed. It has been claimed by some that the Bates cattle have a monopoly of good milking qualities. This I do not think is borne out by facts. No doubt in what is called the old-fashioned Shorthorns were found a large percentage of grand milkers, but at the present time, when care is taken to foster the milk production, from any of the different tribes can be developed good milkers; in fact, we never used a more successful sire of beef milkers in our own herd than Marquis of Lorne, bred by Mr. W. S. Marr, Aberdeenshire. The Shorthorn has a larger field to occupy than any of the other breeds, and by judiciousness of the breeders can hold it with ease. The Shorthorns are the favored breed of the general farmer, because they are hardy, because they are large and good feeders, and excel in the dairy. These qualities have given Shorthorns a prominence no other breed has attained. Therefore, is it not a great mistake for us to undervalue these qualities and neglect the provisions necessary to retain them, and to loose them from our herds and give other breeds a chance to encroach successfully upon our territory.

No Pleuro in Canada—Another Challenge.

The Dominion Minister of Agriculture has just prepared a report to the Governor-General-in-Council on the papers referred to him on the subject of the scheduling of Canadian cattle by the British Board of Agriculture. Following is a summary of the whole matter:—

- That a disease which appeared from lesions in the lungs to have a particular type alleged by the Board of Agriculture to be pleuro-pneumonia, has been found in the case of about a dozen animals out of 93,860 slaughtered at the port of landing since the fall of 1892; and, it may be added, out of a total of 1,303,589 meat cattle shipped from Canada since 1889.
- That the persistent and reiterated demand by the Board of Agriculture of the Canadian Government to furnish further information of such disease, based on expert examination of lungs after slaughter of animals, cannot be complied with for the reason that such disease cannot be found in Canada, notwithstanding diligent and repeated veterinary search, this fact leading to the confident belief that it does not exist in Canada, and to the conclusion that it is absolutely impossible to furnish the Board with any further information in relation to it by the discovery of cases in Canada.
- That the lesions stated to have been found in the lungs of animals after landing in England or Scotland—after having been carried in some cases from the Northwest plains of Canada—near the base of the Rocky Mountains—a distance of between two and three thousand miles to the sea port, subject during such carriage to the detention arising out of waiting for railway connections, the animals being sometimes confined for several days in stock yards before embarkation, and necessarily packed in close compartments on ship board, where sometimes, despite the utmost care under the regulations, they are in some weathers subject to insufficient ventilation and other forms of hardship—it being only after the animals have endured such trials that the lesions in question can be discovered. It follows, therefore, that further elucidation arising from expert inquiry, as asked for by the Board, can only be obtained in the United Kingdom.
- That such disease, moreover, being found in animals having constitutions impaired by age or hardship from confinement in travelling, the form manifested has, for these reasons, been called by veterinary experts in Canada, "transit-pneumonia."
- The inference of the Board that such disease, being bacterial or germ, must, therefore, have been contracted in Canada before embarkation, is not supported by evidence; on the contrary there is nothing to show that it might not be contracted in the conditions and time of transit stated.
- That the weight of expert evidence, as appears in the proceedings of the Board, determines such lesions to be of very recent origin, that is, within the period occupied by the transit.
- That there is nothing in the present discoveries of bacteriological science to establish an inference of the Board and their officers that a bacterial or germ disease may not be developed during a transit such as described.

(8). That experience in Scotland and England, in the same way as in Canada, has shown such disease to be non-contagious; from contact of Canadian animals in very large numbers, spreading over many years, the contention in the Parkhill-Lindores case in 1892 that one Canadian animal communicated the disease in question, is not supported by sufficient evidence in the face of strong improbability.

(9). That in all the many thousands of Canadian animals slaughtered in the United Kingdom, not a single case of old or encysted pleuro-pneumonia has been found, a condition which is believed would be impossible if the disease, as alleged, prevailed in Canada.

(10). That among 3,085 sets of lungs of cattle slaughtered in the abattoirs during one month, in November last, no case or trace of the disease in question was discovered. It is believed that if such disease had prevailed in Canada, some trace of it would have been found by the test.

(11). The conclusion of the Board of Agriculture in their minute, that such disease exists in Canada and that it is contagious pleuro-pneumonia of a special type, but not different in its "contagious and fatal effect" from the commonly accepted type known in Europe and elsewhere, is altogether irreconcilable with the fact that it cannot be at all found in Canada, and that it has never, in any part of the Dominion, been known; that no trace of it even has been, or can be, discovered. This declaration is made after the very earnest special search by veterinarians employed for that purpose by the Canadian Government.

(12). That the continuing of the restrictive order requiring the slaughter of Canadian cattle at the port of arrival, for the reason of alleged presence of the disease of pleuro-pneumonia in Canada, is not supported, and, it is believed, cannot be by any proof of its existence.

If the Board of Agriculture should consider it advisable to send one or more veterinarians for any further elucidation of the facts on the authority of persons employed by themselves, the undersigned would advise that the offer made in 1892 be repeated, and that he be authorized to pay their expenses from his departmental appropriation, applicable to such service.

In submitting this report for the consideration of Your Excellencies, the undersigned respectfully recommends that, if approved, a copy may officially be communicated to the Marquis of Ripon, for such action as he may find advisable, with the object of obtaining, if possible, a reconsideration of the present decision of the Board respecting Canadian cattle.

Our Scottish Letter.

Before saying anything about the Horse Shows a line should be devoted to the Birmingham Show and sale of Shorthorns, which took place on Wednesday. The show is one of the best of its kind in this country, and at the sale very good prices were, in some cases, realized. The average quality of the exhibits was enhanced by the absence of the tail of weeds too often seen at these spring shows. A red bull named Adonis Ringlet, shown by Mr. John Garne, was knocked down at 105 guineas—his destination is understood to be America. Another red bull named Jasper, by Asterisk, won in the class for which a £50 premium is offered, and a reserve of £100 is permitted on every animal shown in it. This bull, owned by Mr. Atkinson, was sold to Earl Powis for 145 guineas. Prices such as 53 guineas, 51 guineas, and 55 guineas were paid for useful bulls of the Aberdeen type, which were much appreciated by the public. Altogether the demand for bulls of good breeding and quality was well sustained, and good paying prices were secured by many sellers.

THE SHIRE HORSE SHOW.

The Shire Horse Society has done much to maintain the breeding of heavy cart horses in the South. The Society bravely set itself to weed out unsound horses, a rigid veterinary inspection being carried on from the beginning of the show. At the Royal Society's Shows veterinary inspection also prevails, and the Clydesdale, the Shire, and the Suffolk have to pass through the same ordeal. The first named still win their way to the front, and make the best appearance, but there has been a very marked improvement in the character of the Shires during the past decade.

The champion of this year, Lord Belper's Rokeby Harold, is a massive, big horse, which walks well, and, for a Shire, trots reasonably well. His sire, Harold, owned by the Calwich Stud Co., of which Mr. John Green, Calwich, Ashbourne, is the very capable manager, is no doubt the best breeding stallion of the Shire breed to-day. His stock were winning all along the line last week, and in some classes it was the old story—"Eclipse first, and the rest nowhere." There is an immense style and gaiety about his stock which it is very difficult to get over when show honors are being given out. Sons of his were first in the yearling, two-year-old, and three-year-old classes, and one of them was the male champion of the whole show. Amongst the older horses, those which attracted most attention were the veteran Vulcan, which won in the class for horses over ten years old; his sons, Vulcan IX. of Worsley, which won in the class for horses over four and under ten years old; and Vulcan XIII. of Worsley, which won in the class for four-year-old stallions; a splendid horse named Calwich Combination, which stood second to Vulcan IX. in his class; and Duke of Worsley II., which stood second to Vulcan XIII. in their class. When we say that these horses attracted a good deal of attention, we do not mean that Englishmen altogether loved them, but they appeared to Scottish eyes to be about the best in the show, and the judges thought so too.

Death has been busy amongst these horses since the show, and both Vulcan IX. and his companion, Calwich Combination, with some less-known horses, have died within the past ten days. They were stabled in a bad part of the hall, and it is supposed blood-poisoning was the cause of death.

Mares were not equal in merit to what has been seen at the Shire Horse Show. The champion was Mrs. Freeman Mitford's Minnehaha, a great wide mare, with beautiful head and neck, grand shoulders, good back and ribs, but unpardonably short in the pasterns, and standing on small enough feet for her gait. She has wonderful use of herself, but we agree with those who fancied for first place her class mate, Mr. J. P. Cross's Cathorpe

Manilla, a more compact mare, with good quality of bone, and much character. She does not move quite so freely as Minnehaha, but not a few preferred her, and an umpire had to decide their positions in their own class. Vulcan's Flower, a daughter of the reserve champion stallion, won the junior champion cup for the mares, and the best yearling was Queen of the Shires, by Harold.

THE HACKNEY HORSE SHOW

has been held this week, and four weary days have been spent over it. Active and gay as are the Hackneys, the judges this year were woefully slow. Alike in respect of merit and prizes, Scotland gave a good account of herself this year. The exhibitors from the North who secured first honors were Mr. David Mitchell, of Millfield, Polmont, whose purchase last year, Sabina, at the Broomhall sale of Mr. Fred. Kelley, was a clear first in a strong class of two-year-old fillies, and Mr. Charles E. Galbraith, Aytton Castle, Aytton, who showed a splendid mare named Lady Ulrica, got by the celebrated Rufus. Mr. Alexander Morton, Gowanbank, Darvel, has been the great pioneer of Hackney breeding in Scotland. At London this week he showed two mares bred by himself, and one of his most famous brood mares, which has scarcely ever been beaten in Scotland. With one of his mares, Audacia, he stood second in a strong class of fillies, a tie being decided against this mare by the ex-president, Mr. Anthony Hammond, and in favor of a Yorkshire mare named Titania, now owned by Mr. Waterhouse, in Essex. The filly which thus distinguished herself was got by the fine breeding horse Goldfinder VI., which Mr. Morton retains as his stud horse. In the junior championship competition she stood reserve to the winner Titania, Mr. Mitchell's Sabina being the third mare. Mr. Morton's other exhibit of his own breeding was the brood mare Bonnie Doon, whose sire was the senior stud horse at Gowanbank—Donal Grant. This horse is own brother to the famous Cadet, and their own sister, a black mare named Frisk, which won the gold medal at the Royal Windsor, in 1883, was also first in her class this week. She is twelve years old, and her owner is Mr. Henry Moore, Burnbutts, Cranswick, Hull. It was remarkable that in one class the short leet consisted of two gets of Lord Derby 2nd, two gets of Cadet, two gets of Danegalt, and one get of Donal Grant. Cadet and Donal Grant are sons of Lord Derby 2nd, and the high merit of the breed in Scotland is indicated by the fact that much of the blood in the best studs in Scotland is thus composed. The best mare in the show was a beautiful animal, Kathleen, got by Danegalt, and, like Titania, owned by Mr. Waterhouse. These two mares tied for the challenge cup. Mr. MacMeeken, the Scottish judge, took Kathleen, and Mr. Dale Robinson, the Yorkshire judge, took Titania; Mr. C. W. Wilson, Rigmaden Park, Kirkby, Lonsdale, decided with Mr. MacMeeken, and Mr. Waterhouse thus gained the challenge cup with one mare, and the reserve with another; in fact, he won all the champion cups for mares in the show.

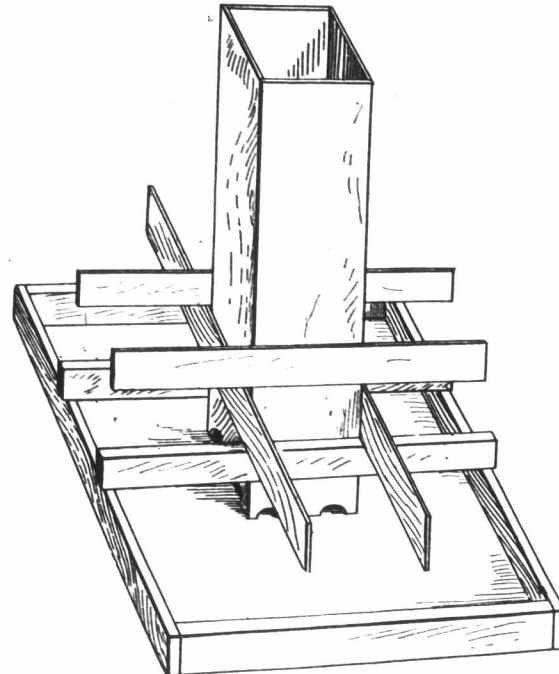
The stallions were a good representation of the Hackney breed; but one defect in the classes was the number of old horses again forward, and the lack of younger animals able to beat them. The best horse, in the opinion of all, was Mr. Tom. Mitchell's magnificent big horse Ganymede 2076, the champion of 1894 (whose portrait appeared in the ADVOCATE of November 1st, 1894), and, as it turned out, again the champion of 1895. This horse is a splendid walker, and a wonderfully vigorous mover. Another favorite horse was Mr. Childerhouse's M. P., the champion of 1888. This is a Norfolk horse, got by Candidate, while Ganymede is a Yorkshire horse, got by the celebrated Danegalt. All through, except in one or two rare cases, Yorkshire beat Norfolk, and the lion's share of the prizes went to horses bred in the Wolds. Perhaps the best class in the show was that for aged stallions not over 15.2. In this all the five prize-winners were bred in Yorkshire. Saxon 2674, Lord Melton 3109, Heden Squire 4306, Gentleman John 3621, and Goodmanham Squire 4287, were the horses placed by the judges, and in the order named. These were nearly all Danegalt horses of the first or second generation, and there was not a bad one amongst them. Another splendid horse, but of a somewhat different type, was Winnal Fireaway 4082, which won first prize in the aged class not over 15 hands. His sire was Fireaway 249. The second best horse in the show was Rosador 4964, owned and bred by Mr. F. W. Buttle, Thirkley by Manor, York. He also is a get of Danegalt, and won in his class for three-year-olds 15 hands and over, as well as the junior champion cup, being only beaten by Ganymede for the highest possible honors of the show. As a typical Hackney he had no superior in the show, but as a harness horse he met a very formidable rival in Langton Performer, from his own county, which, for a time, seemed likely to beat him. This is a magnificent horse. A very nice horse named Polonius 4931, bred and owned by Lord Londesborough, was first in the smaller class of three-year-olds. His sire, Wildfire 1224, is own brother to the dam of Ganymede, and his dam was the London champion mare Ophelia. He stood reserve to Rosador for the junior champion cup. The impression made on our minds by the recent London Hackney Show is that there are great possibilities in the nags, if their practical use be kept in mind, and they are not ruined by being bred for fancy points.

SCOTLAND YET.

FARM.

A Self-Feeding Pig Trough.

James Glennie, Longburn, Man., writes us as follows:—"In response to the request of 'Invicta,' in a late issue of the ADVOCATE, I will give a description of the self-feeding trough I have used for many years for feeding dry chop to pigs. The bottom part or trough is made about three feet square, and four inches deep; good heavy inch lumber will answer, nailed on 2x4 scantling, for sides. In the centre of this set up four boards about ten inches wide, and three or four feet long, nailed together like a box, to hold the chop, with small openings at the bottom on all four sides to let the chop work out. This upright box is held in place by being toe-nailed to the trough, and by a piece of scantling running across on each side, well nailed to the sides of box and to sides of trough.



"To make a good job, and prevent the pigs getting into the trough with their feet, strips of board three to four inches wide should be nailed securely to the upright, two on each side, extending out as far as the sides of the trough, thus making four stall for four pigs, while other four can feed at the corners. Water should be given in a separate trough." Mr. Glennie adds: "This may not be the best way to feed hogs, but I know of no better to prevent waste."

On this page is a cut we have had made from the above directions.

Cut No. 2 represents another style of self-feeder much similar to those we have seen in use on the farms of Jas. Bray, Longburn; W. A. Scott, Emerson, and others. This feeder is made about four feet in length, and two and a-half feet wide on the bottom. The V-shaped box for holding the drop should be about two feet wide at top, and three feet deep. Small openings are made at the bottom to allow the chop to work out slowly as the pigs are feeding. The box can be made with or without cover as desired. It may be constructed of inch lumber, with the exception of the edge of the trough, and a piece at each end to nail the bottom to, which should be 2x4 scantling. A board well-nailed on each end of feeder, as shown in the accompanying cut, forms a strong and sufficient brace to hold hopper and trough together.

Interesting Points Raised.
SIR, Last December I made what to me at least was a discovery. While digging a drain in a level place on the highest part of a pasture field, in taking out the second spading I happened to notice that the subsoil, as far down as it was being moved, was quite thick with fine roots. It was a reddish clay, rather open, but not by any means very soft. As we would say, it seemed filled with roots; one could not find a lump an inch square but was pierced with three or four, while in the cracks or seams of the clay there would be six to a dozen roots together in a kind of loose string. Where this was noticed there was nothing growing but timothy; it had been in pasture but two years. The natural conclusion was that these were timothy roots. But to make the matter sure, I traced a root, after breaking and losing a few, from the bottom right up to where it was connected firm and strong with a plant of timothy. On digging deeper I found that the roots ceased at a depth of about two and a-half feet, where hard pan was reached. I was astonished—not that they stopped at the hard pan, but that they went into the subsoil at all. We farmers are inclined to believe what is told us, and if there is one thing more than another that we have heard of

read about rooted, feet very exhausted are shallow it right. Ities have b

[NOTE.—fibrous root feet below clover, 3 to in a light s feet. In a doubtless g ing points students of

In the F successful Potter, Mo which has enquires h and in orde experience, the trouble describing cost, which purpose ad

Descript 20 feet high feet long—d to suit. It to an 18 fee seven cedar It is held to hoops, mad nut on each ends pass t elm scantli and are he Under each iron washes begins the r

Construc ting two of in position, and the oth the scantlin to pass, and ends of hoop prop under the scantlin them through side on a co the machin circle, was hooping un on the grou we set up t by driving below the n then bendin outside. W and this wa one in w in their pl and put on completed poles, and a roof, as a This kind of and from th it appears ting up any inch lumbe circle, shoul so that the this is done, nail through be much eas

Cost. To 2,400 ft. pine sand. Jointing, dress sand. 650 ft. cedar pl Dressing and 670 lbs. 1 in. r 28 pieces of 1 in. thre 28 malleabla ir 42 welds in ho

Total The cedar mate, as w with nails.

"It will p or two of go make. A f ufacturer in a flock, w ing them, t thus be m only the

Capt. p case of p ewes that five lambs though survived

read about timothy, it is this: That it is shallow rooted, feeding only in surface soil, and therefore very exhaustive. But, perhaps soil to depth of two feet is surface soil, and roots no deeper than that are shallow, but if so, then we have not understood it right. Is it possible, Mr. Editor, that the authorities have been wrong on this subject?

T. BATY, Wilton Grove.

[NOTE.—One investigator, Schubart, found the fibrous roots of rye, beans and garden peas about 4 feet below the surface; winter wheat, rye, and clover, 3 to 4 feet; and the roots of winter wheat, in a light subsoil, 47 days after sowing, as deep as 7 feet. In a season of drought like 1894, plants would doubtless go deep after moisture. Several interesting points are suggested by Mr. Baty's letter for students of plant growth and the soil.—Ed.]

How to Build a Round Silo.

In the Feb. 1st ADVOCATE we referred to a very successful round silo constructed by Mr. R. J. Potter, Mono Mills, in the county of Cardwell, Ont., which has awakened a great deal of interest. Many enquiries have been made for "further particulars," and in order that all might have the benefit of his experience, Mr. Potter, at our request, has taken the trouble to prepare the following statement describing his silo, method of construction, and cost, which we trust will be helpful to any who purpose adopting this plan:—

Description.—My silo is 18 feet in diameter, and 20 feet high. It is built of 2x6 inch pine plank, 20 feet long—dressed on one side, jointed and bevelled to suit. It is set on a cedar plank bottom, cut round to an 18 feet 3-inch diameter. This floor is laid on seven cedar sleepers, properly bedded and levelled. It is held together by means of 7½-inch round iron hoops, made in two pieces, and with a thread and nut on each end of each piece. These threaded ends pass through two 4x1, and 20 feet long, rock-elm scantling placed on opposite sides of building, and are held in position by means of the nuts. Under each nut I have placed a strong, malleable iron washer, so that when the tightening process begins the nuts may not sink into the scantling.

Construction.—In building it we began by putting two of the hoops, the bottom and middle ones, in position, the lower one six inches from the floor, and the other ten feet. This is done by putting up the scantling, through which the ends of hoops are to pass, and bracing them in position, then passing ends of hoops through them, and putting a brace or prop under each half of hoop in the centre between the scantlings. We bent the hoops by passing them through a blacksmith's tire bender, laid on its side on a couple of blocks. The exact set to give the machine, so as to give the hoops the correct circle, was found by running through a piece of hoop until it fitted exactly on a circle scratched on the ground, having an 18 feet diameter. When we set up the first stave we fastened it in position by driving through it from the inside, and just below the middle hoop, a four-inch wire nail, and then bending this nail up around the hoop on the outside. We fastened the bottom in the same way, and this was done with every stave until the last one was in position. As soon as all the staves are in their place, tighten the two hoops already up, and put on the remaining five. This, with me, completed the silo, with the exception of a few poles, and a couple of loads of pea straw by way of roof, as a substitute for a more expensive one. This kind of covering is unsightly, but it is cheap, and from the way my silage is turning out this year it appears to be all that is necessary. Before putting up any staves, a temporary rim made out of inch lumber, cut with a hand-saw to the proper circle, should be tacked to the floor on the inside, so that the staves might be fitted against it. If this is done, there will be no necessity for putting a nail through the bottom of each stave, and it will be much easier to keep them plumb.

Cost. To build it we required:—

2,400 ft. pine plank, 2x6, and 20 ft. long, at \$16 per thousand.....	\$ 38 40
Jointing, dressing, and bevelling same, at \$3.50 per thousand.....	8 40
650 ft. cedar plank, at \$12.50 per thousand.....	8 12
Dressing and jointing, at \$3.50 per thousand.....	2 27
60 lbs. 1 in. round iron hooping, at \$2.50 per cut.....	15 00
28 pieces of 1½ in. round iron hooping, 12 in. long, with 6 in. thread and nuts.....	3 20
28 malleable iron washers, at 6 cents each.....	1 68
42 welds in hoops, at 10 cents each.....	4 20
Total cost, not including labor.....	\$ 81 27

The cedar for sleepers is not included in this estimate, as we had cedar of our own. This timber, with nails, would probably increase cost to \$85.00.

"It will pay any farmer to keep a flock of a score or two of good sheep merely for the manure they will make. A flock of sheep is the best fertilizer manufacturer in existence. Now is the time to pick up a flock, while so many foolish shepherds are throwing them away. One hundred per cent. profit will thus be made in one year, but take care to select only the good ones."—[American Sheep Breeder.

Capt. Thos. Robson, of Ilderton, Ont., reports a case of profluency this spring in one of his Lincoln ewes that would do credit to a Dorset-horned, viz., five lambs at a birth, of which three were living, though one—a very large ram lamb—lively survived.

DAIRY.

To Patrons of Cheese Factories.

BY T. B. MILLAR, INSTRUCTOR FOR THE DAIRYMEN'S ASSOCIATION OF WESTERN ONTARIO.

As the season approaches when the cheese factories throughout the country will again be in full operation, it would be profitable for dairymen to glance over the past, see where we have done well and where we have made mistakes, and from the knowledge of these be prepared to do better work this coming season. In this article I have endeavored to point out some of the mistakes that have come under my notice.

Care of Cows.—One of the first mistakes made by dairymen, and especially by patrons of cheese factories, that I wish to speak of, is the great mistake of not preparing summer food for their cows. Looking at it from a business standpoint, it is quite as essential that food be prepared for summer feeding as for winter, as it is during the summer months that the patrons expect to make the most profit from the cows, and the profits depend greatly (more than most people realize) on the feeding and care of the cows.

Cows should have free access to a plentiful supply of pure water. Milk, as we all know, contains about eighty-seven per cent. of water, and if the water supply be impure or tainted the milk will be of a like quality. True, the quality of milk may be improved by aeration immediately after milking, but here the warning of the old adage comes to us: "An ounce of prevention is better than a pound of cure," and in almost every section of Ontario good water may be procured at a small cost.

Milking.—A great many dairymen pay no attention to regularity of milking; some milk between five and six o'clock in the morning and any time from six to nine o'clock in the evening—a very good plan whereby to lessen the supply of milk. To ensure an even flow of milk, cows should be milked at a regular time; the time as nearly as is possible to be divided equally, leaving twelve hours between the times of milking.

Utensils.—Then the utensils used, such as pails, strainers, etc., should be made of tin, all seams of which should be properly soldered, so that all crevices are filled up, thereby removing every possible lodging place for bacteria or germs of any kind. These pails should be properly washed and thoroughly scalded with boiling water immediately after using, instead of, as I have often seen, trying to wash and scald half a dozen pails or so with less than one pail of water, and that not very warm to begin with.

Straining.—A number of patrons fail to see the necessity of straining the milk that is to be sent to the cheese factory and are not too careful to see that the cows' udders are brushed and cleaned before milking, so that any sediment or foreign matter that may get into the milk is allowed to remain in it until delivered at the factory. They think that because it is strained at the factory that that is all that is required. This is a mistake,—all milk should be strained immediately after milking. This milk is to be manufactured into food for human consumption and should be handled as carefully and cleanly as the milk used at the table. It is oftentimes disgusting to see the amount of dirt of every description that is collected in the strainer used at the factory, all due to the carelessness and untidy habits of those handling the milk.

Aeration.—After straining, milk should be aerated until the animal odor is allowed to escape; this is as essential for the morning milking as for the evening. A greater quantity of un-aerated milk is required to make a pound of cheese than of aerated milk, and it is those who never aerate the milk or assist in any way to improve the quality that at the annual meeting find fault with the high average. Aeration should be done where the surrounding atmosphere is pure, and the milk which stands over night should be kept as far as possible from all bad odors. At times we find the milk standing over night in the barnyard, and much surprise is expressed by the owner when informed that the milk supplied by him is not perfect in flavor. He exclaims, "I cool the milk every night," but on inquiring we learn that this has been done by placing the milk can in a water-trough in the same yard. If properly aerated and not more than one hundred pounds in a can, it is not necessary to cool milk by the use of water in order to keep it sweet over night, even during the hottest weather.

Care of Cans.—In most sections it is customary to return the whey to the patrons in the milk cans. This should never be done, not only because it is injurious to the can by destroying the tinning, but what is more important, a large percentage of the bad flavors complained of in cheese can be traced to this practice of returning whey in the milk cans. While I admit that with proper care the cans may be cleaned, yet the fact remains that a percentage are not cleaned, and where fifty are careful and clean, one careless and untidy patron will undo the good work of the fifty.

At sunset cans may be seen on the milk-stand with the sour whey still in them; when milking time comes they are hurriedly emptied, washed in lukewarm water, and the new milk is poured in. Is it any wonder that at times cheesemakers have a batch of cheese that is declared off-flavor? If patrons were alive to their own interests they would not allow a pound of whey to be returned in the milk cans under any consideration, but would make provision to have it fed near the factory.

A common mistake is to leave the cans standing around unwashed for two or three hours after being returned from the factory. After what has already been said it is almost needless for me to say they ought to be washed as soon as possible after they are returned.

First rinse with cold water, then wash with hot water and scald with boiling water, and set them in a sunny, clean place to air. Never use soap on any utensil in use in the dairy; scour with salt, or soda, which is much better, as either of these leave no objectionable flavor, as soap is almost sure to do. After scalding never use a cloth for drying,—if the water is as hot as it ought to be they will dry of themselves in a minute or so.

In my work as inspector and instructor throughout Western Ontario, I find much to commend, but it also gives me many opportunities of seeing where a little care and forethought would greatly benefit this industry. This article is not written in a fault-finding spirit, but with a view to incite some to do better.

Progress the Watchword.—Canada has an excellent reputation for the quality of her cheese, but the past reputation will not suffice; we must keep advancing, and to do this we ask the patrons to cooperate with and assist the cheesemakers to make a better article in the future than we have ever done in the past.

Farm Buttermaking.

BY F. J. S.

When a Separator is Used.—When we come to think of a separator in connection with farm dairies, the probable cost first looms up; rightly so, as the question is one of profit and not of fashion. Ninety to one hundred and twenty-five dollars is about the price of hand separators, while power separators cost much more. Briefly, then, let us look into the advisability of buying a separator for private dairy use.

We believe the question revolves upon three points, chiefly: First, the number of cows; secondly, the excellence or otherwise of the system now followed for the separation of cream; and thirdly, the skill exercised in handling the machine.

As to the first, a definite answer could not be given without a knowledge of the second and third. However, we may offer a computation. How much more butter may be made from the milk of say ten cows during a season when a separator is used than when the milk is set? Suppose each cow averages as much for the season as would equal 20 lbs. per day for 240 days, or, in total, 4,800 lbs. milk each, or 48,000 lbs. milk for the herd for the season. Granting that good work is done by both the deep can and shallow pan, there will still be one-tenth of one per cent. of butter-fat less in separator than in deep can skim-milk, and two tenths less than in shallow pan milk.

This, calculated with such a herd, will give for the season 50 lbs. of butter in favor of the separator above the deep can, and about 100 lbs. above the shallow pan, which, at 20c. per pound, means ten and twenty dollars respectively. Given such a basis of calculation, any farmer may soon know if a separator will pay him, so far as his herd is concerned.

But to our second consideration—the system now in vogue. Whether or not a farmer shall use a separator will, of course, depend on the profit to be realized over and above that now made. We would say that if one has pure cold water ready at hand, and ice may be had reasonably, he should not be in a hurry to buy a separator, especially one with power; and right here we may as well say that we are not in favor of hand separators. They are hard to turn, and the farmer lacks not for exercise. They must be turned at a uniform speed to ensure good skimming, and the average hand is no better at this than at turning a fanning-mill. In short, if it pays to have a separator, it pays to have the power to run it. The deep can, if well handled, will do excellent work, and a fine product will result, and in such a case, unless one had a herd of at least eighteen to twenty cows, we think he would do well to think twice before buying a separator. While, on paper, one may make good interest on the cost of a separator above deep-can work, a large sum should not be paid out without much close thinking, as it may cripple a man in the development of his herd. The same may also be said of the shallow-pan system, but with less force. However, there is another side to the question. Many use deep cans without ice, and with rare exceptions this is disastrous—don't do it. Others use shallow pans set in rooms at high temperatures; also a mistake. In such and like cases the separator has a great advantage, and might even pay for itself in a single season if a large herd were kept. We have frequently tested the skim-milk from herds where one-fourth of the total butter-fat of the milk had not been removed. Rich skim-milk, sour milk and cream, injured by exposure while setting, with their concomitant allies, all speak in favor of the separator.

The third matter we have mentioned as a guide is mechanical skill, which is absolutely necessary, at least in fair amount, to the successful use of a separator, careless manipulation often undoing the possible benefits. It is not our purpose to enter into directions on running a separator further than to say, Follow closely the directions sent with the machine.

But to the more immediate work of buttermaking in this connection. If the cream is separated as soon as practicable after coming from the cow, more butter may be made than from gravitation

methods. A cleaner cream will also result. For instance, we have known cases where bloody milk was first detected by finding the blood in the separator bowl while cleaning it. A cream free from fibrin, which is an albuminous substance, also results, which is a benefit. Further, there is no prolonged exposure of cream to the atmosphere while separation is going on. We also find in the condition of the skim-milk an item in favor of the separator, as it is in the best possible condition for feeding young stock.

Instruction for Western Ontario Cheesemakers.

The Dairymen's Association of Western Ontario has re-engaged Mr. T. B. Millar as Inspector and Instructor for the coming season. During April, May, and the early part of June, Mr. Millar will give instruction to cheesemakers and others, in the best methods of making early spring and summer cheese, at the following factories on the dates given below:

Verschoyle	April 9 and 10
Harrietsville	" 11 " 12
Northwood	" 15 " 16
Bright	" 17 " 18
Elma	" 19 " 20
East and West Oxford	" 22 " 23
Thamesford	" 24 " 25
Nilestown	" 26 " 27
Norwich Junction	" 29 " 30
North Brant	May 1 " 2
Nixon	" 3 " 4
Attercliffe Station	" 6 " 7
Forest	" 8 " 9
Warwick	" 10 " 11
Cedar Springs (near Komoka)	" 13 " 14
Glencoe	" 15 " 16
West Lorne	" 17 " 18
Elytheswood	" 20 " 21
Harrow	" 22 " 23
Lucan	" 27 " 28
Ripley	" 29 " 30
Harriston	31 June 1
Burgoyne	June 3 and 4
Shelburne	" 5 " 6
Stayner	" 7 " 8
Newmarket	" 10 " 11
Wyebridge	" 12 " 13

After the completion of this tour, Mr. Millar will begin his regular work of instruction. The prospectus giving a full account of the work to be carried on during the season will be issued in a few days.

A Representative Canadian Cheese Factory.

The Harrietsville cheese factory, in the County of Middlesex, Ont., is one of the largest in the world. The auditor's report for 1894 shows that 5,323,073 pounds of milk were manufactured into 498,075 pounds (over 244 tons) of cheese, for which \$48,877 were received; of this amount \$43,191 were paid the patrons. The cost of manufacturing was \$4,980; milk hauling, \$349; miscellaneous expenses, \$526. Average number of pounds of milk required to make a pound of cheese, 10.68; average price, 9.84 cents. The net price per 100, received by the patrons for their milk, was: April, 83 cents; May, 82.4; June, 73.5; July, 71.5; August, 81.5; September, 85.5; October, 92; November, 95.2; December, 91.4. Mr. R. Facey, the proprietor, also encloses us the names of half a dozen of his patrons having different sized herds, with the amounts received from the factory last season, in addition to which would be the amount produced by these cows in winter buttermaking:

PATRON.	NO. COWS.	AMOUNT RECEIVED.
Stephen Yorke	35	\$ 1,610 93
A. Yorke	20	927 65
Wm. Rickard	11	651 49
Wm. Barr	11	512 68
Rich'd. Tooley	8	414 18
Thos. Radway	4	172 80

The most of the above herds average about \$16 per cow, though one of them ran over \$50.

Setting Milk in Deep Cans.

Observing the comments of A. W. R. (Renfrew Co.) upon my article, "Farm Buttermaking," I am pleased to offer an opinion regarding the points raised. Noting that I recommended setting twenty-four hours in winter time, A. W. R. says: "We only set the milk twelve hours, and find that the cream seemed to be all raised, judging from the following test: Out of 282 lbs. milk we had 13 lbs. butter," and compares this with creamery work. First, I would say that the amount of butter taken from milk is hardly a safe guide as to thorough skimming. The richness of the milk in butter-fat would materially affect this. To test samples of the skim-milk with a Babcock milk tester (in one or other of its modifications) is really the only reliable method outside of laboratory work.

In recommending twenty-four-hour setting in winter, I do so because the majority of the best experiments indicate its necessity. Why it is so may not be quite so clear, and yet we know that cows long in lactation, as is frequently, and indeed usually, the case in winter, give a milk that does not part with its cream so readily, nor yet so thoroughly, as when the cows are new in milk. The dry rations in winter doubtless have their effect also. When experimenting on this line we need to remember also that the milk of some cows gives up its cream much more readily than that of other cows, and in giving general rules we must allow for this.

I would not, however, state that A. W. R. does not do good skimming. It is quite possible that he does, as he says that his cows are nearly all fresh in milk, while the hollow pipe up the centre of the can will also assist to that end. P. J. S.

GARDEN AND ORCHARD.

Spraying Calendar.

Plant.	1st Application.	2nd Application.	3rd Application.	4th Application.	5th Application.	6th Application.
Apple.	Copper Sulphate.	Bordeaux.	Bordeaux.	Bordeaux.	Bordeaux.	
Applespotfungus, codling moth, bud moth.	Before buds start.	Just before blossoms open.	Paris Green.—Soon after blossoms fall.	Paris Green.—10-15 days later.	10-15 days later, if spot disease is severe.	
Cherry.	Bordeaux.	Bordeaux.	Bordeaux.	Ammoniacal Copper Carbonate		
Rot, leaf diseases and injurious insects.	Before flower buds open. Kerosene Emulsion for aphids.	Paris Green.—When fruit has set.	Paris Green.—10-15 days later.	10-15 days later.		
Grape.	Copper Sulphate.	Bordeaux.	Bordeaux.	Bordeaux.	Bordeaux.	Ammoniacal Copper Carbonate.
Mildew, rot, leaf-eating insects.	Before buds burst.	Paris Green.—When first leaves are half grown.	When fruit has set.	10-15 days later.	10-15 days later, if disease persists.	If disease persists.
Peach—Apricot.	Copper Sulphate.	Bordeaux.	Bordeaux.	Bordeaux.	Bordeaux.	Copper Carbonate.
Rot, leaf curl, curculio.	Before buds start.	3 lbs. copper sulphate, 3 lbs. lime, 50 gals. water. Just before blossoms open.	Paris Green.—Soon after fruit has set.	Paris Green.—8-12 days later.	Paris Green.—8-12 days later. If rot is prevalent.	10-15 days later, if rot is prevalent.
Pear.	Copper Sulphate.	Bordeaux.	Bordeaux.	Bordeaux.	Bordeaux.	
Scab, leaf blight, codling moth.	Before buds open.	Just before blossoms open.	Paris Green.—Soon after blossoms fall.	Paris Green.—10-12 days later.	10-15 days later.	
Plum.	Copper Sulphate.	Bordeaux.	Bordeaux.	Bordeaux.	Copper Carbonate	Copper Carbonate.
Rot, shot hole fungus, curculio.	Before buds open.	Paris Green.—Soon after blossoms have fallen.	Paris Green.—10-12 days later.	10-15 days later.	10-15 days later, if rot is prevalent.	10-20 days later, if rot is prevalent.

SPRAYING MIXTURES.

An extended series of spraying experiments were last year carried on by Prof. Craig, Dominion Horticulturist, in conjunction with the Ontario Fruit Growers' Association, the results of which were most gratifying. The above calendar, together with the following directions for preparing spraying mixtures, should be carefully preserved for future reference, as they embody the results of the investigations referred to:

Diluted Bordeaux Mixture.—The ingredients are copper sulphate, lime, and water, in the following proportions:

Copper sulphate	4 lbs.
Lime	4 lbs.
Water	50 gals., or 1 kerosene barrel.

To destroy leaf-eating insects add 4 ozs. of Paris green. For peaches use 3 lbs. each of copper sulphate and lime, and 3 ozs. of Paris green, on account of the tenderness of the foliage.

When a single barrelful of this is required, dissolve in the barrel 4 lbs. of copper sulphate (bluestone). Hot water facilitates the operation. To dissolve quickly, place the copper sulphate in a cotton bag or basket, and suspend this in the vessel containing the water, so that it is entirely immersed. Solution rapidly takes place. In another vessel slake 4 lbs. of fresh lime with as many gallons of water. If the lime, when slaked, is lumpy or granular, it should be strained through a fine sieve, or coarse sacking, into the barrel containing the copper sulphate now in solution; fill the barrel with water. It should be used soon after being prepared.

When a large amount of spraying is contemplated, it is a good plan to make up a stock solution separately, each, of lime and bluestone, which can be diluted as needed:—Dissolve 100 lbs. of copper sulphate in 50 gallons of water; two gallons, when dissolved, will contain 4 lbs. of the salt. In another barrel slake 100 lbs. of lime, and make up to a milk by adding 50 gallons of water: when well-stirred, two gallons should contain 4 lbs. of lime. When it is desired to make a barrel of Bordeaux Mixture, take two gallons of the stock solution of copper sulphate, and add the same quantity of the milk of lime; if the lime is of good quality it will be sufficient to neutralize it completely. If the lime is air-slaked or impure, the right quantity can be ascertained by applying the ferrocyanide of potassium test. If the lime is deficient a drop of the ferrocyanide of potassium (yellow prussiate of potash) added to the mixture will turn brown. Add lime water till the drop of ferrocyanide of potassium remains colorless.

Ammoniacal Copper Carbonate.—Copper carbonate, 5 ozs.; ammonia, 2 quarts; water, 50 gallons.

This is prepared by dissolving the copper carbonate in the ammonia, and diluting with water to 50 gallons. The concentrated solution should be poured into the water. Care should be taken to keep the ammonia in glass or stone jars, tightly corked.

This mixture is more expensive than the former, but is more easily applied, and may be used as a substitute, especially in the case of grapes, where late spraying is necessary, and when Bordeaux Mixture might, by adhering to the fruit, injure its sale.

Copper sulphate, 1 lb. to 25 gallons of water, is used for the first application only. It should never be applied after the buds burst, as it will injure the foliage.

Equipments for Spraying.—Where the area to be sprayed exceeds 15 acres, it will probably pay to buy a horse-power pump. For smaller areas, strong, barrel force pumps will answer all the requirements. The valves and inside working parts should be of brass, the metal chambers and all castings strong and heavy, and the packing of the most durable character. Pumps of this kind can be obtained from manufacturers whose advertisements appear in the FARMER'S ADVOCATE. Each pump should be supplied with two lines of hose, the length proportionate to the height of the trees, each hose fitted with a stop-cock.

The nozzles should be such as will apply the mixture in a fine, misty spray.

Raspberry Anthracnose—Experience in Its Treatment.

BY ELLIS F. AUGUSTINE.

This disease is rapidly spreading, and causing much damage in many berry-growing districts. Some growers have dug up and destroyed whole plantations in order to prevent its further spread. This is entirely unnecessary if the proper remedy for checking it be applied in time. The first symptom of the disease is the appearance on the young canes of small, white pits, surrounded with a dark-bluish circle. These soon enlarge and spread over the cane until it is sometimes entirely girdled with them. The following season, just before fruiting time, the foliage of both old and new canes becomes affected, and the bushes appear as though a fire had passed over them. Many of the canes dry up completely, while upon others the berries do not grow to more than half their natural size, and are dry and tasteless.

The first season of fruiting, the disease is scarcely perceptible; but the second, if unchecked, it causes much damage; and the third season often ruins the entire crop. It is more prevalent on wet, cold soils than on lands that are warm and rich.

A year ago last summer we had an acre of raspberries—mostly black caps—affected. Being then unacquainted with the disease, I forwarded a few specimens of the injured leaves to John Craig, Horticulturist, Experimental Farm, Ottawa, for inspection. He at once recognized it as anthracnose, and advised spraying with diluted bordeaux mixture immediately after harvesting the fruit, and again in the spring before the buds burst; to be followed by one or two later applications. Having no sprayer at that time, I neglected spraying in the fall; but in the spring I thoroughly sprayed the old plantation on the 26th April, and one acre of young plantation on 4th May. This was just before the buds began to burst. In each case it rained within 24 hours after spraying. The solution used was composed of four pounds copper sulphate, four pounds lime, and 50 gallons water. I found that by first filling the barrel half-full of water, then pouring in the copper sulphate and lime solutions, and then adding the remainder of the water, the mixture adhered much better to the foliage during

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Of cou America, little us transplant with the l at about object is to begin to h the north, a hot-bed, setting in in August of very po

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rain showers than when prepared in the way usually recommended, viz.: first pouring in the copper sulphate and lime solutions, and then filling the barrel. The second spraying was made on June 12th and 13th, just as the berries were beginning to form. One corner of the old plantation was then quite badly affected with the blight. I also sprayed three acres of young plantation on June 16th and 17th, which had not received first spraying. After last spraying, very little rain fell in many weeks.

Now, as to the results: In the corner of the old plantation, where the foliage was already affected, the disease was entirely checked, and none of the leaves of other bushes became affected, although some of the canes that were injured from the previous year dried up to a certain extent, and some of the fruit on those canes was not quite as large as it should have been. But, while the previous year many of the lateral branches did not grow to more than six or eight inches in length, this season many reached the enormous length of ten and twelve feet, and none are less than four feet. I also find in the plantations that received the first spraying, the canes are almost entirely free from symptoms of the disease, while in those that received only the last application there are still evidences of it. I would therefore recommend spraying, by all means, before the buds have burst.

Again, I find that the disease is much more difficult to eradicate when affecting the Shaffer's Colossal, a purple berry. But perhaps this is due to the foliage being so much more dense on this variety, thereby preventing the mixture from thoroughly reaching the canes. But in this variety the fruit does not appear to be injured as much by the disease as in the case of black caps.

In conclusion, I would say that while many persons find fault with the Experimental Stations, and consider them only a bill of expense, I feel confident if their teachings were more closely followed great benefits would result. I know that in my own special case their advice has been worth hundreds of dollars.

The Cauliflower.

BY FRANK GARDINER.
(Continued from page 93.)

The great enemy to the young plants is the flea-beetle. Where these are very destructive, some protection may be gained by growing the plants in beds raised a couple of feet above the level; while the grubs may be circumvented by repeatedly working the ground, applying a dressing of potash salts and enclosing the seed-bed with partly-sunken boards. The objection to the raised beds is the rapidity with which the soil dries out, requiring constant care in watering. Radishes are often sown with the cauliflower seeds, as the fleas prefer these and will confine their attacks to them, giving the cauliflower plants comparative immunity. Dust is also a "discourager," and fine road dust, lime, ashes and plaster are often sifted on the plants as a protection. An emulsion of fish-oil, and a decoction of tobacco, are also serviceable.

The cut-worm is another foe which must be combated. Generally the safest way to avoid loss is to trap the worms before the plants are set out in the field. This is done most expeditiously by a method recommended by the Entomologist of the National Department of Agriculture. He advises spraying a patch of young clover with Paris green. Cut it, divide in small bundles, and scatter over the field a day or two before the plants are to be set. The worms find the clover, eat of it, and it ends their career very satisfactorily.

Of course, in a paper which circulates all over America, like the FARMER'S ADVOCATE, it is of little use to give directions when to sow seed or transplant. The time in each locality will vary with the latitude. At the north plants are managed at about the same season as late cabbage. The object is to get the crop ready in October; it should begin to head in September. For an early crop, at the north, plants should be started in February, in a hot-bed, and set out the middle of April. Avoid setting in May, for early varieties set then will head in August, usually at a dry, hot period, and will be of very poor quality.

The early sorts, which usually have small heads, should be set in rows two feet apart, and three feet in the row; for the late, large-growing varieties, four feet by four is none too far apart, as cauliflower, like cabbage, is a gross feeder. Medium sized, or even small plants are preferable, as if too large, though more certain to live, they are apt to "button"—that is, form inferior, miniature heads very early. Set the plants just before or after a rain: if the skies are unpropitious and it is necessary to water, give no "heel-taps," but a good, thorough wetting. Setting the plants in shallow trenches, like celery, is advantageous, and if irrigation is practiced, a necessity. In early planting the ridges are a protection to the plants from wind and cold, and the ground is gradually leveled by after-culture.

A steady growth must be maintained, for if checked the result is disastrous, the plants heading at once, or failing to head at all. And culture is to be continued until the plants are nearly ready to head: then they must be undisturbed. Experience teaches when to stop, but usually should cease when the leaves begin to impede the work. Plenty of water is needed when heading begins: it is then that irrigation is practically useful, improving the crop in every respect. Possibly the fine crops of European growers are due to the practice of irrigation, made possible by the cheapness of labor. In this

country the crop is usually grown without, except in certain parts of the west, or near large cities, where an early crop will demand large prices. If watering is once begun, it must be continued, or "the last state is worse than the first."

Blanching is another essential. If the heads are left unprotected, they are yellow or brownish-yellow and strong-flavored, and quite unsalable. The blanching is usually done by lapping the leaves (somewhat in the fashion in which they grow) over the head, till well protected, and tucking the last leaf under the others to hold them all in place, or fastening with a thorn or tooth-pick. This work is done early in the season, and during the heat of the day, when the leaves are limp and easily handled without breaking. On a late crop, a leaf broken from the lower part of the plant is laid over the head, or the leaves are tied down with rye straw, serving the double purpose of protecting from frost as well as promoting growth of heads. Well-covered heads will endure six or eight degrees of frost without injury, and then go on and perfect themselves.

As the heads perfect, frequent cutting is necessary, especially in the early crops. Here, again, experience is the best guide. A mature head bulges its leaves out; the surfaces take on a grained appearance. If left too long they get loose and warty. They must be cut early in the morning, when crisp with coolness and dew; and careful handling is imperative, as a bruise soon turns black and the sale is spoiled. It is best to leave the leaves on until the heads are exposed in market. They are packed in barrel-crates and each head wrapped in white paper tucked between the leaves and the head. They pack best when a trifle wilted.

The Extra Early Dwarf Erfurt is the most popular variety grown, and is the parent of a great many other kinds differing slightly from it. The earliest varieties are now often grown in the north for a late crop, by sowing late, owing to their reliability in forming heads, and the less space required.

The cabbage maggot, which attacks the roots; the well-known cabbage worm, and a fungus disease known as stem rot, are all enemies of the cauliflower as well as the cabbage, and may be fought by the means employed to secure a cabbage crop. Somebody has called cauliflower "etherized cabbage"; Dr Samuel Johnson said the only flower he cared for was cauliflower; and as it is much less coarse and heavy, and much more easy of digestion, as well as more nutritious, than cabbage, perhaps the old doctor was right. At all events, the culture and consumption of the more delicate vegetable are constantly increasing, and good profits are often secured by the careful gardener.

APIARY.

Who Should Keep Bees?

BY JOHN MYERS.

An article on the above topic was brought to my mind by a question asked by one of my correspondents, as follows: "Having a few acres of land, situated in the suburbs of a thriving town, do you think I would be able to keep a few colonies of bees?" First and foremost, I think farmers ought to keep a few stocks of bees; enough to provide their families with one of nature's rarest delicacies—honey. But I see no reason why the larger number of farmers should not only keep enough hives to supply their own tables with honey, but enough to enable them to sell a quantity each season. It would be hard to find a farmer's wife that is not interested in buttermaking and keeping poultry, yet I guarantee, if you could get those same women interested in keeping a few hives of bees, they would make more money out of them in a season than they would out of eggs, if not of butter, and with not nearly the amount of work. It is surprising how little work is really required in bee-keeping, if you have the right kind of hives and implements. Of course, there can be any amount of time spent on them if the owner so desires, but if one wishes to do no more work than is really necessary (and which I think is the best method), the labor part is reduced to this: Look them all over in the spring, and see that they are in good condition; then when white clover commences to bloom, put on your honey boxes or upper stories. Have all swarms that issue. See that they have plenty of room to store honey. Take off honey when ready, and in fall prepare and pack for winter, or remove to a cellar. Now, you will see by the above that it takes really more work to care for one cow or twenty hens than it does to care for ten colonies of bees. They need no feeding or watering in the winter, or at any other time of the year, if the owner is not too greedy and does not take too much honey from them in the fall; therefore you see they are largely creatures that work for nothing and board themselves.

While farmers and those living in rural districts have a trifling advantage over those in cities and towns, still there are many of the latter class that could keep a limited number of stocks and add materially to their income. I know a gardener who keeps fifteen to twenty colonies, and sells his whole product on the market with his vegetables, and he says his honey pays him better than any other product. Why should not gardeners in every town in the Dominion go and do likewise? In our city we have a man who is a mail clerk on the train, and has to make his trip every other day the year

round, and yet he keeps one hundred colonies of bees, and has no other help than his wife, and her part of the work is to watch the bees and catch swarms on days when her husband is away on duty. This man has a peculiar swarm-catcher, and all his good wife has to do is to watch, and when she sees a swarm issuing, she picks up one of these catchers, run and places it in front of the hive from which the swarm is issuing, and the bees enter it, when she closes the lid and carries them into the cellar until the man comes home and hives them the next day.

I also know of some ministers who make quite a success of keeping bees. Laboring men, and men in nearly every station in life, can keep a few stocks as a hobby, and still provide plenty of that health-giving food—honey—for their families. Oh, but, says some one, you would not get me or my wife to go near a hive of bees; we would get stung to death. Well, my friends, there is no necessity of scarcely ever getting stung. I cannot in this article tell all about how to avoid being stung (in some future one I may do so), but it would be best for any person intending to commence keeping bees to procure a good book on the subject, which will give all the ins and outs of the business. In my next I will deal with some of the profits of bee-keeping.

Bees in Spring.

It is well to remove bees from the cellar as soon as there is any prospect for good flying weather. It is well, however, to provide ample protection from possible harm from cold by covering the quilt with several sheets of paper and a good warm cushion. The bees should not be handled nor the hives opened until the weather is moderately warm, when every colony should be inspected to see that they have sufficient stores. Stimulative feeding in spring is not recommended except when the stores are dangerously low.

VETERINARY.

Milk Fever vs. Milk Chill.

We had no intention to offend Mr. Donald Alexander when we penned the reply to his first letter on this subject. It was done with a sincere regard to the readers of this paper, as we considered that we were entitled to speak with some authority on the subject. It does not often fall to the lot of one man, outside of the veterinary profession, to see many cases of milk fever, or parturient apoplexy more properly named, and from that particular fact we ventured to suggest that the new name, "Milk Chill," was inaccurate and a false deduction. There is plenty of room for controversy of this subject without descending into exhibition of bad taste, etc. We welcome criticism, and will at all times answer to the best of our ability fair and honest objections. Now sir, if you will refer to our letter on the subject you will find this paragraph:

"It is a recognized fact that during pregnancy the nervous system is in a peculiarly excitable condition, easily disturbed, and prone to the influence of shock. Parturition is naturally accompanied with much pain and great expenditure of nerve force."

Again, we never mentioned anything about loss of blood at calving. What we did say was as follows:—"Calving may be said to be an exciting cause; yet, the labor and fatigue is not the exciting cause in these cases, for it is after the easy calving, when there has been little expenditure of vital force and no loss of blood."

First of all, to answer our friend, we wish that he had more knowledge of natural laws, so that he could better understand what is meant by vital force. Muscles contract as the result of nervous influence; here we get expenditure of blood, viz., vital force. Reading, writing, thinking, speaking, etc., wastes nervous force. Members of Parliament, orators and actors always experience great prostration and fatigue as the result of their labors. There has been great consumption of nervous force. Paralysis of nerves is always due to compression or pressure from exciting cause. Here we get the irritable, nervous individual, always in a fret, liable to excitement, easily disturbed, and prone to the influence of shock. We will try and illustrate this fact: When a strange hand is placed on our shoulders we experience a nervous shock; this is not called forth if the hand is a loving one—of our sweethearts or wives; there is no fear or revulsion of nervous influence; the shock is absent. When a cow is milked by a strange, unfamiliar hand, she will usually hold up her milk. Amongst men who have studied animal life, it is pretty well known that the cow has no power to retain her milk by voluntary muscular effort; it is simply the result of nervous shock, reacting on the blood pressure, causing the suppression of milk. After the lapse of a few minutes, this shock passes away, and the blood pressure is restored—the milk is again secreted. Again, it is very frequently seen that during milking the animal will give a throbe of pain, arch the back, evert the vagina as if to discharge a focus. Now, we say that this is again a manifest influence, expenditure of vital force from nervous shock. It is scarcely necessary for us to again speak of the congestion of the blood to the brain, the cold skin and extremities, the result of fever, or what is meant by inflammation. That ought to be very well known after the many articles on the subject.

DR. W. MOLE.

POULTRY.

The Ontario Agricultural College Poultry Building.

The accompanying illustrations represents different views of the main building of the new poultry department erected last autumn, and which has been inhabited but a few months; in fact, it is only during the last few weeks that the latest birds have been received. There are now in all some twenty-two different breeds represented, which struck the writer as rather more than was absolutely needed for practical instruction in poultry-keeping.

The building is situated a little distance to the south-east of the dairy building, on the south side of the road, which passes the College grounds. It stands about 150 feet from the travelled road. The yards, as shown in plan, run to the south-east, being parallel with the public road. The building sits upon a substantial stone foundation, well let into the ground. Across the building, beneath the divisions of the pens, a stone wall runs to the level of the floor, the space being well filled with sharp, gravelly sand, to prevent rats, weasels, etc., from getting at the fowls. Beneath the incubator room and office is a splendid stone cellar, with concrete floor, in which stove fuel, vegetables, etc., are kept; also a hot-water plant for heating the entire poultry house in the coldest weather. Where the words "wood" and "gravel" appear in the plan, they refer to the material of the floor. The yards are divided by woven wire. The extra yards take in several rows of apple trees, which will afford ample exercising accommodation for the liveliest of breeds. It is the intention to plant plum trees in the smaller yards to provide shade and obtain large crops of plums—barring accidents.

In line with No. 1 is house No. 2, separated only by a few yards. It is 15x100 feet, and 6 feet 6 inches at eaves. In the centre is a feed room 8x10 feet for storing grain. There is also a place built for a stove, which gives enough heat to keep the entire building up to a desirable temperature in the cold weather. The balance of the house is divided into eight pens, with yard.

The buildings were constructed as follows:—After the framework was up it was boarded on the outside of studs with inch boards, upon which tar paper was spread, followed by dressed inch lumber, battened and painted. Inside of the uprights the whole building is lined and ceiled with tongued and grooved lumber, leaving a 1/2-inch air space. The nests are made as follows:—Two feet four inches long, twelve inches wide, fourteen inches high at lowest part, sloping up to a height of about two feet at back; each nest is divided into two compartments, and round holes are cut in each to permit the hens to go in and out. The nests sit against the wall, and are movable and easily cleaned. Feed troughs for soft food are three inches wide and three deep, and are hung upon nails against the partition, so that the fowls cannot get their feet into them.

We might say that the plans and specifications for these buildings were submitted to several of the most extensive and successful poultry breeders of the country for their approval before being put into execution. Their erection was looked after personally by President Mills, who has succeeded in perfecting an economical, convenient, and healthful poultry house. As our readers are aware, Mr. L. G. Jarvis, one of the best-known poultry experts in America, is in charge of this new and important department.

THANKS.

D. I. MCINTYRE: "Accept my thanks for your notice of my letter in a recent issue of the ADVOCATE. The treatment has been very successful. The lump almost all gone; it broke on outside, and I now cause pus to be squeezed out and wound cleansed by injections of a solution of sulphate of copper and carbolic acid in soft water. The animal is quite healthy, the skin quite smooth, and he has fully kept up with the others."

QUESTIONS AND ANSWERS.

[In order to make this department as useful as possible, parties enclosing stamped envelopes will receive answers by mail, in cases where early replies appear to us advisable; all enquiries, when of general interest, will be published in next succeeding issue, if received at this office in sufficient time. Enquirers must in all cases attach their name and address in full, though not necessarily for publication.]

Veterinary.

ABORTION IN EWES.

SUBSCRIBER, Carman, Man.:—"I have a number of ewes which have lambed before their time, and when they came some were decayed and some in their natural state; we are feeding wheat sheaves and hay. Could you kindly give the cause why one should be decayed and the other not; I have a boy attending to them; would it be abuse that is the cause?"

[There are several causes that would be productive of the conditions you have mentioned, viz.: Filth, bad ventilation, exposure to severe cold, a debilitated state of the system, consequent upon scanty and improper food; and, on the other hand, a too plethoric condition brought on by an over-rich and stimulative diet; close breeding, external injuries, such as kicks, etc. I may add that the cause is sometimes so obscure that it is past finding out.]

W. A. DUNBAR, V. S., Winnipeg.]

[We have frequently pointed out the various conditions met with as a result of the retention of the placental membranes; there is no danger as long as decomposition does not take place. In this case we have a focus of inflammation from which the infective substances are derived; the absorption and general dissemination of the material into the circulation, and the disease known as pyæmia or blood poisoning. When this material is sufficient to cause the active inflammatory process of considerable extent, the process is followed by the general disorder of the vital functions, the most prominent symptom of which is the elevation of temperature, or, as you say, on the 27th February she began to scour, with temperature up to 104.4 Fahrenheit. This general disturbance of the vital functions ultimately terminates in death of the animal. The diarrhoea is simply an effort of nature to get rid of the offending material. The cough, indigestion, depraved appetite, are only symptoms of the disease. The large lump in the centre of udder will be due to an abscess that has undergone the changes of an abscess into organized matter, and then known as a tumor. There is no evidence of tuberculosis in this case, and, therefore, the treatment should be directed towards producing a better state of health. Yet we are of opinion that it would be better to destroy the animal than spend any amount on the treatment. However, if you are desirous of trying what can be done, the treatment indicated is to restore the vital function to a natural condition. A powder such as the following, given every day, would be of service: Quinine, 10 grains; aloes, barb., 1 drachm; nitrate of potash, 1/2 ounce; gentian, 1/2 ounce; ginger, 1/2 ounce; capsicum, 1/2 drachm. To be administered in a quart of warm beer or gruel. DR. WM. MOLE.]

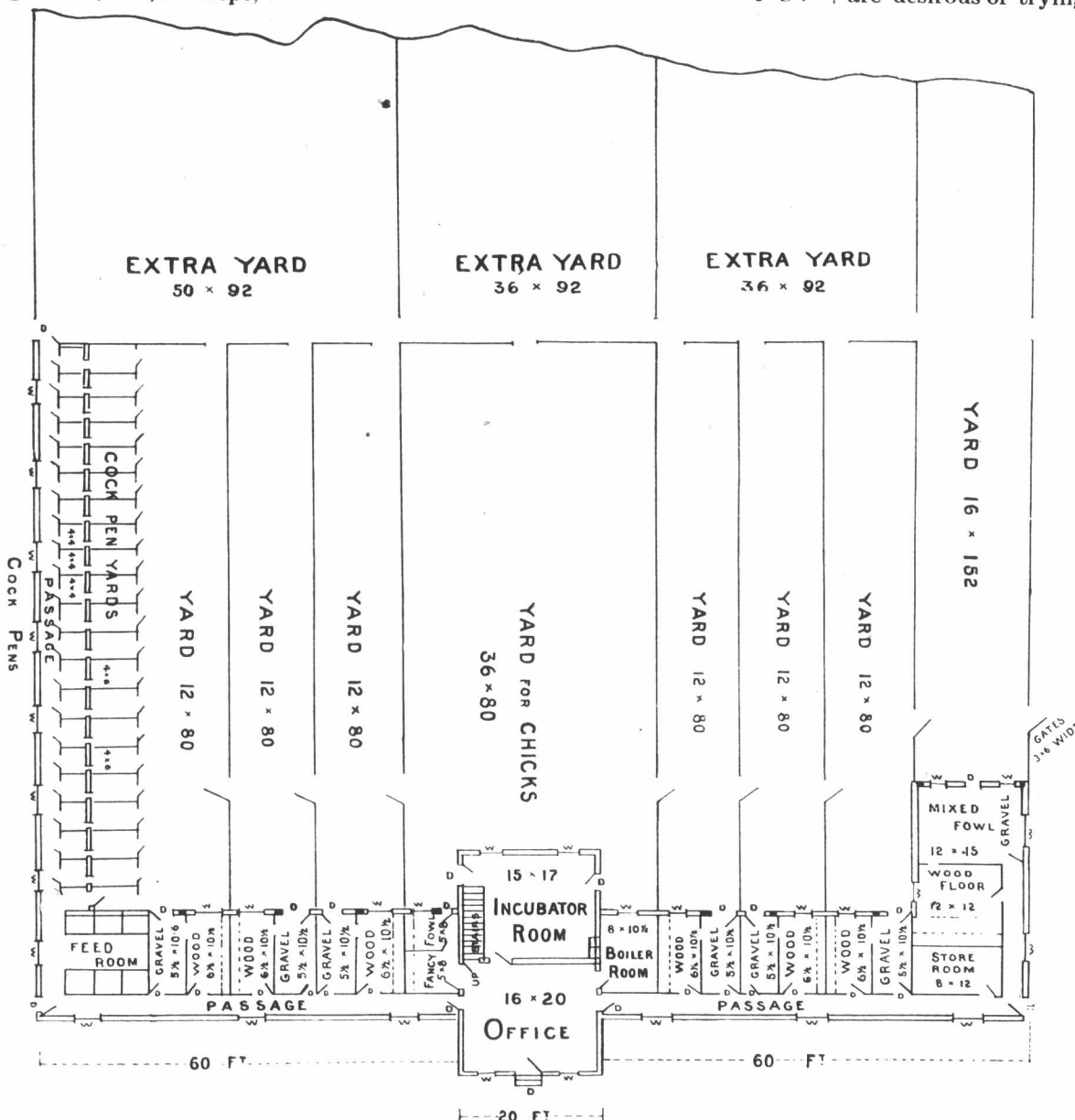
DISORDERED STOMACH.
E. C. MOSS:—"I have some August pigs which did very well for about three months; since that time they have not gained much. I find that they have black teeth. Will you kindly tell me, through your valuable paper, if black teeth will hinder their growth, or shall I remove them?"

[When pigs take sick you can do very little for them in the shape of doctoring. Black-tooth is a symptom of disordered digestion, due, in many cases, to over-stimulating food and too little exercise. Some breeders are particularly fortunate in their system of management, and are rarely troubled with this complaint. They contrive to give a variety of feeding materials, and so keep their animals always growing and in good condition. The complaint known as black-tooth is not a disease, but a symptom of disordered stomach, and from this cause prevents the proper assimilation of the food, which causes acidity of the stomach, and the discoloration of the teeth is followed by the deposition of tartar. When the disease attacks young animals it is usually fatal. For treatment, alter the method of feeding entirely; give sloppy diet of bran and oatmeal shorts, with flaxseed well boiled, or linseed cake. Lime water or a small piece of lime should be placed in the slop. This will always produce good results. Ashes, salt, and bone-meal should be placed within reach of the pigs at all times. If the bowels are costive, give a purgative mixed in their food as follows: Powdered jalap, 1 drachm; flower of sulphur, 1 drachm. This is a dose for small size pigs. DR. WM. MOLE.]

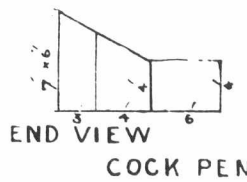
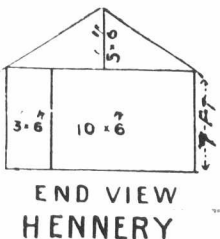
SWOLLEN LEG.

SUBSCRIBER, Rosburn, Man.:—"My mare, four years old, hind leg swells whilst standing in stable; seems to go down quite a bit when she has been worked for a little while; swells from knee joint down. What will cure this trouble?"

[The swollen condition of the leg may be the result of either external or internal local irritation, or it may proceed from constitutional causes. If the mare is not pregnant, give the following dose of purgative medicines: Barbadoes aloes, seven drachms; calamel, one drachm; ground ginger, two drachms; soap or syrup sufficient to form a ball. Previous to administering the ball, prepare the animal by feeding exclusively on small bran mash for at least sixteen hours, and give no hay during the operation of the physic. After this give for ten days, morning and evening, in food: Iodide of potassium, one drachm. Apply to the leg.



GROUND PLAN OF No. 1 POULTRY HOUSE, O. A. C., GUELPH.



RETENTION OF PLACENTA CAUSING PYÆMIA.

W. B. THOMPSON: "I have a Jersey cow four years old; last March she dropped a healthy calf; a few days later I noticed a brown discharge from her vagina, which afterwards became white in color. In September she became very stupid and swelled, the udder, teats, and vagina turned black and purple; from this she recovered. She has a cough more on some days than others. Had her tested for tuberculosis with tuberculin, and she proved to be sound; there was no reaction. In February of this year she began to scour, and continues so till the present time. She will lick mud walls and dirt. She has also a large lump in centre of udder and under the tail—very hard. 1. Had I better test her again for tuberculosis? 2. What will I do for lump? 3. Can cough be cured? 4. What is wrong with stomach?"

morning and evening, by downward friction with the hands, the following lotion: Acetate of lead, one ounce; tincture of arsenic and camphor, of each two ounces; alcohol, four ounces; water, one pint. Apply a flannel bandage during the night. Give moderate exercise daily. W. A. DUNBAR, V. S.]

WORMS IN SWINE.

JAS. BARBOUR, Balmoral, Man.:—"Can you give me a remedy for worms in pigs? Our pigs are troubled with worms, occasionally passing very large ones, from five to six inches long. I believe this must be the cause of their not developing as they should. They do not seem to thrive well, and I know of no other cause."

[Give twice a week to pigs one year old and upward, in food, a teaspoonful of powdered charcoal, and the same quantity of powdered arica nut. To younger animals give proportionately less. W. A. DUNBAR, V. S.]

WART.

SUBSCRIBER, J. T.:—"I have a colt, three years old; has a big lump on hind fetlock, which I call a wart; first noticed it eighteen months ago; was then about the size of a coat-button. Some time after I took the colt to a V. S., who pronounced it a wart, and cut it off, then burnt the place with a hot iron, and said that would be the last of it. In about two months it started to grow again, faster and bigger than ever, and I had the operation repeated, and some light-colored powder given me to put on the sore when the scab from the burning came off. This I applied three times, and though it made a blister and raised a scab, it did not prevent the wart from growing again. It is now as big as a dessert plate, and about 1 1/2 inches thick. It bleeds when cut or scratched. The colt gives a little lame on that leg sometimes. Can his leg be cured; if so, by what means?"

[Any qualified veterinary surgeon should be able to remove and prevent a second growth of the wart; but being over a joint, I would not advise you to undertake the treatment yourself, as it has to be closely watched by an experienced person. The treatment after the wart has been removed and the roots cauterized is the judicious application of arsenicum alba. W. A. DUNBAR, V. S.]

Miscellaneous.

MAPLE SYRUP STANDARD.

FREEMAN GREEN, Kent Co.:—"Is there a standard weight for a gallon of maple syrup? Please answer through the ADVOCATE."

[No. The Imperial gallon is the only lawful measure. If the saccharometer is used in making the syrup, the proper density can easily be obtained. This instrument can be bought at any drug store for about sixty or seventy cents.]

CRANBERRIES.

Y. Z.:—"1. Are there two sorts of cranberries, or is the cultivated sort simply an improved condition of the wild, by cultivation, etc.? 2. Where can I get literature on cranberry culture? 3. Has stack ensilage, outdoors (no silo), been tried with success in Canadian climate? 4. Will watercress succeed in Nova Scotia?"

[1. There are several sorts of cultivated cranberries, three of which are the Bell, the Bugle, and the Cherry, all of which are the results of improvement of wild sorts by selection and cultivation. 2. In Massachusetts Hatch Bulletin, No. 19, which can in all probability be had by writing the Secretary at Amherst, Mass., Agricultural College. There is also a little work by Joseph J. White, published by the Orange Judd Co., 751 Broadway, N. Y., which contains some reliable information on the subject of cranberry growing. 3. Not to our knowledge. 4. Yes.]

SELF-SUCKING DEVICES—CONTROLLING SEX.

E. C. T.:—"In reply to Mr. Donald Frazer, of Emerson, Man., I must thank him for his suggestion re sucking cow, but I must say that I have tried the flap he speaks of, and have found it to work very well for weaning calves, also for the cow herself until she got used to it, when she would (as you say in your note) 'hold her head sideways and suck away quite contentedly.' Am trying to work out a half-circular arrangement on the same principle; cover it with a thin coat of leather, and have nails sticking out. Should that succeed, I will let your readers know."

"Is there any foundation for the idea I have sometimes heard, viz.: That a cow served at the beginning of her period will produce a bull calf, and vice versa, or is it a fallacy?"

wait until the land becomes dry and firm? Is sod suitable for bean growing? What is best to plow under for fall wheat?"

[It is the consensus of opinion among the best farmers that summer-fallowing is an expensive and unprofitable method of cleaning land. If the manure referred to is fresh, and for this field it would be well to haul it out at once and spread it, provided the field is fairly level and not already too open or porous; in such a case it would be better to wait until the manure is better rotted, and the danger of being washed out by spring freshets is past. To plant some early variety of beans and cultivate the crop well should put the ground in good shape for fall wheat. Beans are not particularly hard on land. If a yellow-podded sort is wanted, the Golden Wax, White Wax or Butter, or Wardwell's Kidney Wax, are all good. Among green-podded varieties, Early Valentyne, Early Six Weeks, and Burpee's Bush Lima, are all standard sorts. If the field needs cultivation, to grow peas would leave the land too dirty. We cannot speak positively re growing beans on sod, but see no reason why it should not answer fairly well, if the season is not too dry. We would ask bean growers to give us their experience. For ploughing under, some of the legumes should be used if practicable. Clover is preferred by many. If it is for next fall's wheat sowing, peas or vetches will do well, but are expensive. Buckwheat is used extensively in some localities, and has the effect of cleaning the land well, and rendering its mechanical condition very suitable for any crop. As it is not a nitrogen gatherer, as the legumes, it does not add much fertility to the soil.]

MARL AS A FERTILIZER.

C. G. J.:—"Will you or some subscriber please inform me of the best method of using marl as a fertilizer. If used as an absorbent in stables, would the lime in it liberate the ammonia in the manure? What is its value per ton (sun dried). It contains about 90 per cent. lime and a certain amount of phosphoric acid. Is it of recent formation, how formed, and where found in Ontario?"

[Marl occurs in many parts of Ontario. It frequently occurs in beds or deposits in swamps and low land. These deposits are sometimes quite near the surface; at other times they are found underlying beds of muck or humus. The marl deposits result from the evaporation of spring-water containing carbonate of lime in solution, which water fills some swamps and low lands. In such swamps and low places, while the water evaporates, the marl deposits deepen. A low-lying bed of marl on the Ontario Experimental Farm contains 42% of carbonate of lime. Other deposits in Ontario have been found to contain as high as 92% of carbonate. These deposits represent pretty pure marls. Marl is a lime manure, but not so powerful in its action upon vegetable matter as burned lime. It may be used on soils naturally destitute of lime, as many clays, which can scarcely receive too much. Sixty to seventy bushels per acre may be applied to drained swamp muck to render its nitrogen available. On light soils, deficient in lime, twenty-five bushels per acre are sufficient to supply lime to the crops. Containing no sulphate, marl cannot be used as an absorbent in stables. It should not be used with manure, because lime in the form of a carbonate liberates ammonia. While there is no market value for marl in Ontario, your marl, as a fertilizer, is worth about \$3.00 per ton. A. E. SHUTTLEWORTH, Professor of Chemistry, O. A. C., Guelph.]

PERMANENT PASTURE—RAPE—LEGAL.

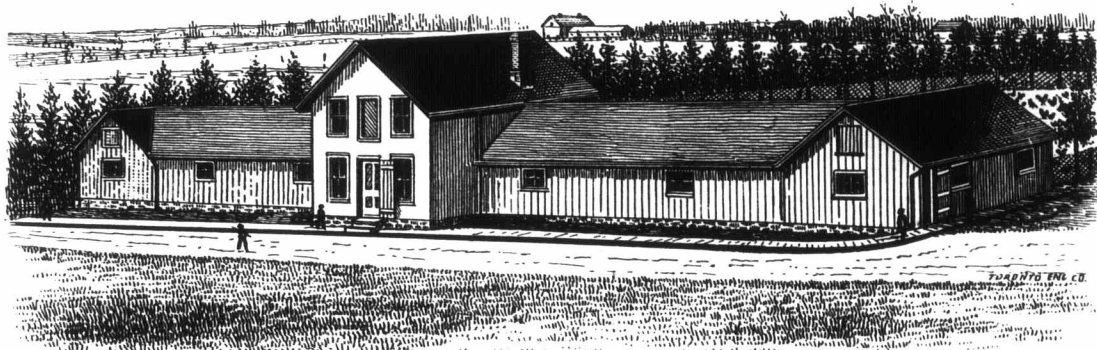
J. J., Boston, Ont.:—"1. Would you recommend permanent pasture for creek-bottom land, which flows spring and fall? 2. Would rape be profitable to sow to plough under for wheat on sandy loam; if not, what would you recommend? 3. In the case of a will, is it necessary to will some to each of the heirs to make the will legal; if so, what would be the least amount?"

[1. Yes. 2. Rape or buckwheat are about equally profitable to plough down. When practicable, it is preferable to sow a leguminous crop, as clover, peas, or tares. Of these, clover is most preferable. 3. No.]

BUCKWHEAT AS GREEN MANURE.

J. D., Centralia:—"1. Is it a good plan to sow buckwheat on a summer-fallow to be ploughed under? 2. If so, what sort, how much per acre, when should it be sown, and when ploughed under? 3. Have the American Harrow Co. any agents in Canada?"

[Wherever buckwheat has been sown for green manure the practice is in high favor. It soon covers the ground, thus keeping the soil moist and open. It has a splendid effect in smothering weeds, and when ploughed down puts the land in fine mechanical condition, due, no doubt, to the rapid decomposition of the sappy stalks and leaves. 2. There is very little difference which variety is used; the common gray produces a luxuriant top. Four to five pecks per acre is quite enough. It may be sown any time after the soil warms up in spring. Ploughing under should commence so as to have all down before the bloom begins to fade. Care should be taken to have all blossoms covered, else seed will mature and give trouble the following season in grain. It is well to run the roller over the crop in the direction in which the ploughs will follow, also to use a chain on the plough to drag the last vestage under. 3. Yes.]



NO. 1 POULTRY HOUSE, O. A. C., GUELPH.

WHITE SCOUR IN CALVES.

CONSTANT READER:—"I have a calf about four months old, which has at intervals of three or four days and for some days at a time been scouring ever since it has been born. If you would through your valuable veterinary column tell me the cause, and give me a preventive, you would much oblige."

[Many think that the only way to fatten calves is to give them plenty of milk. If a little stale, will not matter. On the other hand, there are careful men who want to know the reason why "scour" always attack young calves. Perhaps there are few diseases, the cause of which is overlooked so often, as diarrhoea in sucking calves. This disease usually occurs in rearing calves taken from their natural food—the first milk of the newly-calved cow. This contains a fatty matter, known as colostrum, which acts as a natural purgative in cleansing out the meconium or first secretion of the newly-born calf; therefore, constipation is the first symptom. The fourth stomach of the calf is called the rennet, and secretes a material which coagulates the milk. The curd or cheesy part remains as a foreign agent in the intestines, and the fluid part or whey is thrown off in the form of white semi-fluid faeces. The acid secretion of the intestines once having been set up in the intestines, it becomes a difficult matter to restore its normal condition, as each successive supply of milk coagulates and acts as a fresh irritant. Prevent by allowing the newly-born calf to take the first three days' milk from its mother, and should the disease be present, try to restore as soon as possible the natural condition. The food must be looked to, and the writer finds the best method, when once the disease is established, to take a way half the quantity of milk, and substituting the same quantity of linseed gruel, then adding a wine-glassful of lime water to every pailful of food. To restore the natural secretion of the intestines, an antacid and carminative may be given. Carbonate of potash, 1 drachm; powdered rhubarb, 1 drachm; given with a little peppermint water daily. DR. WM. MOLE.]

[This and many plans have been tried for controlling the sex of the offspring of our domestic animals, but none have proved uniformly successful as far as we are aware.—ED.]

A QUERY IN SCHOOL LAW.

D. C., Kitley Township:—"I own one hundred acres of land in S. S. No. 6, Township of Kitley (on which are placed my buildings), and twenty acres in S. S. No. 3, Township of Kitley. Last year the trustees of S. S. No. 3 made me pay for one scholar I sent to that school as an income scholar. Can they do so? That part of my land which is in S. S. No. 6 is assessed for \$2,800, and what is in S. S. No. 3 for \$200. How is the average per scholar made up from the school taxes; I paid in both?"

[The School Act of 1891 abolished the right of children of non-resident ratepayers to force admission into the school of the section in which they pay rates, but do not reside, unless such residence is nearer the latter school than their own. The law reads: "The parents or guardians of such non-resident children shall pay . . . such fees monthly as may be mutually agreed upon, provided such fees, together with the taxes paid . . . do not exceed the average cost of instruction of the pupils of such school." The average cost is found by dividing the number of children in attendance for the preceding year into the total cost of the school for the same year. It would seem fair in such estimate to except any outlay on capital account.]

BEAN GROWING, ETC.

W. H. STEWART, Tintern:—"Six acres on which I had oats last year, I have thought of summer-fallowing the coming summer. Would it not pay me better to plant with beans, so that I could cultivate the ground well, and have the bean crop removed in time to sow fall wheat? In such a case, what kind of beans should I plant? Do beans take much out of the soil? Would it pay me better to sow peas, as they need no cultivation? Is it better to draw manure out while the ground is frozen, or

"The Welcome Home."

BY BENJAMIN VAUTIER.

Vautier is one of the most popular of the Swiss painters. Born at Morges, in 1830, his education makes him a disciple of the Dusseldorf school, his instructor having been Robert Jordan. His admirable scenes of Swiss and German peasant-life have rendered him a welcome member of the academies of Berlin, Munich, Antwerp, and Amsterdam. "The scenes which he places before us," says a German critic of Vautier, "are never superficially treated. He never expects us to be satisfied with the costumes in place of the characters of the people he represents. On the contrary, his figures, in their faces and in every line of detail, express with marked force their peculiar individualities."

In the present picture, amid a beautiful scene of chalets and blue mountains, a young bride is brought home by the groom to his father's house. The old man totters down the steep external staircase to meet her. The mother-in-law, no harsh caretaker in this instance at least, is the first to smile upon and embrace her; her new sisters run from the fountain to greet, to welcome, to admire her. The new auspices are favorable indeed for this gentle but sturdy-looking girl, who brings into her lover's home her costume of another canton, her long braids of silken hair, and her engaging blushes. We look upon this picture with as much confidence in its facts as if we saw the scene from a carriage-window in the "beautiful Pays de Vaud." Here are no impossible beauties, no studio models in a costume strange to them. Art is here a photographer, introducing us to the real aspect of life itself. We cannot but feel a reverence for a painter who observes so closely and reports so truthfully.

A few, though not many, of Vautier's highly popular pictures have found their way to America. This, until lately belonging to the celebrated collection of Mr. G. I. Seney, is the most important.

My correspondent, "S," of Hamilton, sends me a couple of good stories, which she tells me are taken by her from the London Gentlewoman. The first is about a Protestant magistrate who once had a little waif of an Irish boy brought before him for some trifling misdemeanor. Wishing to ascertain how much the child comprehended of his duty to God and his neighbors, he asked him if he could say his prayers. The boy promptly repeated the Lord's Prayer, and further volunteered that he could say the "Hail Mary." The magistrate testily replied that he did not want to hear that, but requested him to repeat the Creed. The child, much frightened, began to do so, but when he came to the clause, "Born of the Virgin Mary," he stopped short, and anxiously said, "Please, yer Worship, she's turned up again, and what am I to do?"

The second story which "S" sends tells of a tourist who was being driven over a part of the country in Ireland where his infernal majesty appeared to have given his name to all the objects of interest in the locality, for there was the Devil's Bridge, the Devil's Cauldron, the Devil's Glen, etc. Said the traveller: "The devil seems to be the greatest landowner in these parts!" "Ah! sure, your Honor," replied the jarvey, "that is so, but he lives in England. I think he's what they call an absentee landlord in Ireland."

"Into the Light."

"Where are the Snowdrops?" said the Sun.
"Dead!" said the Frost:
"Buried and lost! Buried and lost!—every one!"

"A foolish answer," said the Sun;
"They did not die:
Asleep they lie—every one, every one!"

"And I will wake them—I, the Sun—
Into the light;
All clad in white—every one, every one!"

—A. Matheson.

"VANITY."—No, I should not advise you to cut your eyelashes to promote their growth; you might do more harm than good. A very small portion of olive oil rubbed well on the lids at the roots of the lashes every night will in a short time make them grow considerably. Care must be taken, however, to let none of the oil enter the eye. M. M.

THE CHILDREN'S CORNER.

All communications to be accompanied by the name, age and address of the writer.
A prize will be given in July for the best short story or letter. The writer must be under age. All communications should be accompanied by the name, age and address of the writer, and addressed to "Cousin Dorothy," FARMER'S ADVOCATE, London, Ont.

The first child to occupy the "Corner" is Laura Wallace, from whom I have received the following nice little letter:

DEAR COUSIN DOROTHY:—

I'ma going to write A very little letter. I'm a little girl eight years old this is my first letter. I have one brother ten years old his name is Clarence and I have two little sisters. Lillian she is seven and Cora is one year and six months she is just beging to talk we have lots of fun with her. We live on a farm my Papa takes the FARMER'S ADVOCATE, we like it very much: Last summer was my first summer at school we cannot go in the winter, but I study at home I hope you will think my letter worth printing Ima yours sincerely

Laura M. Wallace.

Well done! Laura. I should like to peep in at you as you play with your dear little sisters. Don't spoil your big brother, although, of course, you must be very fond of him, having only one. What pretty names you all have. Have any of you children heard of the ancient war-god, Thor? Thursday, you know, was really "Thor's day," so you ought to know something about him, as you mention his name so often. There are a great many legends about him; one is called

Thor Among the Giants.

Once upon a time Thor planned a visit to Giantland, taking with him the god Loki, who was as clever as he was wicked. The first evening they sought shelter in a peasant's cottage, and next morning his son, Thialfi, accompanied them as a

the little chamber where he had thought himself tolerably safe now covered the giant's thumb. When they halted for the night Skrymir flung himself down to sleep, first tossing the wallet to his companions and bidding them sup. This they were willing enough to do, being very hungry, but even the strong Thor was unable to untie the fastenings. Then, rising in his anger, he hurled his mallet at the sleeping giant. It fell upon his skull with frightful force and then returned obediently to its master's hand, but Skrymir only turned lazily, murmuring, "A leaf must have fallen on my face and waked me;" then his loud snoring again filled the forest. Thor rose stealthily, grasping with both hands his magic mallet, and hurled it with deadly force, exulting as he saw it sink into his opponent's skull; but still Skrymir only drowsily stirred, saying, "Was it a leaf or an acorn that fell on my brow?" A third time the mallet descended with deadly aim, penetrating the giant's jaw, who sat up, with a yawn, saying, "There is no rest to be had under this tree, what with falling leaves and twigs." Then he shouldered his wallet, and, striding into the forest, was soon out of sight, and I never heard that Thor had any wish to meet him again. Towards noon the gods reached the giant city of Utgard. Its towers and battlements rose to the clouds. The great gates were unguarded, but locked and barred, and they could not open them; but the iron stanchions, placed by giant hands, were wide enough to let Thor and his companions creep through between them. Entering the palace, they found the giant king, who smiled down amusedly on the frightened gods, saying, contemptuously, "So this is Thor, the far-famed war-god—this slight stripping whom I see before me? What proof of valor art thou prepared to give?—for know that by this city's laws none may remain here who cannot by some feat prove his superiority over other men?"

It is Thor who is addressed, but Loki, anxious to distinguish himself, is quick to strike in: "I can eat more, and that faster, than any giant among thy retainers," he cried, boasting.

"Thy challenge is accepted," replied the king, beckoning to one of his courtiers.

Then a great dish of meat was placed on the floor; the giant and god sat at either end, while the company gathered round to watch the contest. Loki did his best, but when the dish was empty, a pile of bones was found at his side, while the giant had eaten bones and flesh alike; and at last, to place his victory beyond dispute, he lifted the empty trencher and swallowed it too. Thor still hung back, and the young peasant, Thialfi, next stepped forward to show his prowess. Of all the youths, far and near, round his father's home, he had always been reckoned the fleet-

est of foot. In the matter of leaping, wrestling or running, none dared to enter the list against him. The peasant lad confidently challenged any whom the king might choose to run a race with him. Then all the company adjourned to a level piece of ground to witness the contest. A young giant was found ready to accept the challenge. The signal being given, the competitors started; but before poor Thialfi had run more than a yard or two, the young giant had reached the winning-post, and came back with a laugh, to greet his opponent, who had to acknowledge himself vanquished. It is now Thor's turn to distinguish himself. Remembering how often he had drained the mead-cup in Odin's halls, he proposes a drinking match. So they return to the palace; the king's cup-bearer brings the royal drinking-horn, filled with a brimming draught.

"It is a goodly vessel," thinks Thor, "but my thirst is great," and with no unwilling fingers he lifts it to his lips and drinks long and deep. But as he ceases, thinking to have nearly emptied the horn, what is his surprise to find it apparently as full as ever.

Angry at the laughter caused by his failure, he tries again, and yet again, to empty the cup. This time the liquor is surely at a lower level, but the horn is still far from empty.

(TO BE CONTINUED.)

CHOCOLATE PUDDING.

Make a cornstarch pudding with a quart of milk, three tablespoonfuls of cornstarch and three tablespoonfuls sugar. When done, remove half, flavor to taste; to that remaining add an egg beaten light and two ounces of vanilla chocolate; put into a mold alternately dark and light. Serve with cream.



"THE WELCOME HOME."

servant. All that day was spent in a fruitless search for adventures. The giants, if there were any, made no sign. Towards evening, however, they came suddenly on a wonderful palace in the middle of the forest. This mansion had a marvelously wide door which led into a vast hall. This hall, with another much smaller one, was the only room in the building. Finding it empty, the travellers took possession and were soon fast asleep. About midnight a great noise shook the building and woke the sleepers. Thor, undaunted, buckled on his belt and guarded the door for the rest of the night. Loki, having a bad conscience, was terribly frightened, and crept into the little room, where he lay trembling until dawn. At the first streak of daylight Thor went out to seek the cause of disturbance, and found it a short distance from their place of shelter. There, at his feet, lay a huge, sleeping figure,—a giant larger than any he had ever dreamed of meeting,—snoring loudly enough to account for all the noises of the night. Here was an adventure at last, but for some mysterious reason the war-god's strength deserted him; his fingers failed to grasp the mighty hammer; and when the giant rose, stretching himself, and yawning, as he towered high above him, the only question he could think of was the very tame one—"What is thy name?"

"Skrymir," answered the giant, in a voice of thunder, looking down on the pigmy god, "and thine I need not ask, for thou art the god, Thor."

The strange companions then breakfasted together, Skrymir putting the remains of the meal into his wallet, which he slung on his shoulder. As they were ready to start, the giant looked around for his glove, which, to their surprise, the gods discovered to have been their place of shelter during the night. Loki perceiving with horror that

THE QUIET HOUR.

Good Friday.

The following verses were suggested by an incident which happened in New York one Good Friday. Surely, if the whole nation keeps that day as a holiday, in memory of Christ's death, all who profess to be His followers, however much they may differ on other points, should try to make it a holy day also.

- 'The shadow of Good Friday had returned, The congregations met with solemn awe, And hearts of penitents within them burned, As Calvary's sacrifice, by faith, they saw.
'Between the porch and altar, 'as of yore, Both priest and people knelt and wept' in prayer. Silence and hymn and Miserere bore Their burdens to the Lord who met them there.
'Whilst to and fro the crowd of merchants sped, And all day long the busy markets trod, And weary workers, struggling for their bread, Could find small respite to draw near to God.
'Some few brave women, toiling all the day, While countless humming wheels kept whir and din, Thrilled with the love that from the Cross bore sway, Burned in their hearts to cast their care on Him.
'Come noon; and one among them gave the word, 'Through the 'Three Hours' the Church sad vigil keeps, Let us, too, join the servants of our Lord, With prayerful, loving hearts, and silent lips.'
'Then through the crowded room the whisper went, 'The girls are keeping service,—something new! Some raised a scoff, some were indifferent, But some were touched in heart, and joined the few.
'They hear outside how the loud traffic rolls, The whirling wheels all down the room they see, But not a word they say, these faithful souls, Their hearts are far away on Calvary.
'Thus Christ's Church, here on earth yet militant, Bids all her members now join hand in hand; His love unites all voices dissonant, Pledge of full union in the far-off land.
'No union stronger—sure to faithful eyes— Than that which quickens mutual faith and love In those who, forced to serve the world's emprise, In heart are lifted to the things above.
'Spirit of Purity, of Strength, of Life! Whom He who loved us to the death imparts, Give us an Easter boon, the end of strife, Tender, compassionate, forgiving hearts.'

[Selected].

A Corn of Wheat.

The very first seed that germinated on our earth was a mute prophecy of the Lamb slain from the foundation of the world. "Verily, verily, I say unto you, except a corn of wheat fall into the ground and die, it abideth alone; but if it die, it bringeth forth much fruit." A corn of wheat is beautiful and complete in itself. It is full of latent life; it contains the germ of countless harvests. But it is hard and narrow and isolated. How, then, are its dormant capabilities to be quickened, its possibilities of unknown good to become actualities? Clearly, not by keeping it as it is. In its present state "it abideth alone." But if sown in the field it softens and expands. It seems to die, but this apparent death is, in reality, more abundant life. Its burial-place becomes the scene of a wonderful resurrection. The spark of vitality has been kindled by the very elements that seemed to work its destruction. The seed that has been sacrificed in the sowing comes again in the harvest, as the sum and organization of the very forces that had laid it aside. And in the mirror of that familiar but mysterious process of nature, the Lord Jesus saw a beautiful picture of his own atoning death, and the great results that should spring from it. He was the life of the world, but He could only reach and benefit the world by His death. It was needful for the fruitfulness of the dead world that the Divine Seed should be put into the ground, in the new sepulchre in the garden. And what a wonderful, world-wide, time-long harvest has sprung from that grave, the hiding-place of God's power, where, by dying, death was destroyed, and life and immortality brought to light! The harvest that has grown from it is everywhere visible. It is covering larger and larger spaces of the earth every day; and all nations are destined to eat of its fruit, know its saving health, and rejoice with the joy of harvest. Thus Jesus lost His own life, but He found it again in the life of others to whom He had imparted life. His personality became enlarged and increased by that very self-sacrifice which seemed at the time to have destroyed it. During His lifetime He had little or no success, and His death itself was the measure of the unbelief of the world in Him, and the failure of His efforts. But after His death men in larger and still larger numbers believed on Him as the Saviour of the world. Seed-time and harvest is a parable, from beginning to end, of that truth which seems so strange and incomprehensible, that death and increase go together—that the growth of every germ in nature, and in human life, must be in darkness and suffering. "He that loveth His life shall lose it; but he that hateth his life shall keep it unto life eternal." It is only in self-sacrifice, in dying to selfishness and sensuality, dying in the faith and love of Christ Jesus to all that is base and mean and frivolous in human nature, that we develop a grander and more abundant life. To live a life of self-indulgence, to be occupied only with the things of this world, to skim over the surface of life and look only at its sunny scenes, to leave the world to struggle and sin on as it may, while caring only for the gratification of our own tastes, is to lose our true Christian life. We shall then be like the seed

which is kept out of the ground; which not only loses the harvest which it might have produced, but the very life which it already possesses. Every thing is hostile to the seed so long as it remains useless as a seed. The rust and the mildew will seize it; the very air will shrivel and waste it. Some seeds possess a marvellous persistency of vital force, but in the end every seed, if kept out of the ground, perishes, and becomes a mere husk, full of dust and ashes. And so those who live only for their own enjoyment, who make their own personal pains and pleasures the pivot upon which turns the entire conduct of life, not only deprive themselves of the higher joys and hopes of humanity, of the blessings of "doing good and communicating"—they do not simply prevent the development of their being by refusing the sacrifice of self, but they inevitably lose whatever measure of spiritual life they already possess, and their unfulfilled vocation and unsatisfied desires will consume them like a tormenting rust. The life to which we are called is a life quickened by Christ's death for us, that derives all its elements of growth and well-being from His atoning sacrifice, and that lives by the continual sacrifice of self for the glory of God and the good of man. Let us pass on to the Cross of Christ, that there, filled with unspeakable love and devotion to Him who loved us and gave Himself for us, we may bestow—not our gifts only, but ourselves, and live no more unto ourselves, but unto Him that died for us and rose again.

[Selected from "Two Worlds are Ours."]

UNCLE TOM'S DEPARTMENT.

MY DEAR NEPHEWS AND NIECES,—

From the earth's loosened mould The sapling draws its substance, and thrives; Though stricken to the heart with winter's cold, The drooping tree revives.

The softly-warbled song Comes from the pleasant woods, and colored wings Glance quick in the bright sun, that moves along The forest openings. —Longfellow.

We need but glance at these lines to know that our own beautiful spring must have suggested them to the poet's mind; and we need but glance around us on a bright April day to find them verified. Hillside and hollow are quickly donning their emerald summer dress; on every side we hear the voice of the busy ploughmen as they guide their teams, while from fence and tree-top the saucy blackbird chirps back, as if in mockery. The trees are covered with almost bursting buds, and from the dark carpet, formed by their last year's foliage, springs the pale primrose, and the rich green leaves that give promise of lilies, cowslips and May-flowers in the near future.

The happy schoolboys pocket their marbles and seek a dry plot on which to play ball or cricket, and their blithe whistling and merry shouts, mingled with the chattering burn and "softly-warbled songs" of the birds, makes April very cheery indeed. They have almost all returned; the staid old crow put in his appearance long before the snow left us, but the swallow, graybird, blackbird, robin, etc., who waited for warmer weather, have but lately lent their voices to nature's sweet spring song.

How desolate would be even the most beautiful landscape without all our musicians—we would miss any one of their songs, from the hoarse "caw, caw, caw," of the crow, or the croak of the frog, to the mournful "whip-poor-will" or the tender chirrup of the cricket.

Great is the influence of music; the love of it is implanted in almost every heart, and of him "who hath no music in his soul, nor is not moved by concord of sweet sounds," Shakespeare has a very poor opinion, and I readily agree with him. Such persons are happily few and far between (as some of you mischievous young folks would say, "like chicken's teeth"), and I know there is enough music and love of the beautiful in all my boys and girls to make them admire the following pretty extract:

"There is a story told somewhere, of a celebrated musician who lay upon his dying bed. A youth entered an adjoining apartment, sat down to a piano, and began to play a tune. For some reason, bestopped abruptly in the midst of a strain and left the room. The air was a favorite one with the dying son of song, and the notes untouched so haunted him as he lay there, that he arose from his couch, seated himself at the instrument, took up the tune where the youth had left it, played it out, returned to his pillow, and in a moment was dead." I know not that it is true; but it is touching and suggestive enough to be so.

The world is full of life; each life is a tune; so the world is a great orchestra; and of them all, how few tunes are played through!—how many have ended as they have but begun.

Marches are so ended every day—strong, brave marches, that end all too soon in a "dying fall." Whirling waltzes, set off to the time of the youngest, merriest hearts, subside into dirges, sad and low. Peans turn to plaints, and all at last are hushed in the measured beat of the "muffled drums" of life.

And of strains of hope and harmony, how many are unended—no dying musician to take them up when those that struck them first are dumb or dead.

But it is a pleasant thought that perhaps somebody may take up the tune when we are dead—not a note lost, not a jar, not a discord, but all a swan-like harmony. May neither your life nor mine be

composed of random "scores," but be a beautiful anthem, harmony in its parts, melody in all its tones, till the "daughters of music are brought low," and the life-anthem is ended.

Perhaps the writer of this extract asks too much in wishing for a life-anthem without jar or discord—the monotony of perpetual day would soon pall on the senses,—we need the ever-intervening night to render us capable of fully appreciating the glory of dawn. And so I prefer to think that our life-song is not marred by what our imperfect earthly knowledge would designate "discord." Like George Parson Lathrop—

"I doubt not when our earthly cries are ended, The listener finds them in one music blended."

UNCLE TOM.

Puzzles.

1—DROP VOWEL.

R-g-rdth-w-rldw-thc-ut--s-y, N-rr-s-y-r-xp-cl-t-nsh-gh; S-th-th-b-l-ne-dsc-l-sb-s-ch, Y-n-th-rf-rn-rh-p-t-m-ch.

2—ENIGMA.

They throw me to the cold, damp ground, And thrust the soil upon me, Seemingly as carelessly As if no toil had won me.

And many, many days went past, As through I was forgotten; With all my might I sought the light, To prove I was not rotten.

And when they saw me peeping out, They laughed right heartily, And said the world would poorly fare, Were it deprived of me. MORLEY SMITHSON.

3—CHARADE.

When the sunshine and the shadows, In the springtime of the year, Are flitting o'er the meadows, My FIRST you always hear. When man is softly sleeping, And every care seems sped, My SECOND, darkly creeping, Oft fills his soul with dread. My ALL is what we despise and shun, A delusion sprung from hate or fun. MORLEY SMITHSON.

4—SQUARE WORDS.

(a) 1, a feast; 2, to rob; 3, vehement; 4, declares; 5, brief. (b) 1, decease; 2, ordered; 3, notion; 4, to laminate. HARRY D. PICKETT.

THE SOCIAL CORNER.

Under this heading, communications relating to the home or any subject of interest will be published and questions answered. MINNIE MAY.

ELSIE B.—The following legend of the orange blossom is of Spanish origin:—

An African prince presented a Spanish king with an orange tree, whose creamy, waxen blossoms and wonderful fragrance excited the admiration of the whole court. Many begged in vain for a branch of the plant, a foreign ambassador using every means in his power to obtain it and introduce it into his native country, but without success.

The court gardener's daughter was loved by a young artisan, but lacked the dowry necessary for a bride. One day the gardener chanced to break off a spray of blossoms, and gave it to his daughter. The ambassador, by giving her sufficient money for her dowry, induced her to give the branch to him, and say nothing about it. Then, of course, the marriage took place, and the girl, in remembrance of the good fortune the flower brought her, stole another spray to adorn her hair on her wedding day. This may not be the legend you desire, but it is the only one I have ever seen.

"DISCONTENTED."—You should not expect to gain an eminent position all at once—that can only be obtained by conscientious, untiring effort. You will lose many of life's pleasures if, as your name implies, you are always fretting. Do not ignore the lesser duties of your calling. Charles Kingsley says: "Begin with small things. You cannot enter the presence of another human being without finding there more to do than you, or I, or any soul, will ever learn to do perfectly before we die. Let us be content to do little, if God sets us at little tasks. It is but pride and self-will which says, 'Give me something huge to fight, and I should enjoy that; but why make me sweep the dust?'" Another writer says: "If each had the spirit of self-renderer, it would not matter to him whether he were doing the work of the mainspring or one of the inferior parts."

Mrs. Matthews sends the following:—

"Tell the farmer to keep plenty of garlic around his stables, and keep it fresh enough to send its odor all around, and he will have no sick horses. Steeped in spirits and rubbed along the spine every night, it will cure whooping cough in children. A cupful of hop tea, sweetened to taste, will produce quietness of the nerves and refreshing sleep. This is cheap, safe and sure."

"MONA."—To manicure the hands, dissolve a piece of pure soap in a bowl of hot water, in which thoroughly soak the finger tips for about five minutes; wipe dry, then with a cuticle knife—the sharp edge downward—carefully press the skin round root of nail, to show the crescent or half-moon. Remove all dirt from under edge of nails, and cut them to a nice shape, filing down the edges. After the nails have been so treated, use the wash-leather polisher and a little nail enamel to give them a well-polished surface. M. M.

Farmer's Advocate Spring Premiums 1895

FLOWER and VEGETABLE SEEDS, ROSES and BULBS:

- | | | |
|--|--|--|
| <p>No. 1—FLOWERS</p> <ul style="list-style-type: none"> Aster. Balsam. Candytuft. Convolvulus. Marigold. Mignonette. Nasturtiums (tall). Pansy. Petunia. Phlox. Portulaca. Sweet Peas. Verbena. Zinnia. | <p>No. 2—VEGETABLES</p> <ul style="list-style-type: none"> Beet (blood turnip). Cabbage, Sure Head. Carrot, Early Scarlet Horn. Cucumber, Impr. Long Green. Cucumber, Cool and Crisp. Lettuce, Prize Head. Melon (Musk), Surprise. Onion, Globe Danvers. Parsnip, Hollow Crown. Pumpkin, Large Cheese. Radish, Scarlet, Olive-shaped. White-tipped. Squash, Hubbard. Sage. Tomato, Beauty. | <p>No. 3—ROSES AND BULBS</p> <p>ROSES.</p> <ul style="list-style-type: none"> Anna de Diesbach. American Beauty. Coquette des Blanchés. Gen. Jacqueminot. Mrs. DeGraw. Marchioness of Lorne. <p>BULBS.</p> <ul style="list-style-type: none"> 3 White Callas. 2 Spotted Callas. 12 Gladiolus. 3 Cannas, Crozy's. 2 Cannas (1 Mad'me Crozy and 1 Childs Crozy). 3 Begonias, single, tuberous-rooted. 3 Caladium Esculentum. 6 Cinnamon Vine. |
|--|--|--|

EGGS FOR HATCHING.

A grand chance to obtain EGGS FOR HATCHING from prize-winning fowls. A sitting of eggs from either of the following breeds, from the famous pens of Mr. C. J. Daniels, Toronto: Black and White Javas, White Rocks, Derbyshire Red Caps, Silver-Gray Dorkings, Buff Leghorns, Black Leghorns, Golden Wyandottes, will be given for sending five new subscribers, accompanied by \$5. For description of Mr. Daniels' fowls, see Poultry Dept., this issue.

SIBERIAN OATS—The variety of WHITE OATS that has done best in connection with the Experimental Union throughout Ontario, for the last six years, is the Siberian. For the name of one new subscriber, accompanied by \$1, we will give 15 lbs.; or for two new yearly subscriptions and \$2, one bushel, by freight or express, as desired by receiver. Shipped at London F.O.B.

TEXAS RUST-PROOF OATS. WE will give fifteen pounds for one new subscriber, accompanied by \$1, or for two new subscribers and \$2, 1 bushel.

EITHER collection No. 1 or No. 2 will be given for sending the name of one new subscriber, accompanied by \$1. Any one of the roses, or any one collection of bulbs in list No. 3, will be given for sending one new subscriber, accompanied by \$1.

SEND FOR FREE SAMPLE COPY. BEGIN CANVASS AT ONCE.

FIRST ANNUAL CANADIAN HORSE SHOW

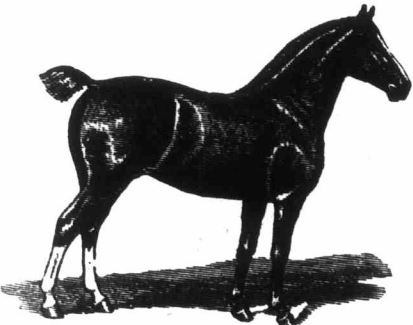
TO BE HELD IN THE CITY OF NEW ARMORY, TORONTO ON APRIL 18, 19, 20, 1895. THE SHOW WILL BE OPEN EACH EVENING. Entries close April 8rd.

UNDER the Auspices of the Agriculture and Arts Association of Ontario, and the County and Hunt Club of Toronto. Large premiums will be given for all the recognized breeds of Stallions, and for all kinds of Driving, Saddle and Jumping Horses.

REDUCED RATES ON RAILWAYS Evening entertainments as well. For Prize Lists and information, apply to

HENRY WADE, Agric. & Arts Assn., Toronto. STEWART HOUSTON, Hunt Club, Toronto.

HORACE N. CROSSLEY, PROPRIETOR OF THE SANDY BAY STOCK FARM. Importer and breeder of SHIRES, HACKNEYS, AND COLLIE DOGS.



The above stud, though only commenced in 1890, has achieved unparalleled success at all the leading Canadian shows, such as Montreal, Toronto and London, also at the CHICAGO WORLD'S FAIR. The most notable in this stud are, the Shire Horse Bravo II, 1893, winner of first at Toronto, Montreal and London, and also beating all Clydes at the latter show in the sweepstakes. Hackney, Fireworks No. 3602, winner at Chicago, Toronto and London. Shires and Hackneys always on hand for sale. For further particulars apply to the Proprietor. ROSSEAU, Muskoka. 10-y-om

FOR SALE TWO IMPORTED SHIRE MARES WILL FOAL EARLY. The W.M. DAVIES CO., TORONTO, ONT.

German Coach and Royal Belgian STALLIONS

Just landed and for SALE at ROYAL HOTEL, WOODSTOCK, Ont. Six German Coach Horses that were exhibited at the Columbian Exhibition, and won two first prizes, three seconds and one fourth. Each of these horses won honors at the great Exposition, 1893. These are the greatest, truest, and most prepotent carriage horses in the world. Graceful, sweet disposition, high action, fast stepping. Two Royal Belgians, weigh 2,000 pounds each. High nethers and necks, great hearts, deep, well-sprung ribs, always good feet. The soundest draft horses in the world. One of these horses won first prize at the World's Fair, 1893. Come and see eight of the best Stallions that ever landed in Canada.

Address—A. B. HOLBERT, Prop., WOODSTOCK, ONT. 5-d-om or, GREELEY, DEL CO., IOWA.

VALENTINE FICHT, MAPLE LEAF FARM, ORIEL, ONT.

Breeder of Scotch Shorthorns, Clydesdale, and Shire Horses; Cotswold and Shropshire Sheep; Yorkshire Hogs. Young stock for sale at hard times prices. Young bulls supplied in carload lots. 7-1-y-om Write for particulars.

FARM MANAGER.—A thoroughly practical English farmer wants a position as farm manager; well up in rearing of pedigree stock, etc., or would work good farm on shares. Address: Box 557, London, Ont. 7-2-om

Shorthorns for Sale.

EIGHT SHORTHORN BULLS, including Canada second prize yearling at Toronto, the best show bull in Canada of his age, and a sure getter. Also a lot of young cows and heifers. J. & W. B. WATT, Salem P. O., Elora Station. 3-a-om

Shorthorns, Shropshires and Berkshires.

Having rented one of my farms, I will sell at very much reduced prices, six young Shorthorn bulls; thirty Shropshire ewes, in lamb to imported ram; fifteen ewe lambs; six Berkshire sows, due to farrow in March and April, and two boars, six months' old. All registered and choice quality. W. G. PETTIT, 13-y-om Freeman P. O., Burlington Stn., G. T. R.

CARGILL HERD OF SHORTHORNS.

Stock from imp. bulls and imp. and home-bred cows. Catalogue now in printer's hands. Send for one. H. CARGILL & SON, CARGILL, ONT. 11-y-om

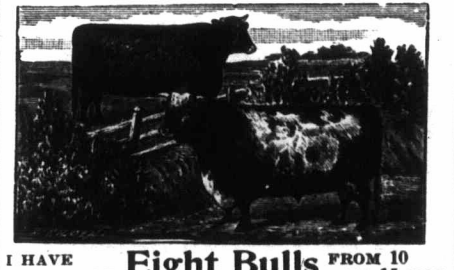
FOR SALE—Shorthorns: Bull Calf one year old; Heifers giving milk and younger ones. Also Fruit Farm, at Clarkson, 16 miles west of Toronto. Sandy soil, 80 acres of land, good house and outbuildings, 45 apple trees, 10 cherry trees, 60 grape vines, 330 plum trees, 500 pear trees. Possession immediately. Apply to C. G. DAVIS, Freeman P.O., Ont. 13-y-om

FOR SALE.

A choice lot of Shorthorns—bulls & heifers—of good quality and of the most approved breeding. Show animals a specialty. The accompanying Queen 2nd, the foundation of my herd. Best produce offered for sale. Come and see us, or write for particulars. JOHN MORGAN & SONS, KERWOOD, ONT. 21-y-om

SIMMONS & QUIRIE.

Shorthorn Cattle, Berkshire Swine—Money-making Sorts. The matchless bull, ROYAL SAXON—10537—(by Imp. Excelsior), 1st at Toronto, 1894, heads the herd, with BARMPTON M.—18240—, by Barmpton Hero—324—, in reserve. Female representatives of the celebrated Mina, Strathallan, Golden Drop and Mysie families. The Berkshires are choice, prize-winning stock. Easy to feed, quick to sell. STOCK FOR SALE. C. M. SIMMONS, Ivan P.O., Ont. 1-1-y-om JAMES QUIRIE, Delaware, Ont.



I HAVE **Eight Bulls** FROM 10 TO 15 MOS. old, from my best dams, and got by PREMIER EARL and INDIAN CHIEF, which I will sell very reasonable. Claremont on C.P.R. and Pickering on G.T.R. Write for prices or come and see my stock. DAVID BIRRELL, Greenwood, Ont. 1-1-y-om

AMPLE SHADE STOCK FARM

—HAS FOR SALE— SHORTHORN BULLS 14 to 16 months old, of the best breeding. Large size, thick and well-fleshed; grand quality. At reasonable prices. Address, E. GAUNT & SONS, St. Helens, Ont. Lucknow Station, G.T.R. 13-1-y-om

SHORTHORNS.

I have FOR SALE two Shorthorn heifers and two bull calves of fine breeding, fine colors, fine form and carriage, in fine condition, at fine cut prices. Also one or two cows. D. ALEXANDER, BRIGDEN, Lambton Co., Ont. 5-y-0

WINONA, ONT., Mar. 19, 1895. "I never used **ROCK SALT** until this season, but I find it cheaper and handier to use than loose salt. I would not like to be without it now." BRUCE MUIR. You see Mr. Muir salts his stock for less money, and better than he did with loose salt. You can do the same. 400 lbs. or over at 50c. per 100. Cash with the order. TORONTO SALT WORKS, 128 ADELAIDE ST. EAST, TORONTO.



SOLD BY ALL GROCERS THE 6c TWIN BAR

FOR SALE—Shorthorn Bulls AND SEED OATS.

Seven Shorthorn Bulls of extra quality and breeding, at prices to suit the times. Texas Rust-proof Oat, grown four years in Canada, averaging seventy-five bushels per acre, is reddish in color, large in grain, and generally contains three grains in one chaff. Straw is medium length, and stands well. It is a great stooler, very early, and one of the coming oats for Canada. Price, one to five bushels, \$1.00 per bushel; five to ten, 90 cents; ten and over, 75 cents. Bags free. For particulars write G. A. BRODIE, Bethesda, York Co., Ont. 5-c-om

Empire State Potatoes.

This variety has headed about one hundred varieties in yield at O. A. C. Experimental Farm for four years, also all over Ontario last year in experimental union. Will sell a limited quantity at \$1.00 per bag, put on cars at Guelph. Bags free. Eating qualities excellent. JAS. BOWMAN, West End, Guelph P. O. 7-b-0

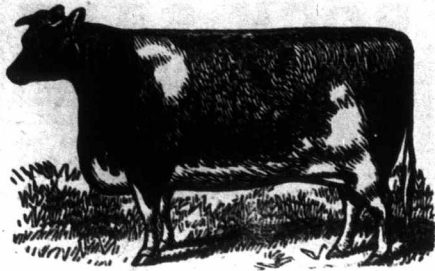
NOTICE.

A PROSPEROUS INSTITUTION. It has become a prudent and, in fact, an ordinary business procedure on the part of heads of families and others to make reasonable provision, by means of life insurance, for those dependent upon them for support. We have received from the Mutual Life Insurance Company, of New York, of which Richard A. McCurdy is President, a copy of their annual statement for 1894. During the past ten years its assets have increased from \$108,908,967 to \$204,638,783. Compared with 1893, the report shows the following increases: In total income, \$6,067,724.26; in premium income, \$2,528,825.84; in assets, \$17,931,103.82; in surplus, \$4,576,718.91; of insurance in force, \$51,925,039.96. The Company paid to the holders of its policies on account of claims by death \$11,929,794.94, and for endowments, annuities, dividends, and other payments to living members, \$9,159,462.14. It increased its reserve fund, to guarantee the future payment of all claims, from \$108,755,071.23 to \$182,100,456.14, an addition for the year of \$13,354,384.91. The increasing popularity of this institution is, therefore, not to be wondered at.

IT PAYS TO ADVERTISE

— AND — **FARMER'S ADVOCATE HOME MAGAZINE.** If you have anything to sell, SEND AN ADVERTISEMENT to The William Weld Company LONDON, ONTARIO.

ARTHUR JOHNSTON



Offers at moderate prices an exceedingly good lot of young Shorthorn Bulls (16), including two imported two-year-old bulls fit to show anywhere. Also a choice lot of young Cows and Heifers. 1895 Catalogues now ready. Send for one. He is also breeding.

REGISTERED BERKSHIRES Of the purest breeding and finest quality. GREENWOOD P. O. AND TELEGRAPH OFFICE. Clarendon Stn. C. P. R. or Pickering Stn. G. T. R. Parties met on shortest notice. 5-1-y-om

DEEP MILKING SHORTHORNS For sale, 4 young bulls, 2 reds and 2 roans also yearling heifers and heifer calves. The Golden Drop bull, Golden Nugget = 17548-, by Imp. General Booth = 6365-, (54353), at head of herd. Address WM. GRAINGER & SON, Londonboro, Ont. 13-y-om

SHORTHORNS, BERKSHIRES A very choice lot of young pigs on hand (from large litters) farrowed in February and March. JOHN RACEY, JR., Lennoxville, Que. 17-1-y-om

FOR SALE. A few choice Short-horn Heifers in calf; also Berkshire Pigs of all ages. Prices very moderate, and terms easy. R. RIVERS & SON, 13-1-y-om Springhill Farm, Walkerton, Ont.

SHORTHORN BULLS 3 VERY PROMISING BULLS FIT FOR SERVICE For particulars apply to

CHARLES CALDER, 7-c-om Brooklin, Ont.

ONE SUPERIOR Shorthorn Bull for sale, 20 months old, roan; calved at Chicago. World's Fair. Dam Lady Bright, record 22 lbs. of butter per day. He is large, quiet, and sure. 5-1-y-om

Write to HERBERT WRIGHT, Box 47, Guelph, Ont.

IMPORTED SHORTHORNS. D. D. WILSON, Ingleside Farm, SEAFORTH, Ont. Importer and breeder of

SCOTCH SHORTHORNS. Imported stock from the herds of Wm. Duthie and W. S. Marr for sale; also Canadian-bred from imported bulls and out of imported dams. Farm one mile from G. T. R. station. Sale postponed until April or May, on account of uncertainty of date of elections. 13-1-om

A. CRUICKSHANK, SHORTHORNS of the Duchess of Gloster family. A few straight-bred young bulls and heifers by imp. Duke of Lavender. THOS. ALLEN & BROS., OSHAWA, ONT. 7-1-d-om

HOLSTEINS AND YORKSHIRES. None but the best are kept at BROCKHOLME FARM, ANCASTER, ONT. R. S. STEVENSON, Proprietor.

Write me for prices if you want first-class stock at moderate figures. Holsteins in the advanced registry. Yorkshires all recorded. 13-1-y-om

THE GREAT MILK AND BUTTER HERD OF HOLSTEIN-FRIESIAN CATTLE.



BORNELLA TENSON. Best quality and strains. Seventy-five head Young bulls and heifers at reduced prices. Send for catalogue to SMITH BROS., Credit Valley Stock Farm, Churchville, Ont. 5-om

A SPECIAL OFFER IN HOLSTEIN-FRIESIANS

BONNIE QUEEN 3rd's Pieterje Netherland, the richest milk and butter bred yearling bull in the Dominion; individually good enough to head any herd with honors; is offered at a bargain. Bonnie Prince, nearly as well bred, and a grand individual, at a price to suit the times. Write at once for breeding and full particulars.

H. BOLLERT, 3-1-y-om Cassel, Ontario

SPRING BROOK STOCK FARM.—Holstein-Friesian Cattle, Improved Yorkshire and Tamworth Swine. Bargains in Holsteins; special in calves. Stock of all ages for sale; best strains. Great choice in Tamworths. Ask at once for prices. A. C. HALLMAN, New Dundee, Waterloo Co., Ont. 7-1-y-om

SUNNYSIDE HOLSTEIN-FRIESIANS Choice animals, either sex, all ages, for sale at any time. Correspondence solicited. Address



MeDUFFEE & BUTTERS, Stanstead, P.Q. 16-y-om

GEM HERD HOLSTEINS FOR SALE BY ELLIS BROTHERS, BEDFORD PARK P.O., ONT.

Three miles north of Toronto, on Yonge Street. Electric cars pass our gate. Inspection invited. Correspondence solicited. 7-1-om

MAPLE HILL HOLSTEIN-FRIESIANS. FOR SALE—Bull calf from Sept. 1st, 1894; sire Artis Aaglie Prince, whose full sister gave 50 lbs. 1 oz. milk in a day at two years; dam Netherland Blanche, first-prize yearling heifer at the last Toronto Industrial, and a fine milker. Calf is three-fourths black, very straight, square and blocky. Prices very reasonable. G. W. OLSON'S, ST. GEORGE, ONT. 11-y-om

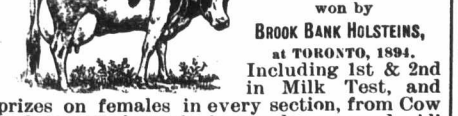
WILL SELL HOLSTEIN BULL CALVES — AT — \$15.00 Each

During months of March and April, if taken before three weeks of age. Write Early if Wanted. Could not supply the demand last year.

F. A. FOLGER, 5-d-om Rideau Farm, Kingston, Ont.

\$312.00 and SILVER MEDAL won by BROOK BANK HOLSTEINS, at TORONTO, 1894. Including 1st & 2nd in Milk Test, and 1st in Calf. We keep the best to be procured. All prizes on females in every section, from Cow to Calf. We keep the best to be procured. All ages. For sale—right sort and right prices. Correspondence cheerfully answered. Also a few choice young Poland-China Boars for sale. A. & G. RICK, Currie's P.O., 19-1-y-om Oxford Co., Ont.

LARGE IMP. YORKSHIRE PIGS AND HOLSTEIN CATTLE. We breed nothing but the best, and sell cheap and guarantee satisfaction, or ask no pay. Come and see us, or write for prices and be convinced. FLETCHER BROS., Oxford Mills, O., Ont., Kemptville Station, C. P. R. 5-1-y-om



ARKLAN STOCK FARM (Adjoining the Town of Carleton Place.)

JERSEY CATTLE Herd headed by Carlo of Glen Duart 1867, A. J. C. C. champion Jersey bull whenever exhibited. Young stock from prize winning animals for sale, out of deep-milking strains. Correspondence solicited and inspection invited.

A. C. BURGESS, Carleton Place, 7-y-om Ontario.

Jerseys for Sale. H. Cooke & Co. are offering some of their choice Exmoor Jerseys at close prices. Milk Cows, and in calf, 2 Yearling Bulls. Also a few choice Black Java Cockerels. Address H. Cooke & Co., 6-b-om ORILLIA, ONT.

Pure St. Lamberts

YOUNG BULLS fit for service, and bull calves sired by Jolie of St. Lambert 3rd's Son, 29731, and Lady Fawn of St. Anne's Son, 25703. The get of these two bulls have swept everything before them at the Toronto, London, Ottawa and Quebec Shows of 1893-4. Dams of the young bulls are daughters and granddaughters of

The Famous St. Lambert Cows, Jolie of St. L., Pet of St. L. and Lady Fawn of St. A. Farmers! If you wish to double the butter yield of your herd, buy a pure St. Lambert Jersey bull. The St. Lamberts, for size, constitution, and wonderful production of milk and butter, lead all other strains known.

PRICES VERY LOW. Apply to W. A. REBURN, 20-y-om St. Anne de Bellevue, P.Q.

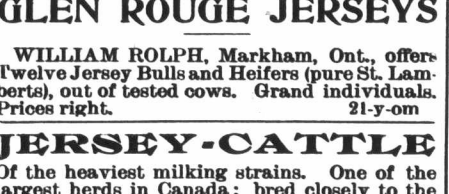
FOR SALE. A choice Jersey bull calf, two months' old, solid fawn color—his two granddams have a butter record in seven days of 184 pounds and 19 pounds 5 ounces, respectively—to make room for new-coming calves. I will deliver him free, express prepaid, for \$25.00. Address, W. O. SHEARER, 19-2-y-om BRIGHT, ONT.

PURE-BRED JERSEY BULL FOR SALE PAWN KING 22791, six years old, for sale to prevent in-breeding. A winner of two firsts and a second at Toronto Exhibition, and first last fall at Markham; also a son of his, six months old. Write for price and pedigree. 7-a-o Address, P. A. FREEMAN, Box Grove, Ont.

JERSEYS, STANDARD BRED HORSES. Chocily bred Stoke-Pogus and St. Lambert Jerseys. Standard bred and Road Horses for sale. DR. E. P. BALL, 17-1-y-om Rock Island, Que.

GLEN ROUGE JERSEYS WILLIAM ROLPH, Markham, Ont., offers twelve Jersey Bulls and Heifers (pure St. Lamberts), out of tested cows. Grand individuals. Prices right. 21-y-om

JERSEY-CATTLE Of the heaviest milking strains. One of the largest herds in Canada; bred closely to the great dairy cow at Chicago, also the famous two-year-old. Sires of both were sold from this herd. Also Welsh Blood Ponies for ladies' and children's driving. Stock for sale always on hand. GEO. SMITH & SON, Grimsby, Ontario. 3-y-om



JERSEY COWS in Calf and in milk, Heifers in calf, Heifer Calves and Bull Calves, registered, pure-bred, unregistered, and high grades. Rich breeding, good color and good looking. Pedigrees written in butter. Write or come. R. R. Station, Brampton, G. T. R. and C. P. R. 8-y-om J. C. SNELL, Edmonton, Ont.

JERSEYS FOR SALE At the head of the herd is the grand young St. Lambert bull, Nabob, son of Nell's John Bull. Stock of both sexes and different ages, and of choice breeding, now on hand. JONATHAN CARPENTER, 13-1-y-om WINONA, ONT.

The GLEN STOCK FARM AYRSHIRES We have 6 young Bulls that will be fit for service in the Spring. They are good individuals, are well bred, and will be sold on reasonable terms. We have also a number of imported and home-bred Shropshire Ewes and Ewe Lambs for sale at very low prices. 7-y-om



WHITESIDE BROS., Innerkip, Ont.

FOR SALE.—A number of pure-bred Ayrshire calves, also a few high grades; all from deep milkers. Address, F. W. TAYLOR, Wellman's Corners, Ont. 7-b-om

AYRSHIRES AND YORKSHIRES. We have one of the oldest and largest herds of Ayrshires in the Province of Quebec. Selected and bred from the choicest and deepest milking strains. Young stock for sale at prices to suit the times. Our Yorkshires are a choice lot. Orders booked for young pigs. Write for particulars. Visitors welcome. W. F. & J. A. STEPHEN, 7-1-y-om Brook Hill Farm, Trout River, Que.

J. YULL & SONS, Meadowside Farm, Carleton Place, Ontario.

Our herd is composed of seventy-five head, Leonard Meadowside—1423—first prize at World's Fair, heads the herd. Cows of the deepest milking strain, having won several medals at provincial tests. Shropshire sheep and Berkshire pigs. Young stock of both sexes for sale. Visitors welcome; met at train. Give us a call. 7-y-om

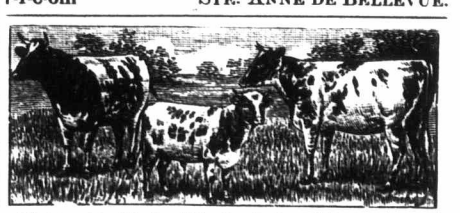


Ste. Anne de Bellevue, Que. AYRSHIRES.

We have some splendid Calves for sale from Imported stock. Head of the herd G. Mcneil III., prize-winner at the great Ayr Show, Scotland.

MAMMOTH BRONZE TURKEYS, Weight 35 to 40 pounds; a few young birds to sell; prices per trio, \$10.00, one cock and two hens.

GOLDEN SILVER WYANDOTTES From Imported American and English strains. JAMES BOWDEN, 7-1-c-om Manager for R. REFORD, STE. ANNE DE BELLEVUE.



Champion Dairy Herd of Ayrshires at various government tests. Prize winners at the World's Columbian Exposition, Chicago. Write MESSRS. ROBERTSON & NESS, Howick, Que. 19-y-om

GREENHOUSE FARM Ayrshire Cattle and Suffolk Sheep. I offer several Bull Calves, from 1 to 5 months old—rare good ones—from (imp) cows and their progeny, whose sires and dams have won highest honors, and, for butter and milk combined, are, without any doubt, the best Ayrshire cattle ever imported to this country. A few 2-shear Suffolk Ewes and Ram Lambs. All at right prices. Write or come and see them. Corwin, C. P. R., 2 miles; Guelph, G. T., 7 miles. W. B. COCKBURN, 17-y-om Greenhouse Farm, ABERFOYLE, ONT.

C. C. & G. F. CLEVELAND (J. L. Goodhue & Co., Mfgs. Leather Belting) BREEDERS AND IMPORTERS OF Durham Cattle, Standard Bred Horses, Chester White Swine. Young Stock for Sale. Address—C. C. & G. F. CLEVELAND, Greenlands Stock Farm, Danville, Que. 17-1-y-om

INGLESIDE HEREFORDS I Three choicely bred yearling Bulls; good individuals and at rock-bottom prices. BARGAINS IN SWINE. Our large Yorkshire Boar (bred by J. E. Brethour), 18 months old, at half price. Also three nice young boars, farrowed in Nov. last, for the price of weanlings. Orders now booked for early Spring pigs. Improved Large Yorkshires and Tamworths, of choicest breeding; and satisfaction guaranteed. Come and see them, or write for particulars. H. D. SMITH, Ingleside Farm, G. T. R. Station, 2 1/2 miles. COMPTON, QUE. 17-1-y-om

GUERNSEYS Having two stock bulls, will sell either of them; grand stock getters; first-class animals. YORKSHIRES. Boars fit for service; sows in farrow, and a grand lot of spring pigs. W. H. & C. H. McNish, 20-y-om LYN, ONT.

GUERNSEYS This is the Dairy breed for ordinary farmers. Large, vigorous and hardy, giving plenty of rich milk. Imported Bull Benefit, son of Vice-Pres. Morton's famous butter cow Bienfaitrice 4th, heads the herd. Address: SYDNEY FISHER, 17-1-y-om Alva Farm, Knowlton, P.Q.

MAPLE SHADE SHROPSHIRE AND SHORTHORNS My yearling Shropshire rams are all sold. I now offer a select lot of ewes in lamb at reasonable rates. Also young Shorthorn Bulls and Heifers good enough for anybody. Satisfaction guaranteed. Fulllest information cheerfully given.

HON. JOHN DRYDEN, BROOKLIN, 3-1-y-om ONT.



W. C. EDWARDS AND COY

IMPORTERS AND BREEDERS.



PINE GROVE STOCK FARM, Rockland, Ont.
SCOTCH SHORTHORNS.
The imported Cruickshank bulls Knight of St. John and Scottish Sportsman are at the head of this herd of Imported and Home-bred Cows & Heifers of the most approved Scotch families.
JOS. W. BARNETT, Manager.

ELMHURST STOCK AND DAIRY FARM, CLARENCE, ONT.
Shorthorns, Shropshires and Berkshires
Our flock is from the choicest English flocks, headed by the ram sent out by Mr. Thos. Dyke; also milking Shorthorns, with imported bull Pioneer at the head of the herd.
HENRY SMITH, Manager.

Laurentian Stock AND Dairy Farm, NORTH NATION MILLS, P. Q.
Ayrshires, Jerseys and Berkshires.
Imported Emperor at the head of a grand lot of Imported and Canadian-bred Ayrshires; also St. Lambert Jerseys and Imported Berkshires.
7-1-y

FOR SALE.
SHROPSHIRE RAMS (Registered)
—AND—
SHORTHORN BULLS (Registered)
Also a few females. Apply to
C. HARLESTON IRVING,
"Bonshaw Farm," NEWMARKET,
P.O. Box 288 9-1-y-om

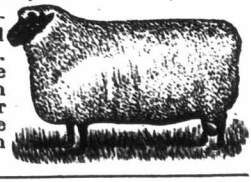
Shorthorn Stock Sale.
THORNCLIFFE STOCK FARM, TORONTO.
ROBT. DAVIES, Proprietor.

Entire Herd of Shorthorns will be sold by Public Auction on **May 16th, 1895,** at 12 o'clock, noon.

Among the Bulls are the celebrated Imp. Cruickshank Bull, Northern Light (57801) =11111= by Standard Bearer (55096), dam Nonpareil 20th (46144); also the celebrated Bow Park Bull, Lord Outhwaite =18787= by Butterfly Duke 10th =14278=, dam Lady Isabel (Imp.) =5156= by Crown Prince (38061); and several young bulls and heifers sired by the above. Also a lot of grandly bred cows in calf. Write for Catalogue. c-om

SPECIAL OFFERINGS AT REDUCED RATES
—TO THOSE WHO YIELD TO—
DOUBLE THE BUTTER YIELD OF THEIR HERDS.
6 Jersey bull calves, 2 to 4 months old, bred entirely for **GREAT BUTTER YIELD.**
Sired by bulls whose dams make **17 1/2 to 26 3/4 lbs. Butter a Week.**
As my fall cows gave an unusual number of bull calves, I have decided to place them within reach of all who want an extra bull for next summer, viz.: \$60 to \$90 each, registered, and express prepaid by me to their destination. **MRS. E. M. JONES, Box 324, Brockville, Ont., Can.** Mrs. Jones' great book, *Dairying for Profit*, 30c. by mail. Address, **ROBT. Y. BROWN, Agent, Box 324, Brockville, Ontario, Canada.** 8-y-om

SMITH EVANS, Gourock, Ont.
Breeder and importer of registered Oxford-Down Sheep. Selections from some of the best flocks in England. Stock for sale at reasonable prices. Inspection invited.
5-1-y-om



HENRY ARKELL, Arkell P. O., Ont.
Importer and breeder of Oxford Down sheep, winner of nine prizes out of ten entries at World's Fair. Fifty rams and ewes for sale, both imported and Canadian-bred; 100 ram and ewe lambs for 1894, from Royal and World's Fair winning rams. Prices reasonable. Guelph, G. T. R.; Arkell, Telephone, Guelph, 7-1-y-om



TO FARMERS, STOCK DEALERS & WOOL GROWERS FOR SHEEP, CATTLE AND HORSES.
LEICESTERSHIRE TICK & VERMIN DESTROYER
It effectually destroys Ticks, Lice, Worms or Grub, to which sheep, horses and cattle are subject, and enables the animal to thrive. It will be found far superior to other preparations used for the similar purpose. The proprietors will guarantee perfect success when used according to directions, as will be found on each box. It prevents scurf and scab, and renders the wool bright and clear. It is put up in tin boxes, price 30 cents each. One box is sufficient for twenty ordinary sized sheep. It only requires to be tried to prove itself all that is claimed for it. Sold by Druggists and Grocers. Manufactured by **G. C. BRIGGS & SONS, 31 King St. West, Hamilton, Ont.** 2-j-o

To Stockmen & Breeders.
LITTLE'S PATENT: FLUID NON-POISONOUS SHEEP DIP AND CATTLE WASH.

For the destruction of Ticks, Lice, Mange and all insects upon Sheep, Horses, Cattle, Pigs, Dogs, etc. Superior to Carbolic Acid for Ulcers, Wounds, Sores, etc.
Removes Scurf, Roughness and Irritation of the Skin, making the coat soft, glossy and healthy.
The following letter from the Hon. John Dryden, Minister of Agriculture, should be read and carefully noted by all persons interested in Live Stock:
"MAPLE SHADE" HERDS AND FLOCKS. BROOKLIN, ONT., Sept. 4th, 1890.
DEAR SIR,—I cannot afford to be without your "Little's Sheep Dip and Cattle Wash." It is not merely useful for Sheep, but it is invaluable as a wash for Cattle, etc. It has proved the surest destroyer of lice, with which so many of our stables are infested, I have ever tried; it is also an effectual remedy for foul in the feet of Cattle. I can heartily recommend it to all farmers and breeders.
JOHN DRYDEN.
Seventeen Gold, Silver and other Prize Medals have been awarded to "Little's Patent Fluid Dip" in all parts of the world. Sold in large tins at \$1.00. Special terms to Breeders, Farmers and others requiring large quantities. Ask your nearest druggist to obtain it for you, or write for it, with pamphlets, etc., to **ROBERT WICHTMAN, DRUGGIST, OWEN SOUND, Ont.** Sole Agent for the Dominion. 7-1-y-om

CLYDESDALES AND HACKNEYS
A FEW FIRST-CLASS CLYDESDALE Stallions, Mares & Fillies for sale. Prices to suit the times. Come and see them, or write for prices.
GRAHAM BROS.,
Claremont, Ontario.
25 miles east of Toronto, on C. P. R. 4-1f-om

SHROPSHIRE RAM LAMBS.
We are entirely sold out of yearling Rams, but still have a few Choice Ram Lambs for immediate delivery. Also a fine lot of Ewe Lambs from imported stock.
IN YORKSHIRES we are booking orders for choice pigs for spring delivery from 30 breeding sows. We have a few Boar Pigs fit for service, and some nice young Breeding Sows. Order early, as from present demands they will not last long.
GUERNSEYS—Two choice Bull Calves left, fit for spring service, sired by "Adventure," winner of 29 1st prizes in Britain previous to importation. Correspondence solicited and promptly attended to. 9-y-om
T. D. McCALLUM, Manager Isaleigh Grange Farm, Danville, Que.

JOHN A. MCGILLIVRAY,
Jerseydale Farm, Uxbridge, Ont., Midland Div.
C. T. R., Importer and breeder of **Dorset Horned Sheep**
19-1-y-om

GOCCOON SHEEP DIP
NON-POISONOUS
KILLS TICKS, LICE AND ALL INSECTS
3-1-y-om **MYERS & CO., Toronto, Canada.**

SHEEP BREEDERS' ASSOCIATIONS.
American Shropshire Registry Association, the largest live stock organization in the world. Hon. John Dryden, President, Toronto, Canada. Address correspondence to **MORTIMER LEV-ERING, Sec., Lafayette, Indiana.** 3-1-y-om

IMPROVED YORKSHIRES,
A few Sows three months old; a litter six weeks old, both from imported stock. Also a pure bred Bates Princess Bull Calf of milking strain.
WM. COWAN, V. S., Galt, Ont. 9-y-om

BREEDERS OF Large Improved Yorkshire Pigs.
Markham Baron, the sweepstakes Barrow over all breeds at the Guelph Fat Stock Show, 1892, bred by us. A choice assortment of Pigs now on hand. Only first-class stock shipped to order. **Markham Herd Farm, at Locust Hill, Station, 17 y-om. J. R. PARK & SONS.**

ASHTON GRANGE HERD IMPROVED YORKSHIRES
Imported or out of imported stock. We have a choice lot of young stock ready for shipping. We ship to order, and guarantee satisfaction. **WM. TAIT, St. Laurent, near Montreal.** 1-y-om

J. G. MAIR, HOWICK, QUEBEC.
BREEDER AND IMPORTER OF **Improved Large Yorkshire Swine.**
A number of very choice pigs not a kin for sale. Write for prices, etc. 7-1-c-om

Specialty of Improved Large Yorkshire Hogs
The largest and most successful prize-winning herd in Canada. In the management of my herd I have endeavored to produce what the market demands, combining the most profitable type for the feeder. Extra lot of in-pig sows for sale cheap. Am booking orders for spring pigs suitable for exhibition or breeding purposes. All stock guaranteed as described.
J. E. BRETHOUR, Burford, Brant Co., Ont. 3-y-om

NOTICES.

The attention of our readers is directed to the new advertisement of Mr. John Hallam, of Toronto, in another column, in reference to hides, binder twine, sheep dip, etc.

Now is the farmer's opportunity to obtain cheap salt, either in barrels, bags, or bulk. For particulars note the advertisement elsewhere of the Canada Salt Association, Clinton, Ont. They can quote surprisingly low prices. Write them.
There is no necessity for farmers, or any one else, paying the prices for harness that they have so long been accustomed to in order to obtain substantial, well-finished, hand-made sets. The Canadian Harness Co., 176 King street east, Toronto, are turning out excellent goods at prices in accordance with the times. See their advertisement elsewhere, in which bargains are offered. It is worthy of special notice that their work is all done by hand.
A member of the Grange Wholesale Sale Supply Co., Toronto (G. W. Hamby, Manager), in our issue of March 15th, it was stated that their sales for the previous four months had increased nearly \$1,300 over the corresponding four months of the previous year. *It should have read \$15,000, or an error of over \$11,000.* There is nothing small about the progress of the Grange Wholesale Supply Co. We have just received a copy of their wholesale spring price list for 1895. The immense variety of goods handled is apparent from the index, and the prices quoted should lighten up the gloom of hard times.

The "Daisy" Bone Cutter, on exhibition at the recent Poultry Show in Winnipeg, was closely inspected by the poultrymen and others attending the show, many expressing their approval of its work. It was purchased by Mr. M. Maw, one of the leading poultry raisers of the city. The manufacturers, Messrs. Wilson Bros., Easton, Pa., also make mills for grinding oyster shells, dry bone, and grain. The numerous testimonials received from those using their machines attest to the value of their goods, as well as the satisfaction of those using them.
A member of the ADVOCATE staff recently visited the Nichols Chemical Co.'s extensive Fertilize Works at Capetion, Que. He found these works in full operation, producing their high-standard fertilizers. The daily receipt of orders for their fertilizers, at this early date, indicates that the season is going to be a very busy one with them. This might naturally be expected, considering the well-known merits of their superphosphates and complete fertilizers for all crops, and adapted to all soils. They issue a useful circular, which may be obtained by writing them.

A VALUABLE NEW OAT.

There seems to have been more improvement made in varieties of oats during the last few years than in any other grain. In this issue, Mr. G. Brodie, Bethesda, advertises an improved sort which he gives a splendid reputation. The oat is called the "Texas Rust-proof," which indicates a desirable quality. They were brought from the Southern States about four years ago. Since then their average yield has been between 70 and 75 bushels per acre. The straw is of medium length, very stiff, but not coarse. It has a reddish tinge when ripe. The head is a combination of side and spreading, some grains being closely attached to the main stalk. It is a great stooler, and when young its growth resembles fall wheat in lying or creeping flat on the ground, and the straw springs up almost like a mushroom. It is about ten days earlier than the Banner, Siberian, and other early oats. Its great yielding qualities are due largely to a peculiarity of heads, which frequently contain three well-developed grains in one chaff. The oat is large, rather long, thin hulled, and of reddish dun color. We have secured a few bushels of these oats, which we are offering in this issue as premiums for new subscriptions. On weighing, we found them very heavy, going 37 pounds to the bushel.

BOOK TABLE.

The LONDON ADVERTISER is starting on its 32nd year of life, using the Mergenthaler Type Setting Machines, and the typographical improvement will be highly appreciated by every one of its numerous readers.
There has lately been sent us two excellent little works for Bible students, and those interested in American missions. They are edited by W. H. Withrow, D. D., F. R. C. S. "A Harmony of the Gospel," being the Life of Christ in the words of the four evangelists, arranged so as to make the life of the Saviour particularly clear and definite in the mind of every student. It is brief and complete. "The Native Races of North America" (illustrated) is particularly interesting to Methodist people, as it deals with their missionary efforts among the Indian tribes. Each work is interesting and helpful. They are published by Wm. Briggs, Methodist Book Room, Toronto.
"Advanced Agriculture," by Henry J. Webb, Ph. D., B. Sc., London, Eng., is a valuable work lately received, which deals with Agricultural Science and Agricultural Practice in a masterly manner. It treats of geology in its relation to agriculture. Agricultural engineering, including elementary mechanics, the different kinds of engines, agricultural machinery, etc., are discussed at considerable length. Agricultural chemistry, botany, entomology, anatomy, and physiology of farm animals, and veterinary science, are elaborated upon sufficiently to be exceedingly helpful to a farmer seeking to understand the science of his business. Part II, on "practical agriculture," takes up mechanical improvement of soil, farm crops and their cultivation, manures, drainage, irrigation, permanent pastures, live stock, dairying, woods, and plantations, fruit culture, meteorology, and a review of agricultural experiments. The success attending Dr. Webb's elementary text book on agriculture induced the writer to continue the subject in a more advanced manner, as has been done in the present volume, to which considerable aid was given by other scientific men. The chapter on veterinary science was contributed by Mr. H. Thompson, M. R. C. V. S., which is a helpful acquisition to its completion. The work of 670 pages is carefully edited, illustrated, and attractively bound. It is worthy a place in every agricultural library. The publishers are Longmans, Green & Co., 15 East 16th street, N. Y. U. S. A.

NOTICES.

"CHICKENS IN THE PARLOR." "The farmer to-day," writes Mr. Geo. H. Stahl, of Quincy, Ill., manufacturer of the famous "Model Excelsior Incubator," can hatch chickens in the parlor without prejudice either to the parlor or the birds, "provided he uses this handsome and efficient machine for that purpose. Mr. Stahl is said to control some 60 patents on incubator construction, and runs an immense factory. A special feature in the "Model Excelsior" is the double regulator for controlling temperature. That he should do an immense business is only natural.

The Cradle Churn, which has been advertised in our columns for the past year or so, has won its way into very general favor. Hundreds of churns have been invented and put on the market, but with very few exceptions they have been superseded by something simpler and better, or have proved of little value in themselves. The Cradle Churn, however, invented by Mr. Hamilton, Nepeawa, Man., has stood the crucial test of the past few years, during which such vast strides have been made in the dairy world, and in which time so many old notions, and old-fashioned dairy utensils have been subjected to back shelves in the attic.

Chas. Boeckh & Sons, 80 York street, Toronto, have now obtained the sole agency for this churn for the Dominion of Canada. As indicated by the name, this churn is on rockers, and moves with a cradle motion, the cream taking a figure 8 motion, which thoroughly mixes it, and "makes" the butter very rapidly. There are no paddles inside; it is thus easily washed, and allowing a free current of air all the time in the churn; whereas, the revolving churns must be frequently stopped and opened to allow the gas to escape. The churn is all fastened together, is easily moved about, and there is no danger of upsetting or the head falling out, emptying the contents on the floor. It is claimed for the Cradle Churn that it is easier to work, easier to clean, and will make the best granulated butter in as short a time and with much less labor than any other churn in the market. There are now 1,000 of these churns in use throughout the Dominion, not one complaint having been made to the proprietors, while they possess hundreds of commendations.

THE DR. H. W. LEAVITT DEHORNING CLIPPER. The accompanying illustration conveys an accurate idea of the above instrument, which is one of the most powerful and efficient made for removing the horns of cattle.



Great improvements have been made in the Clipper—the arrangement of cogs, the same movement of handles moving the knife twice as far as before; in other words, the handles need be moved only half the distance. The end blade is also drawn up at the same time the other goes down, which greatly facilitates the cutting, as a practical man will readily see. Its weight is only 14 lbs., and the knives are easily removed for sharpening. Any additional information may be obtained from S. S. Kimball, 577 Craig street, Montreal. Above advertisement appears elsewhere.

SECURE GOOD SEED. A good change in seed oats is certainly most advantageous. The next great consideration is to secure the stock of seeds in first-class order, and that the varieties selected are such as will give ample yield, and be an improvement on varieties sown in the past. Among the most desirable varieties of field seeds offered this season by J. A. Simmers, Toronto, Ont., are the New Challenge White Oats, Peerless White Oats, and Canada Beauty Peas. Mr. Simmers states that the New White Challenge Oats gave them a yield of about 80 bushels to the acre in 1894, which is certainly a very creditable turn out, indicating that this variety will be largely sown this season. The Peerless White Oat is also a very desirable variety. It was sown to a fairly large extent in the past season. It is a good yielder. The Siberian White Oats also are to be had at Simmers', at very low price. Price will be given on application. All the other oats are quoted in another column in this issue. Farmers wishing to get a good reliable change of seed will have their orders promptly attended to by forwarding them to Mr. Simmers. Simmers' descriptive catalogue of seeds for 1895 accompanies all orders sent to the firm. Orders for Permanent Grass Seed Mixtures, Clover and Timothy Seeds, are promptly attended to, and cleaned seed is supplied to farmers at a very slight advance on the ordinary seeds usually sent out by dealers.

INCUBATION AT THE O. A. C. Mr. L. G. Jarvis, Superintendent of the new Poultry department at the Agricultural College, Guelph, writes under date of March 13th, to Geo. Ertel & Co., London, Ont., as follows: "So far the Incubator (Victor) is running all right, and very regular. Have had no trouble. We are keeping it at 102 and it has not varied over a degree either way since starting. In fact, could not run more regular. The regulator is simple and easily adjusted."

HOW TO GET "SUNLIGHT" BOOKS. Send twelve "Sunlight" Soap wrappers to Lever Bros. (Ld.) 13 Scott St., Toronto, who will send post-paid a paper-covered book, 100 pages. By leaving the ends of the parcel open, it will go for one cent postage. Remember "Sunlight" now costs six cents per twin bar.

YORKSHIRE PIGS
Of the best type and breeding. Pairs not akin for sale at all seasons.
J. M. HURLEY & SON
Belleville, Ont. Box 442.
17-1-y-on



IMPROVED : YORKSHIRES

I have been breeding Improved Large Yorkshires for six years. I breed the best, as my success at our Provincial Exhibition clearly proves. Write me for prices, etc., on spring pigs. I sell at reasonable prices.
a-on W. M. CLARK, North Wiltshire, P. E. I.

LARGE IMPROVED WHITE YORKSHIRES AND ENGLISH BERKSHIRES

Now ready, boars fit for service; young sows ready to mate, and sows in farrow. Prices reasonable. Pairs supplied not akin. Apply to
WILLIAM GOODER & SON,
11-y-o Box 160, Woodstock, Ont.



IMPROVED LARGE WHITE YORKSHIRE PIGS for sale, both sexes. These are the finest specimens ever bred in the County of Stanstead.
6-f-on W. G. TALBOT, GEORGEVILLE, QUE.

MODEL BERKSHIRE HERD

D. A. GRAHAM
PARKHILL, ONT.
I am prepared to book orders for spring pigs from prize winners & imp. stock. Pairs supplied not akin. Prices moderate. Can also book orders for W. & B. P. Rocks, W. and S. L. Wyandottes and Bronze Turkey Eggs. 3/4 miles from Parkhill Station, G. T. R.
17-1-y-on



LARGE ENGLISH BERKSHIRES
My herd are imported or bred from imported stock, and have carried winnings at leading shows for years, including sweepstakes at all breeds at last Guelph Fat Stock Show. Pigs of all ages for sale, pairs supplied not akin.
9-y-on GEO. GREEN, Fairview, Ont.

Large English Berkshires!
J. G. SNELL & BRO.,
Edmonton, Ontario.

We are now booking orders for young pigs. Have several litters now, and more to follow in Mar. and April. These are by imported Star One, 88 lbs., 1st prize aged boar, Toronto, 1894; Lord Ross, 1st p. yearling boar, Toronto, 1894; Regalia, 5th lbs. at 12 months old, 1st p. boar under a year, Toronto, 1894; Baron Lee 4th, 602 lbs. at 14 mos. We never had so many good sows to breed from as at present. Write for prices. 2-y-on

ISRAEL GRESSMAN, New Dundee,
—IMPORTER OF—
Large - English - Berkshires
4-y-on

BERKSHIRES AND YORKSHIRES.
Choice stock for sale at reasonable prices. Orders filled in rotation. Inspection invited. Write for prices.
THOMAS WATSON, Springvale, Ont.
3-1-d-on

S. COXWORTH, WHITBY, ONT.,
Breeder and Importer of Berkshire Hogs and Cotswold Sheep

I am now booking orders for spring delivery. Pairs supplied not akin; all stock guaranteed as described. Inspection of herd solicited. All correspondence promptly attended to.
8-y-on

H. J. DAVIS, Woodstock, Ont., Breeder of Short-horn Cattle, Imp. Large White Yorkshire and Berkshire Swine. Some very fine young bulls of good color and breeding, from 12 to 18 months old, for sale. Also a number of Yorkshire Boars of splendid quality, fit for service, and a good lot of Yorkshire Sows ready to breed. Berkshire boars of the right stamp fit for service; also sucking pigs of both breeds for sale at moderate prices. Inspection invited, or write for description and prices. 8-y-on

G. J. GILROY & SON
Glen Buell, Ont.,
BREEDERS OF
HOLSTEIN FRIESIAN CATTLE
—ALSO—
Large English Berkshires & Imp. Yorkshire Swine
Bred from imported stock. Personal inspection solicited. 7-y-on

NORMAN BLAIN,
Cold Spring Farm, St. GEORGE,
BREEDER OF
CHOICE TAMWORTHS.
Young stock for sale of both sexes, from four to five months old. Orders booked for April and May pigs. Prices moderate. Correspondence solicited. 7-1-y-on

IMPROVED
Chester White and Tamworth Swine
Our Improved Chesters have won more Sweepstakes at large exhibitions than all herds of Chesters combined in the Dominion, including Sweepstake Sow over all breeds at Fat Stock Show, Guelph, '91. Tamworths are selected from best breeds in England, and winners of Sweepstakes at Fat Stock Show, Guelph and Ottawa, 1894. 250 Choice Sows bred for spring trade. Orders booked for spring pig in pairs not akin. Reduced rates by express. Send for price list. 7-y-on H. GEORGE & SONS, Crampton, Ont.

Ontario Central
—Herd of—
Chester Whites and Duroc-Jerseys.
Our Improved Chester White Herd was established eight years ago with first-class animals. Our Duroc-Jersey Herd is of two years' standing. Selection and care have enabled us to lead in both breeds in the show rings of Toronto, London, and Ottawa. Orders placed with us will be attended to with dispatch.
Wm. Butler & Son,
Dereham Centre, Ont.
21-1-f-on

PINE VIEW HERD!
CHESTER WHITES and BERKSHIRES.
Young Boars fit for service. Young Sows in pig to an Imported Boar. And in fact I can supply any aged pig wanted of the two breeds mentioned above, at a price in touch with the times. Orders are solicited for weanlings; but I am anxious to clear out the older ones in order to make room for sows farrowing next month. For prices and other particulars address, JAMES H. SHAW, Simcoe, Ont. 21-1-f-on

E. D. GEORGE
PUTNAM, ONT.
Importer and Breeder of
Ohio Improved Chester White Swine
The largest and oldest established registered herd in Canada. I make this breed a specialty, and furnish a good pig at a fair price. Write for prices. 15-1-y-on

O. I. CHESTER WHITE SWINE.
Stock for sale. All stock registered. Toulouse Geese, Pekin Ducks, Bronze Turkeys, eggs \$1.50 per 11. Partridge and Buff Cochins, Plymouth Rocks, Silver Gray Dorkings, Golden, Silver, and White Wyandottes, Brown and White Leghorns, Black Hamburgs, American Dominiques, Black Red and Black Summatras, and Indian and Pit Games, eggs, \$1 per 13. Will mix sittings if desired; also a few pair of Wild Turkeys for sale. G. BENNETT & PARDO, Charing Cross, Ont. 7-1-y-on

Established 1867. Guaranteed. Self-Regulating. Absolutely. **THE IMPROVED Victor Incubator and Brooder** endorsed by all as the most reasonable in price, finest finished, and perfect Artificial Hatching and Rearing Outfit ever made or sold. Thousands in use. Guaranteed as represented or money refunded. Circulars free; Catalogue 4c. Address **GEO. ERTEL & CO., Patentees and Mfrs., LONDON, ONT., and Quincy, Ill.**

Salt! Salt!

FARMERS, by clubbing together, can get an assorted carload of Salt at the lowest prices. Patrons of Industry cannot touch us in prices from their Kincairdine Works. Now is the time to send in your order and buy salt cheaply. All kinds, in barrels, bags, or bulk, and at the lowest prices. Write and get our prices. It will only cost you a postal card.

THE CANADA SALT ASSOCIATION,
CLINTON, ONTARIO.

Summit Farm Herd of Duroc-Jersey Swine. I have young stock for sale, bred from imp. stock. Both sexes, from two to nine months old. Including a few choice young sows in farrow. Prices to suit the times. F. W. TERHUNE, 3-1-y-on Box 690, BRANTFORD.

TAMWORTHS AND POLAND-CHINAS
Young boars fit for service. Sows bred to farrow in February and March. Pairs of weanling pigs of each breed not akin for sale. **FRANK ROW,** 21-1-f-on Avon, Ont.

R. H. HARDING, Thorndale, Ont., is offering special bargains for the next thirty days in Chester Sows in farrow, and Boars fit for service, in order to make room for spring litters. 20-y-on

PIONEER HERD. — DUROC-JERSEY SWINE. Oldest herd in Canada. Careful breeding. Only good pigs shipped. Write. **PETER LAMARSH,** 5-1-y-on Wheatley, Ont.

REGISTERED POLAND-CHINA SWINE
A choice lot of young Pigs, Boars and Sows, fit to ship. Can supply pairs not akin; also boars fit for service. My herd is composed of the most popular prize-winning strains; also sows fit to breed. Prices very moderate. Write. **WESLEY W. FISHER,** 5-1-y-on Benmiller, Ontario.

THE OXFORD HERD OF REGISTERED POLAND CHINAS
Our herd won all the sweepstakes, diplomas and herd prizes, and 22 out of 26 first prizes, at the three largest fairs in Canada, in 1894. Our herd is headed by Darkness Quality the winner of the first prize in his class, over 41 entries, at the World's Fair, in Chicago, in 1893. Our stock is large in size, and fine in quality, and are well adapted for the Canadian trade. Young stock for sale at all times. Prices reasonable. Address **W. & H. JONES, Mount Elgin, Ont.** 15-y-on

CANADA WILKES. Young Stock of all Ages For Sale. Silver Gray Dorkings, W. F. B. Spanish, Brown and W. Leghorns, L. Brahmas, Partridge Cochins and Silver Hamburgs; a few cockerels yet for sale of B. Leghorns and B. Spanish. Eggs for setting after April 1st, 13 for \$1, 30 for \$2. Send for illustrated catalogue of Polands and poultry. Correspondence solicited. **CAPT. A. W. YOUNG, Tupperville, Ont.** 17-y-on

FARMERS' VETERINARY MEDICINES
FOR HORSES.
Colic Draughts, 50c.; \$5.00 per dozen bottles.
Fever Draughts, 50c.; 5.00 " " "
White Oils, 50c.; 5.00 " " "
Wound Liniment, 50c.; 5.00 " " "
Blister Ointment, 50c.; 5.00 " pots.
Cond'n Powders, 50c.; 5.00 " tins.

FOR CATTLE.
Purgative Drenches, 25c.; \$3 per dozen packets.
Milk Fever " 25c.; 3 " " "
Cleansing " 25c.; 3 " " "
Mammitis Lotion, 50c.; 5 " bottles.
White Oils (strong), 50c.; 5 " " "
Hoof-Rot Liniment, 50c.; 5 " " "

These veterinary medicines are guaranteed scientific remedies for horses and cattle. A case containing one dozen remedies, assorted to suit the purchaser; price, \$5.00. Prepared by **DR. WM. MOLE, M. R. C. V. S.,** 7-e-on 260 Adelaide St., TORONTO, ONT.

Cheese Vats, Curd Sinks, Gang Presses, and Hoops, Weighing Cans, Milk Cans, AND DAIRY UTENSILS OF ALL KINDS. Write us for full information and prices. **Wm. Stevely & Son,** 7-a-on Manufacturers, LONDON, CAN.

LIVE STOCK AUCTION SALES
Conducted in all parts of the country. Pedigree stock a specialty. Write for terms. References; J. C. Snell, Edmonton; Hon. M. H. Cuthbert, Compton, P. Q.; or this office. **JOHN SMITH, Brampton.** 9-1-y-on

FOR SALE—Silver Wyandottes and Mammoth Pekin Ducks. Eggs at \$1.00 per 11. My strain of S. Wyandottes have won more prizes at our leading shows than all others combined. My Pekin Ducks are mostly imported, and of great size. J. E. MEYERS, Kossuth, Ont. 7-f-o

Jacob B. Snider, Corman Mills, Ont., Breeder of choice Light and Dark Brahamas, Black Langshans, Plymouth Rocks, Golden Wyandottes, Black Minorcas, Red Cap and Indian Game. Eggs, \$1.25 per 13. Correspondence solicited. 7-f-o

PRESTON POULTRY YARDS.—L. and D. Brahamas, Buff, W. and P. Cochins, B. Langshans, B. and W. Rocks, S. Wyandottes, W. and Bk. Leghorns, B. B. R. and I. Game, W. B. S. and G. Polish. Pekin Bants. Send for circular. Eggs, \$2 per sitting. G. D. SMITH, Preston, Ont. 7-f-o

HAZELTON B. P. ROCKS
Guaranteed eggs from prize stock; 13 for \$1.50, 25 for \$2.00. Hundred lots at reduced rates. Circulars ready.
7-b-om C. W. ECKARDT, Ridgville, Ont.

FORT ROUGE POULTRY YARDS
Eggs for hatching from Barred and White Plymouth Rocks; Gold, Silver, White and Black Wyandottes; Brown Leghorns; Langshans; White Minorcas; Mottled Javas; Light Brahamas; Game Bantams; Bronze Turkeys, and Pekin, and Rouen Ducks. Eggs, \$2 per sitting of 15. A few choice birds for sale; also Pigeons and Rabbits. My breeding pens contain upwards of 40 prize-winners at the late poultry show.
Write, S. LING, WINNIPEG, MAN.

I AM BREEDING FROM CHOICE YARDS of imported birds of Black Minorcas (from England this year), Derbyshire Red Caps, Brown and White Leghorns, Light Brahamas, and Black Plymouth Rocks. Grand birds. Eggs \$1.00 per sitting. A hatch guaranteed. Some choice birds W. L. BROWN, London West, Ont. 7-c-o

FONTHILL POULTRY YARDS
Single-comb White and Brown Leghorns, B. P. Rocks, Colored Dorkings, S. L. Wyandottes, W. F. B. Spanish, S. S. Hamburgs, Houdans, and B. Minorcas. Send for free circular.
5-o J. E. MCCOMBS, Ridgville, Ont.

W. A. Pettit, Breeder of S. C. W. Leghorns (Knapp Strain).
Prize-winners at Winnipeg Industrial 92, '93 and '94; also at Manitoba Poultry Association Show, March, 1894. Cockerels for Sale, \$2, \$3 and \$5 each. Hens for Sale, \$2 to \$3 each. Also my four-year-old Imp Cock "Prairie Ranger" for sale cheap, in good vigorous breeding condition.
Winnipeg White Leghorn Poultry Yards, 1-d-om BOYD AVE., Winnipeg.

THE MUTUAL LIFE INSURANCE COMPANY OF NEW YORK

RICHARD A. MCCURDY PRESIDENT.

STATEMENT
For the year ending December 31 1894.

Income	
Received for Premiums	\$36,123,163 82
From all other sources	11,897,706 12
	\$48,020,869 94
Disbursements	
To Policy-holders:	
For claims by Death	\$11,929,794 94
Endowments, Dividends &c.	9,159,462 14
For all other accounts	9,789,634 18
	\$30,878,891 26
Assets	
United States Bonds and other Securities	\$83,970,690 67
First lien Loans on Bond and Mortgage	71,339,415 92
Loans on Stocks and Bonds	11,366,100 00
Real Estate	21,691,733 39
Cash in Banks and Trust Companies	9,655,198 91
Accrued Interest, Deferred Premiums &c.	6,615,645 07
	\$204,638,733 96
Reserve for Policies and other Liabilities, Company's Standard, American 4 per cent.	
	\$82,109,456 14
Surplus	\$22,529,327 82
Insurance and Annuities assumed and renewed	
Insurance and Annuities in Force December 31 1894	\$55,207,778 42
Increase in Total Income	
	\$6,067,724 26
Increase in Premium Income	
	2,528,825 84
Increase in Assets	
	17,921,103 82
Increase in Surplus	
	4,576,718 91
Increase of Insurance and Annuities in Force	
	51,923,039 96

I have carefully examined the foregoing Statement and find the same to be correct.
CHARLES A. PELLER Auditor

From the Surplus a dividend will be apportioned as usual.

ROBERT A. GRANNISS VICE-PRESIDENT

WALTER R. GILLETTE General Manager
ISAAC H. BLOD Vice-President
FREDERICK CROMWELL Treasurer
EMORY W. LINTOCK LL.D. F.I.A. Actuary

HENRY K. MERRITT, Manager, 31, 32, 33 Bank of Commerce Building, Toronto.
E. J. McROBERT, District Manager.
P. SLACHT, Special Agent.
J. J. WRIGHT, Special Agent.
London, Ontario.

Bronze Turkeys | Plymouth Rocks

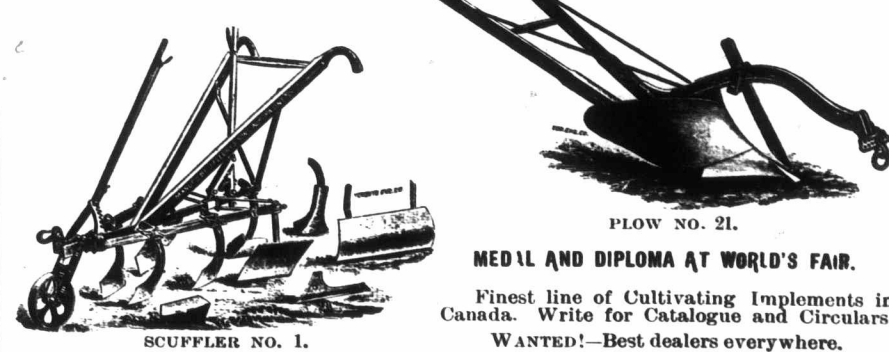
Toms and Hens for sale, from 23-lb. hens and 40-lb. gobbler. A few good ones left. All Turkeys in March Exhibition that took prizes were from my stock.

A few good Cockerels left from Hero Pen. I exhibited 5 Manitoba raised Cockerels scoring over 90 points. One of my Pullets took 2nd in a competition of over 30.

White Wyandottes—I swept the show.
Silver Laced Wyandottes—A grand Lot.
Imperial Pekin Ducks.

Write for new Catalogue giving prices of eggs and description of Pens.
M. MAW, North Main St. Poultry Farm, **Winnipeg.**

CULTIVATORS | PLOWS



J. FLEURY'S SONS, AURORA, ONT.

FERTILIZERS

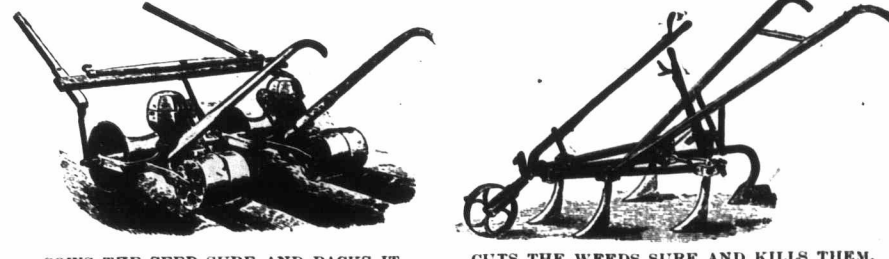
THE NICHOLS CHEMICAL CO., CAPELTON, P.Q.
MANUFACTURERS OF SUPERPHOSPHATES CONTAINING A HIGH PER CENT. OF PHOSPHORIC ACID.

COMPLETE FERTILIZERS

Containing a high per cent. of Phosphoric Acid, Ammonia, and Potash.
FOR ALL SOILS — ALL CROPS.

THE NICHOLS CHEMICAL CO., Capelton, P.Q. Send for Circular and Prices. 7-d-o

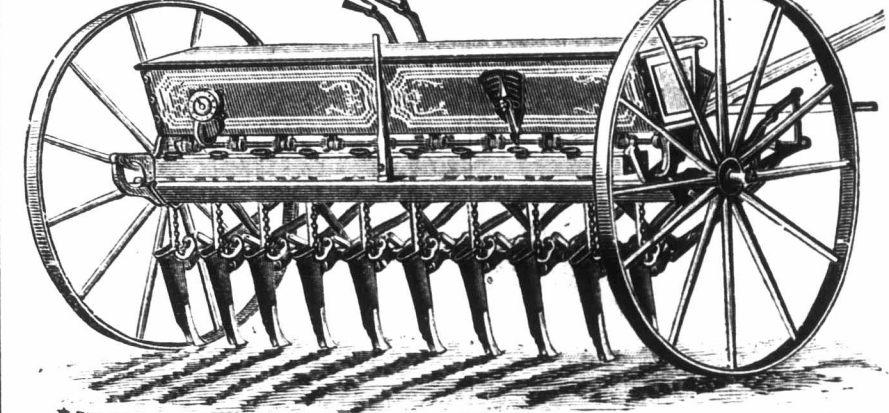
IN some cases three of a kind beats two pair; but here's only one pair, and it will beat any two of a kind made.



What's Left?
A FINE ROOT CROP.

B. BELL & SON, ST. GEORGE, ONTARIO.

Noxon Steel Hoosier Drill!



There are Drills and Drills! But there is only One Hoosier!
All Others are Back Numbers!
The proof is, there are more Hoosier Drills in use in Canada to-day than all other Drills combined.

No Purchaser Dissatisfied Yet? Why should they be, when they have got THE BEST DRILL EVER MADE? WE GUARANTEE THIS.

NOXON BROS. MFG. CO. (Ltd.), INGERSOLL, ONT.

ADVERTISE in the ADVOCATE.

STOCK GOSSIP.

In writing to advertisers please mention the Farmer's Advocate.

Robert Davies, proprietor of Thorncliffe Stock Farm, Toronto, on 16th May next will hold a special sale of his entire herd of Short-horn cattle, consisting of 12 bulls, among them being the celebrated Imp. Cruickshank bull, Northern Light (57801)—11111—and the celebrated young Bow Park bull, Lord Outhwaite, who took first prize and sweepstakes for best bull, any age, at Toronto show last fall; also a lot of choice cows in calf, and young heifers by the above bulls. This will be a great opportunity for breeders to purchase some of the best stock on the Continent. He will also offer for sale on the same date some of his fine registered thoroughbred Shropshire sheep. Catalogues will be forwarded upon application.

H. Bollert reports that his Holsteins have wintered nicely. "The calf crop is the best I ever had; the get of the great Colanthus Abbecker please me more every year. There seems to be a wonderful difference in the produce of an old bull and a young and undeveloped one. My calves are nearly all heifers, and among them are such that the most exacting breeder might well feel proud of. They are from dams who, not as some breeders say, will some day make a great record, but who are actually making great records, and backed with the unequalled rich butter breeding of "C. A." These heifers cannot fail to make great producers as well as show animals. A bull specially worthy of mention was dropped Feb. 15th. He has for dam Witkop Pieterje Beauty, out of Witkop 2nd Beauty, 563 lbs. milk in one day; 10,057 lbs. in 9 months and 25 days at two years old, and at six years old made 26 lbs. 10 oz. of butter in seven days. One of her sons won 1st prize in class and sweepstakes as best bull under one year old against all dairy breeds (including Shorthorns) at the World's Columbian Fair. Last fall another of her sons won 1st prize at the New York State Fair in strong competition. Witkop Pieterje Beauty has for sire Millas Pieterje Netherland. His dam, Pieterje 3rd, holds the world's four-year-old milk record of 24,126 lbs. in a year, and in midwinter made 27 lbs. 84 oz. of butter in seven days, and 110 lbs. 64 oz. in 30 days. Her dam is the famous Pieterje 2nd, who holds the world's milk record for mature cows with 30,3184 lbs. The sire of my calf is Colanthus Abbecker, who stands unequalled in the country for richness of breeding. His dam, at three years old, two granddams and great-granddam have an average butter record of 29 lbs. in seven days. Among them is Mechtchilde, with a milking record of 1124 lbs. in one day, 717 lbs. in seven days. She made in seven days 39 lbs. 164 oz. of butter, and 292 lbs. 64 oz. in 30 days. For the showing her equal never lived. Another one is Alberta Abbecker, who has a milk record of 884 lbs. in one day, and 11,604 lbs. 13 oz. in six months—a great prize-winner. In the competition for the gold medal and \$100 cash prize offered by the Holstein-Friesian Association in 1888, competition open to all breeds and the world, she won 2nd prize (her stable mate winning first), and the following week at Detroit, in same class, she won first, defeating her companion. Every animal in the pedigree of my calf has been a noted prize-winner, and he himself is all that I desire—beautifully marked, low, lengthy, and very broad; in fact, a credit to his breeding. I lately sold a fine and very richly-bred yearling heifer to Wm. F. Clarke, Woodville, Ont. She is in calf to Colanthus. I now offer several yearling bulls, among which is one for whom I claim, without fear of contradiction, that he is the richest-bred milk and butter bull of his age in the Dominion. I have also secured a very fine bull calf of the Bonnie Queen family, sired by Colanthus Abbecker, from Mr. E. Pearson.

MAPLE LEAF STOCK FARM.
At Oriel, a few miles south-east of Woodstock, is situated the beautiful four-hundred-acre farm known as the Maple Leaf Stock Farm, the property of Mr. Valentine Ficht. It is well fenced, and in a splendid state of cultivation, standing somewhat back from the road on an elevation that gives one a view of most of the farm, are the buildings—a fine large brick dwelling, and extensive basement barns. Mr. Ficht has been engaged in breeding pure-bred stock since 1860, and for many years has done an extensive business in Shorthorns, and Clydesdale horses. In looking through the stables we found the cows in just nice breeding condition (not excessively fat), and in looking over the pedigree we found that they were of the best Scotch strains. A noticeable feature of this herd is that they have the combined qualities of being good workers at the pail, and still retain good beefing qualities. We were exceptionally well pleased with a remarkably fine fourteen-month-old heifer sired by The Governor (12289) and from a Winnipeg cow; we considered this heifer the plum of the herd, being very compact and deep-bodied, with a great girth, well-sprung ribs, a splendid quarter, and a beautiful head. She stands very wide, on strong-boned, short legs; in fact, we regard her as a model heifer. The young bulls are a good lot, ranging from one to two years old—reds and roans in color, and in good serviceable condition. They are mostly from Wimple cows, and sired by "The Governor" (12289), a bull bred by J. & W. B. Watt, Salem, Ont., and "Butterfly Duke 2nd," bred by Hugh Thompson, St. Mary's. We were shown a fine two-year-old bull, by Waterloo Duke, of Bow Park breeding—a very useful animal—roan in color; and a red two-year-old (bred by Mr. Ficht), sired by "Just in Time" (4926), dam Wimple Diadem. Among the Clydesdales we saw three fine registered mares, and a number of their progeny, which a few years ago would have brought very handsome figures. Our attention was also drawn to the imp. mare, Maggie, a number of whose offspring have been sold at handsome prices. Mr. Ficht is also the owner of a very handsome imp. Shire mare. In conjunction with the above mentioned stock, he is handling a large flock of Cotswold and Shropshire sheep. The Cotswolds number some fifty breeding ewes, and are a large, well-wooled, ever lot, headed by a very fine two-year-old ram, of Mr. Hardy Shores' breeding. Among the Shropshires a number of very fine individuals are also to be seen. Parties wishing Improved Large Yorkshires can also get their wants supplied in this line at the Maple Leaf Stock Farm.

STOCK GOSSIP.

In writing to advertisers, please mention the Farmer's Advocate.

Attention is directed to the announcement of Wm. Davies & Co., Toronto, who, elsewhere, offer two imported Shire mares (to foal early) for sale. Write them promptly for terms.

Our readers in the Maritime Provinces will do well to note the advertisement of Mr. Wm. Clark, North Wiltshire, P.E.I., in this issue. Mr. Clark breeds Leicesters, and Plymouth Rocks, as well as Yorkshires.

W. F. & J. A. Stephen, "Brook Hill Farm," Trout River, Que., advertise in this issue of the ADVOCATE choice Ayrshires of the deepest milking strains, and an extra lot of improved Yorkshire swine for sale. Note their announcement. They are prepared to quote very favorable terms.

The dispersion sale of the late F. W. Stone's stock, at Guelph, attracted a large gathering of farmers and stockmen. The many head went off in a comparatively short time, but as they were in only fair condition, and not of outstanding excellence, the prices realized were not high.

W. C. Edwards & Co., Rockland, Ont.,—"Our stock is coming through the winter in good shape; the cows are nearly all calved, and are milking well. We have a lot of good bull calves coming on for the next season's trade. Have a few good yearlings still on hand, but expect to get rid of them soon, as the demand here seems to be improving."

Wesley W. Fisher, Horn Castle Farm, Benmiller, writes in good spirits regarding his success with Poland-Chinas. While his herd is a large one, he finds it necessary to purchase a few more pregnant sows in order to keep up with the growing demand for his splendid stock. His winter sales of boars have been one to each of the following:—T. M. Leggett, Hollin, Ont.; T. Willoughby, Mandamin, Ont.; Fred. Sullivan, Newbury, Ont.; M. E. Walker, Glencoe, Ont. He also has several orders booked for spring pigs.

M. Maw, North Main street, Winnipeg, writes:—"I am getting out a new catalogue and descriptive price list of all varieties of poultry I handle, and will be pleased to mail a copy to any one sending their address. Have had a very successful season, shipping birds to Dakota, Minnesota, Ontario, British Columbia, and Northwest Territories. I consider the ADVOCATE the best medium to advertise good stock in. People are beginning to realize that we have good stock, and that *Manitoba-bred birds* are harder and stand the climate and winter better than those imported from warmer countries. Express charges are less than half what they are on imported birds."

Smith Bros., Churchville, Ont., write:—"On the first day of last January we shipped twelve head of pure-bred Holstein cattle to Taber Bros., Port Perry. They have a large farm and are building a large cheese factory. They discerned that Holsteins were the best cheese cows in Canada, and hence their selection. They got the following: Lillie Tensen's Mink Mercedes, a granddaughter of Cornelia Tensen, who gave 19 lbs. of butter in a week, and 14,184 lbs. of milk in ten months; Anna B 2nd's Mink Mercedes, whose dam gave 7,915 lbs. of milk in six months; Marion's Mink Mercedes, whose dam, Marion, gave 10 lbs. of butter in a week, and 12,963 lbs. of milk in ten months; Mink Mercedes Teake, whose dam, Sady's Teake, gave 6,720 lbs. of milk in six months; Hijke 2nd's Tirannia Queen, from Hijke 2nd, who gave 18 lbs. butter in a week; Esdraella Tensen, a granddaughter of Cornelia Tensen; Tirannia Mink Mercedes; Tirannia Castine Countess; Clinton Mercedes Queen; Jacoba's Mercedes Queen; Springbrook's Mercedes Maid; and Tensen Mercedes Count, a richly-bred bull of the Tensen and Mercedes strains. These will make one of the best cheese-producing herds in Canada. Mr. S. W. Fawcett, of Drayton, secured since then Petar-the-Great, a grandson of Peel Queen, who gave 11,074 lbs. of milk in nine months. Messrs. F. Bard & Son, of Sturgeon Falls, purchased a heifer some time ago, and now gets Slepke Hedda King, a granddaughter of Slepke 4th, who gave 13 1/2 lbs. of butter in a week as a two-year-old, since then 7,597 lbs. of milk in 188 days. His grand-dam on sire side gave 8,430 lbs. of milk in 238 days. Mr. Wm. Watson secures Ykema Mink Mercedes Beauty, whose dam gave 9,581 lbs. of milk in nine months. He also gets a choicely bred bull calf. Mr. James Martin, of Bobcaygeon, gets Crosby Tensen's Mink Mercedes, whose sire took second prize at the World's Fair, and first at Toronto, Ottawa, and Montreal in 1892. She is a very promising heifer, in calf to our Tirannia 2nd's Prince Castine, whose dam, Tirannia 2nd, made 22 lbs. 8 ozs. of butter in a week as a two-year-old. This is the best two-year-old butter record in America. Mr. John Kelly, Red Rock, has purchased Baroness Clothilde, Daisy Teake's Castine Queen, and Lansdown Mercedes King. These contain the richness of the Clothilde, Castine, and Mercedes strains, and will give a good account of themselves in a short time. Mr. James Bick, of Bobcaygeon, gets Slepke 4th's Mink Mercedes, whose dam's record was given, and she is from Mink Mercedes Baron, whose butter-producing qualities are well known, and Eva's Pride 2nd's Queen, a very promising young cow, and she milks well right along, and is one of the most persistent milkers in our herd. Mr. Lee Williams, of Lambton Mills, has secured Flossie Tensen, a daughter of Cornelia Tensen, whose record has been given. She will make a very large milker. This makes twenty-three sold since the first day of last January. People recognize that good stock is profitable, and so they give us a call. We have some choice ones of all ages left, and our young bulls are especially good. Our prices are cut down close to suit the times."

SPECIAL PRIZES FOR SHROPSHIRE. Mr. Mortimer Levering, Sec'y, LaFayette, Ind., writes us that the American Shropshire Registry Association have given \$50 each to the Toronto, London, and Winnipeg Fairs this season, divided for the best flock of registered Shropshire, consisting of one ram one year old and over, and four ewes of any age (first premium, \$15; second, \$10. Best flock of four lambs one ram lamb and three ewe lambs, all to be American-bred, and owned by exhibitors: first, \$15; second, \$10.

Don't Wait till Sickness Comes before Buying a Bottle of PERRY DAVIS' PAIN-KILLER You may need it to-night

AS IN YOUTH Ayer's Hair Vigor CORDIALLY INDORSED.



RESTORES Natural Growth OF THE HAIR -WHEN- ALL OTHER Dressings FAIL. "I can cordially indorse Ayer's Hair Vigor, as one of the best preparations for the hair. When I began using Ayer's Hair Vigor, all the front part of my head—about half of it—was bald. The use of only two bottles restored a natural growth, which still continues as in my youth. I tried several other dressings, but they all failed. Ayer's Hair Vigor is the best."—Mrs. J. C. PREUSSER, Converse, Texas.

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To meet the wishes of their customers The Geo. E. Tuckett & Son Co., Ltd., Hamilton, Ont., have placed upon the market A Combination Plug of "T & B" SMOKING TOBACCO.

This supplies a long-felt want, giving the customer one 20-cent plug, or a 10 cent piece, or a 5-cent piece of the famous "T & B" brand of pure Virginia Tobacco. 5-y-om

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A safe, sure and effectual remedy for the removal of all Corns and Warts. It removes those troublesome excrescences without pain or inconvenience, and without the use of the knife. There is no corn or wart that it will not cure, if the directions are strictly followed. Full directions around each bottle. PRICE, 25 CENTS, POST-PAID. T. R. MORROW, Chemist & Druggist, 426 Cordova St., & Mt. Pleasant, VANCOUVER, B. C. 21-y-om

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YOUNG MAN, with farming experience wishes to hire by year, or otherwise, with general farmer of good standing. Address A. W., Office of this paper. 7-a-0

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There is no place in Canada where the season is longer than here. Hence we get trees brought to the fullest maturity, capable of withstanding the severest cold. Having one hundred acres in fruit, from which cuttings, buds, scions, etc., are taken, I can safely guarantee the purity of my stock to be equal, if not superior, to any other nursery. The soil is specially adapted to produce vigorous, hardy trees, now growing and for sale. All the leading sorts of both old and new varieties deemed worthy of propagation. Catalogues free on application. Agents wanted in every township. 13-f-om E. D. SMITH, Winona, Ontario.

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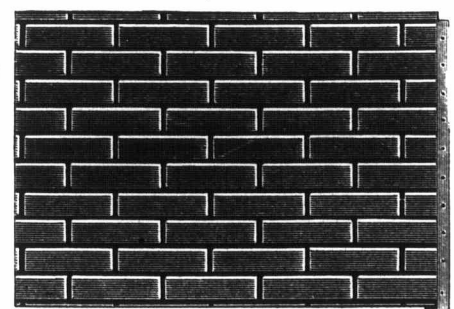
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By sending your Name and Address to us on a postal card, we will by ground to your Post-office and drop free of charge, a copy of our Circular and Price List and sample copy Canadian Bee Journal.

\$18 **\$18**

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For only \$18.00 we sell the above outfit (all but the wooden track, which any one can make). The outfit includes the latest improved Double Harpoon Steel Fork, the improved Malleable Iron Swivel and Reversible Carriers, twelve Rafter Brackets with nails, twelve Rafter or Track Bolts, three large Rope Swivel Pulleys, three heavy Wrought Iron Pulley Screw Hooks, 130 feet of seven-eighths pure Manila Rope, and 60 feet of Russian Hemp Trip Rope, along with accurate directions for hanging. The above is a complete haying outfit, and will be sent upon receipt of \$18 in a registered letter. If you live in Ontario we pay the freight.

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Cheese-factory Cans: 20 gallons, \$3; 25 gallons, \$3.50; 30 gallons, \$4 each. 2-y-om

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Just the thing for farmers—neat, strong and durable. Will last a lifetime, barring accidents. Uses only straight wires with so little depression as not to cause the galvanize to crack or peel. If there is a dealer who wants something better to handle than he's had, try it. We also supply the Double Lock

Wire Fence, which is claimed by some to be second to none, the lateral wire of which, as well as the upright stay, being crimped at joints. Our agents build either on premises. Agents wanted everywhere in Canada, to whom sole territory will be allotted. County and Township Rights for sale. Our Gas Pipe Frame Gate takes the lead. No better or cheaper place in the city to get plain or fancy turning done. Call on, when in the city, or address,

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It is cheaper than Shingles.
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Is put up in rolls of 108 square feet each, 10 feet long by 32 inches wide, making a light, durable and inexpensive roofing suitable for buildings of every description, and can be laid by ordinary workmen. One man can lay from five to ten square in a day, which brings the cost of Mica Roofing about 75c. per square cheaper than shingles. Special terms to dealers who buy our Roofing to sell again. Orders and correspondence answered promptly.

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ADVERTISE IN THE FARMER'S ADVOCATE.

STOCK GOSSIP.

In writing to advertisers, please mention the Farmer's Advocate.

W. F. & J. A. Stephen, Brookhill Farm, Trout River, Ont., have long-established herds of Ayrshires and Yorkshires of high merit. What they say in their advertisement in this issue should be of interest to many of our readers in Quebec and Eastern Ontario.

A. Elliot, Pond Mills:—"I find the FARMER'S ADVOCATE a very good advertising medium. The demand for Bronze turkeys has been quite brisk, having sold many, and have received many No. 1 recommendations from customers. I have sold quite a number of Tamworth pigs since I wrote to you last."

One of the best-arranged poultry houses we have yet seen was at German Mills, near Berlin, where very choice specimens of the various breeds advertised by Mr. J. B. Snider, elsewhere, are to be seen. Both from the arrangement of his yards, etc., and the quality of his birds, Mr. Snider evidently does not propose to occupy a back seat among poultry raisers.

To those interested in poultry raising we would direct their attention to the advertisement, in this issue, of G. D. Smith, of Preston. At these yards may be seen seventeen different varieties of very choice birds. Mr. Smith is prepared to supply either sittings or choice birds at very moderate figures, considering the quality and breeding. Good poultry, when properly handled, is without a doubt one of the most profitable adjuncts of the farm.

Messrs. W. H. & C. H. McNish, of Lyn, write:—"Guernseys only have to be seen to be appreciated; their many good qualities bespeak for them a great demand in the near future. Our stock has wintered exceedingly well for keeping stock in full bloom roots knock ensilage higher than Gillroy's kite), and we are finding an increasing demand for good dairy stock. Could have sold 25 Guernsey bull calves had we them for sale. We have made numerous sales lately, which extend from Nova Scotia to British Columbia."

Messrs. R. Rivers & Son, of Springhill Farm, make a change of ad. in this issue, having sold the two Short-horn bull calves advertised last month, grandsons of "Old Barmpton Hero." They now offer a few choice granddaughters of that famous old sire, in calf to "Commodore," their present stock bull, bred by Messrs. John Miller & Son, Brougham, out of (imp.) Lydia, bred by Sylvester Campbell, and sired by "Salamis," bred by Wm. Duthie, Collynie, Aberdeen, Scotland. Commodore promises to be a very impressive sire, as shown by the calves now coming, being all red and of the low down, thick type. At the time of writing, their old sow stock (Kirkcubbin Duchesse, by Laird of Kinellar, and Rosebud of Walkerton 2nd, have just dropped two fine red bull calves by Commodore. Shorthorns all going ahead, notwithstanding the hard winter.

J. E. Meyers, Kosuth, is well known among poultrymen, not only as a breeder of some of the choicest varieties, but also as an exhibitor who has won laurels in very keenly contested rings at our leading exhibitions for a number of years past. After looking through the poultry yards, on a recent visit, we were shown through the workshop of Mr. Meyers, where he manufactures outdoor brooders. He had just completed one for use at the Agricultural College Farm, and for John J. Lenon, Oshawa, Ont.; also a self-regulating incubator for his own use, with a three hundred and fifty egg capacity, arranged to hatch duck and hen eggs at the same time. It was in operation when we inspected it, and should it prove a success it will be well worthy the attention of poultrymen. Mr. Meyers claims that his incubator consumes remarkably little oil compared with others, and has many superior points. His advertisement will be noticed in this issue.

Messrs. Arthur Johnston & Son, of Greenwood, Ont., write:—"Shorthorn matters much improved in briskness, if not in prices. We have sold two young bulls the present week, at lower prices than ever before, and we are offering seven other exceedingly good ones at equally low prices. They are all fit for immediate service, and they are all in just very nice moderate condition—not a fat one and not a lean one. We have nine cows due to calve during the next four weeks, and we need room, hence the low prices. Breeders of first-class Shorthorns have no cause to feel discouraged in looking at the result of the Messrs. Ballantyne's sale. Good ones, well bred, attract attention and cash yet, and they will continue to do so. Courage, brother breeders! We have the farmers' cattle, the cattle that must make this country famous. Ontario is destined to be the nursery for high-class stock to keep up the standard in all other parts of North America. We are to be the Britain of America in Shorthorns at least."

TAMWORTH'S AT COLD SPRING FARM, ST. GEORGE. A couple of miles west of St. George, at Cold Spring Farm, Mr. Norman Blain has established a very nice herd of Tamworths, a breed which of late has become a special favorite on account of their adaptability to the requirements of the pork-packers of the country. The aim of the feeders at the present time is to produce a hog that will meet the requirements of the packers, and at the same time one that will give the best returns in the shortest time for the feed consumed; and it would seem that the Tamworth or the Tamworth cross on any of the other breeds gives very satisfactory results. The foundation of this herd was laid some two years ago by a selection from the well-known herd of Mr. John Bell, Amherst, Ont. At the head of the herd is Amber Rose (322), a young boar recently purchased from Mr. Bell; a lengthy, even boar, which promises to make a very useful animal. In the next pen was Red Knight (248), a nine-months-old boar, strong-bodied and with plenty of size. He is from Rattler (27), bred at the Guelph Experimental Farm; dam, Amber Rose (72). Among the sows we particularly noticed Amber Rose (72), one of Mr. Bell's breeding and a good representative of the breed, due to farrow in March. We also saw some fine young sows due to farrow in April, by Amber Smith (322). Mr. Blain also has on hand young boars and sows from four to five months old, ready for spring service. Representatives from this herd have been shown successfully at local fairs, and no doubt in the near future Mr. Blain will be an aspirant for honors at Toronto and other leading exhibitions.

STOCK GOSSIP.

In writing to advertisers please mention the Farmer's Advocate.

MR. FRANK ROW'S TAMWORTHS AND POLAND-CHINAS.

We recently had the pleasure of looking over the stock of Mr. Frank Row, of Avon. We found the Tamworths and Poland-Chinas in splendid shape, and of very high quality, some individuals being especially meritorious. This herd is not large, but gives evidence of careful selection and breeding. Mr. Row's reputation as a breeder is not unknown; and in the show rings of Toronto and other leading fairs he has scored many winnings. He has in Tamworths the show sow Lady Elgin (322), bred by H. Revell, Ingersoll, sire Revell's boar (imp.), dam Woodland's Queen (imp.), by Gun Hill Prince (159), Darridge Countess (2778), by Monarch (159), Darridge Queen. She won 1st in class in Toronto, two years in succession; 1st as sow and four of her progeny under six months, and many other prizes. Some of her October pigs are still on hand. The yearling sow Princess is a very notable animal. In Poland-Chinas, Mr. Row has a number of young pigs fit to ship; also boars fit for service.

MR. COXWORTH'S BERKSHIRES.

On a recent visit to Claremont, Ontario, the writer had the pleasure of calling on Mr. S. Coxworth, and inspecting his fine herd of Berkshires. The farm is conveniently situated, being less than a mile from C. P. R. Depot. Mr. Coxworth, although still a young man, has won for himself an enviable reputation as a breeder, and also as an exhibitor, having won prizes in many keenly-contested rings at our leading exhibitions. Selections of Berkshires and Cotswolds from this farm were shown at Winnipeg and other fairs in the Northwest last fall, where many prizes were won and good sales effected. In looking over the swine we found them in fine shape, and possessing good length and size, combined with smoothness and quality, essentials which have been considerably sacrificed by some breeders in order to obtain certain fancy points. The breeding sows were certainly a creditable lot. Among those we might mention the imp. sow Queen Own (2852), bred by Russel Swanwick, England; Bonny Queen (2664); Shaftsbury Maid 2nd (3478), and Lady Stanley (2183), as sows of a very fine Berkshire type, possessing great length of body, deep sides, thick and well-developed hams, strong-boned, and well-dished faces. One of the boars being used on the herd to good effect is King Lee (1777), by Entertainer (1878), dam Oxford (2373), a grand boar of great substance. Major Lee, by King Lee, dam Bonny Queen, is an exceptionally fine young boar, farrowed March, 1884. He possesses good length, deep sides, good hams, a fine head, and stands well on short, strong legs. He is a very promising show animal for the fairs of 1885. Mr. Coxworth has some twenty odd sows bred for spring trade, and a number of young boars and sows of all ages, and of the best strains, with which to supply customers. Cotswold sheep are also an important factor on this farm, of which we saw some very good specimens. Mr. Coxworth intends removing soon to Mayfield Farm, Whitby, Ont., where he will carry on his breeding operations with more zeal than ever.

A SUCCESSFUL SHORTHORN SALE.

As announced in the FARMER'S ADVOCATE, the dispersion Shorthorn sale of Thos. Ballantyne & Sons, Stratford, Ont., occurred on Wednesday, March 13th, and it proved, as we looked for, a most successful event. Considering the times, and the amount of complaining that has been heard regarding the cattle industry, it was decidedly auspicious, comparing favorably with other sales held of late. Take, for instance, the Potts dispersion sale, at Dexter Park, Chicago, on March 6th, where an average of but \$90 was obtained. Every one of Messrs. Ballantyne's cattle were sold, including three old imported cows, 13 to 14 years old (two of them but lately served), and one heifer in calf to a scrub bull. Omitting these, the average was \$116, or, including them, about \$108, amounting in the aggregate to about \$3,000. The day was perfect, the crowd large, and the bidding spirited. Following is the list:—

- Missie of Neidpath, to Jas. Crerar, Shakespeare; price, \$125.
- Marchioness 7th—John Brydone, Milverton—\$120.
- Marchioness 10th—David Milne, Ethel—\$105.
- Meadowsweet 2nd—Thos. Ellis, Clifford—\$100.
- Meadowsweet 4th—Wm. Oliver, Avonbank—\$51.
- Missie of Neidpath 10th—Fred. Martindale, Little York—\$88.
- Missie of Neidpath 12th—Jas. Riddel, Beeton—\$85.
- Missie of Neidpath 8th—Thos. Steacy, Cromarty—\$118.
- Missie of Neidpath 18th—Wm. Menzies, Kirkwell—\$84.
- Missie of Neidpath 15th—F. Martindale, York—\$76.
- Marchioness 4th—Robert Struthers, Poole—\$64.
- Marchioness 11th—Jno. Jameson, Kirkwell—\$112.
- Marchioness 6th—Jno. Whetham, Kirkwell—\$121.
- Marchioness 8th—Fred. Gardner, Britannia—\$140.
- Missie of Neidpath 3rd—Wm. Mason, Warton—\$175.
- Missie of Neidpath 17th—H. G. Arnold, Maidstone—\$70.
- Princess Royal 23rd—Alex. McTavish, Shakespeare—\$58.
- Indian Princess—Jas. Crerar, Shakespeare—\$136.
- Missie 81st—Pat. O'Rourke, Shakespeare—\$61.
- Missie of Neidpath 14th—Wm. Menzies, Kirkwell—\$120.
- Missie of Neidpath 19th—Wm. Oliver, Avonbank—\$76.
- Missie of Neidpath 6th—Fred. Gardner, Britannia—\$180.
- Missie of Neidpath 9th—Jno. Whetham, Kirkwell—\$135.
- Missie of Neidpath 11th—Henry Parker, Durham—\$150.
- Scotsman—Peter Campbell, Cromarty—\$175.
- Heir of Neidpath—J. Campbell, Crosshill—\$95.
- 11th Marquis of Neidpath—Peter S. Robertson, Stratford—\$112.

Complete Fertilizers

for potatoes, fruits, and all vegetables require (to secure the largest yield and best quality)

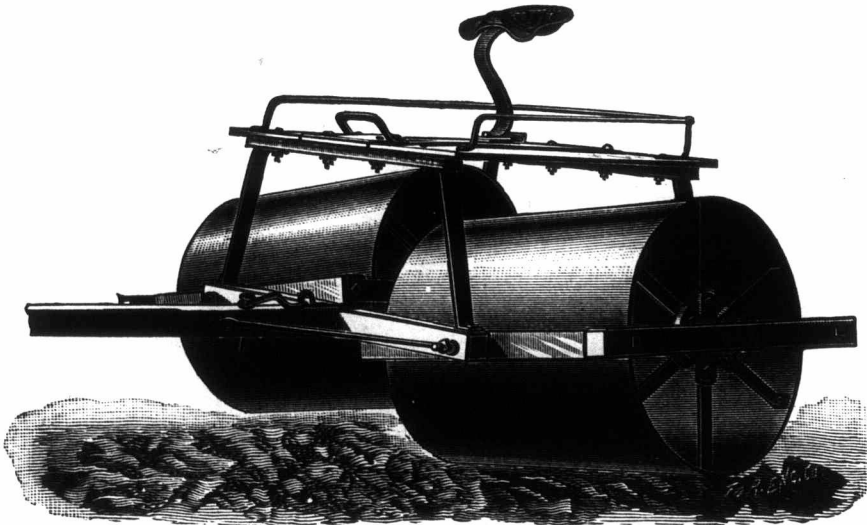
At Least 10% Actual Potash.

Results of experiments prove this conclusively. How and why, is told in our pamphlets.

They are sent free. It will cost you nothing to read them, and they will save you dollars.

GERMAN KALI WORKS, 93 Nassau Street, New York.

The DALE PIVOTED LAND ROLLER (Patented)

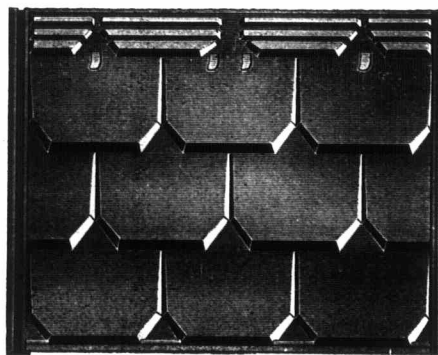


It is unanimously recommended by those farmers who have used it. Orders are now being booked for the spring trade. Description and price furnished on application to

5-om **T. T. COLEMAN**, SOLE MANUFACTURER, SEAFORTH, ONTARIO.

EASTLAKE STEEL SHINGLES

BEWARE OF WORTHLESS IMITATIONS.



BEWARE OF WORTHLESS IMITATIONS.

GUARANTEED SUPERIOR AND TO LAST LONGER THAN ANY OTHERS.

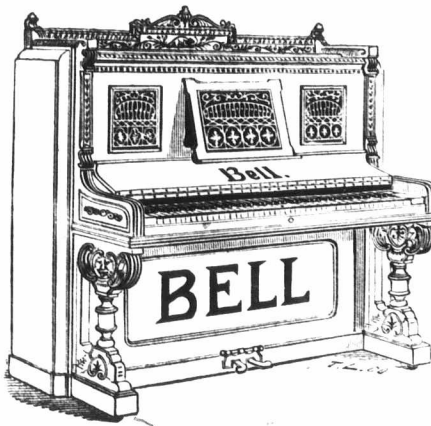
Our Guarantee is of Some Value.

SOLE MANUFACTURERS.

METALLIC ROOFING COMPANY, LIMITED,

84 to 90 YONGE ST., TORONTO.

CUT OUT AND SEND US THIS ADVERTISEMENT FOR SPECIAL PRICE.



BELL PIANOS AND BELL ORGANS

SUPERIOR IN Tone, Quality, Construction and Finish.

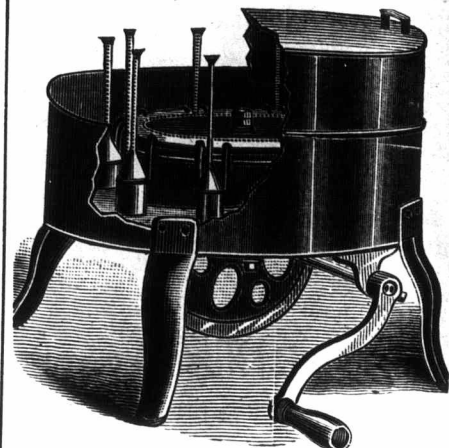
Full description to be found in our Catalogues. Mailed free on application to:

THE BELL ORGAN and PIANO CO. (Ltd.)

Guelph, Ontario.

OVER **75,000** OF OUR INSTRUMENTS NOW IN USE.

5-1-y-om



We have the best and simplest BABCOCK TESTER in use. Also dealers in Alpha De Laval Separators. We manufacture a complete line of Dairy Goods. Send for estimates of factory outfits.

5-d-o CREAMERY SUPPLY CO., Guelph.

GRAIN AND DAIRY FARM FOR SALE.

Choice farm of 400 acres, admirably adapted for grain-growing and dairy purposes; in one of the best localities of Ontario. Three miles from good market and station on G. T. R. Large brick house, in thorough repair, and first-class outbuildings; stabling for sixty head of cattle; good silo; brick piggery, sixty feet long. Farm watered by two living streams, and well at house and buildings. Easy terms of payment. Stock and implements will be disposed of at a valuation. Apply to

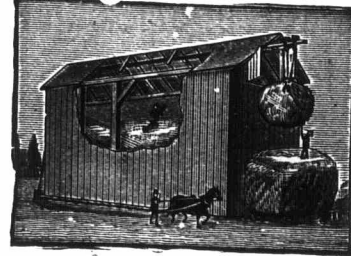
D. PONTON,

7-d-om 25 Toronto Street, TORONTO.

BUCHANAN'S

(Malleable Improved) PITCHING MACHINE

For unloading hay and all kinds of loose grain.



Unloads on either side of barn floor without changing car. No climbing necessary. Malleable Iron Cars. Steel Forks. Knot Passing Pulleys. Will work on stacks as well as in barns. Satisfaction guaranteed.

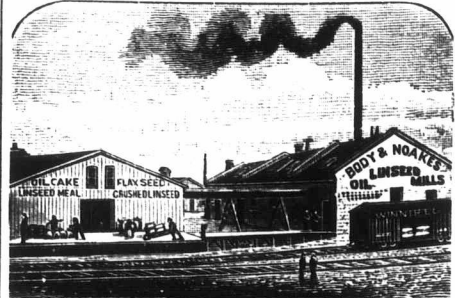


The Common-Sense Sheaf-Lifter

Works in connection with Pitching Machine, and is the most complete apparatus ever offered to the public for pitching sheaves. Sheaves left in the mow just as they come from the load.

RESPONSIBLE AGENTS WANTED

Circulars, Prices and Terms on application to **M. T. BUCHANAN, Ingersoll.**



LINSEED OIL CAKE

Whole, nutted or meal. Car lots delivered at any point. Write for prices. **BODY & NOAKES, Winnipeg Linseed Oil Mills Winnipeg, Man.**

21-om

AGENTS WANTED

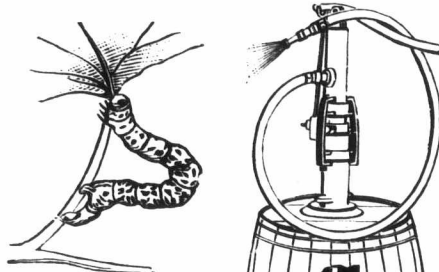
To sell our **GOLD MEDAL NURSERY STOCK** our **Geo. Leslie & Son,**

57 years established. 5-o TORONTO NURSERIES.

ADVERTISE IN THE ADVOCATE

FARMERS!
Ask your dealer in town for
THE "VERA"
CARBONATE OF COPPER FUNGICIDE
It is ready for use by adding water, and will destroy
Apple Scab, Grape Mildew, Etc.
MANUFACTURED BY
TORONTO LEAD & COLOR CO., LTD.
TORONTO. 5-f-o

Ideal SPRAY PUMP.



"IDEAL"
SPRAY PUMP
SIMPLE,
EFFECTIVE,
RELIABLE.



Reasonable Price. **BRANTFORD CAN.**
Manufacturers of
Steel Wind Mills, Iron Pumps, Tanks, Grain
Grinders, Beekeepers' Supplies.
4-y-om Mention this paper.

DAIRYMEN

HAVE you a supply of pure water; if not have a well drilled on scientific principles by a practical driller.
3-1-y-o



WM. SHARP, Practical Well Driller,
184 Hamburg Ave., TORONTO - ONT.

METAL SPRAY PUMPS



Our Perfect Agitator, Strength and Durability, (Working Parts of Brass only) And Their Thorough Spraying Powers
Are the three recommendations which sell so many of our Spray Pumps. Prices, \$7 to \$14, according to size and style. Write for circulars.
HOLMES & HOLLADAY, Clarksburg.

ANDERSON'S
DOUBLE ACTING
Force PUMPS

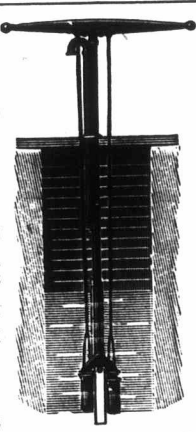
For Wells, Cisterns, Spraying Trees, Hand-Power or Wind-Mill.

NEVER FREEZES!
ALWAYS PRIMED!

Guaranteed the easiest working, most durable and best Pump made, or no sale.

Live men, pushers, wanted in every township in Canada, to sell these Pumps. For particulars address—

J. W. ANDERSON, Patenteo,
19-1-y-om Aylmer, Ont



BEST BELT ON EARTH

Endless and does not stretch.



NOTE THE TRADE MARK.

Capital and Labor

INSIST ON GETTING IT.

ANTHON CHRISTENSEN & Co.,

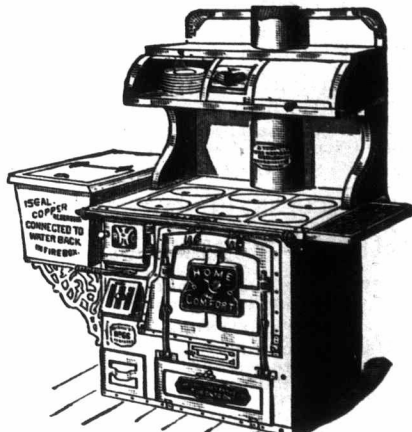
NIAGARA FALLS, ONT., CAN.

10-y-om

HOME COMFORT

ROLL OF HONOR.

- THREE GOLD and ONE SILVER MEDAL THE WORLD'S INDUSTRIAL and COTTON CENTENNIAL EXPOSITION. NEW ORLEANS, 1884 and 1885.
- HIGHEST AWARDS NEBRASKA STATE BOARD OF AGRICULTURE, 1887.
- DIPLOMA ALABAMA STATE AGRICULTURAL SOCIETY, At Montgomery, 1888.
- AWARD Chattahoochee Valley Exposition, Columbus, Ga., 1888.
- HIGHEST AWARDS 25th ANNUAL F. ST. LOUIS AGRICULTURAL & MECHANICAL ASSOCIATION, 1889.
- SIX HIGHEST AWARDS WORLD'S COLUMBIAN EXPOSITION CHICAGO, 1893.
- HIGHEST AWARDS WESTERN FAIR ASSOCIATION, LONDON, CAN. 1893.
- SIX GOLD MEDALS MIDWINTER FAIR, San Francisco, Cal., 1894.



STEEL HOTEL AND FAMILY RANGES.
CARVING AND STEAM TABLES, BROILERS, MALLEABLE WATERBACKS, ETC., ETC.

Above Style Family Range is sold only by our Traveling Salesmen from our own wagons at one uniform price throughout Canada and the United States.

Made of MALLEABLE IRON and WROUGHT STEEL and will LAST A LIFETIME if properly used.

ABOVE HONORS WERE RECEIVED BY **WROUGHT IRON RANGE CO.,** MANUFACTURERS OF Hotel Steel Ranges, Kitchen Outfittings and "Home Comfort" Hot-Air Steel Furnaces.
OFFICES, SALESROOMS AND FACTORIES,
70 to 76 PEARL STREET, TORONTO, ONTARIO, and Washington Avenue, 19th to 20th Streets, ST. LOUIS MO., U. S. A.
Founded 1864. Paid up Capital, \$1,000,000.
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McClary's FAMOUS STOVES.



HAVE been tested for nearly fifty years. Increasing sales each year prove their good qualities. Take no others said to be as good.

If your local dealer does not handle our goods, write our nearest house.

"MODEL," FOR WOOD—2,000 SOLD ANNUALLY.
THE McCLARY MFG. CO.
7-y-om LONDON, TORONTO, MONTREAL, WINNIPEG, VANCOUVER.

CENTRAL PRISON PURE MANILLA BINDER TWINE

QUIBELL'S SHEEP DIP—Highest Award, World's Fair. Try it.

HIGHEST CASH PRICES for Wool, Hides, Sheepskins, Calfskins, Deerskins, Horse Hides, Tallow, Horse Hair. Wool Bags and Burlaps supplied to Farmers and Ranchmen.

JOHN HALLAM, = TORONTO, AND 298 ROSS ST., WINNIPEG, MANITOBA.
7-h-om

Use:- Queenston :- Cement

FOR BUILDING CONCRETE OR OTHER WALLS, Cisterns, Stable Floors, Hog Troughs, &c.

Write for Prices and Particulars. When parties use our goods, when necessary we will send a skilled man, at our own cost, to give instructions how to build. FARMERS can thus build their walls and save half the cost.

ISAAC USHER & SONS, THOROLD, ONT.

13-y-om

STOCK GOSSIP.

YORKSHIRES AT OAK LODGE.

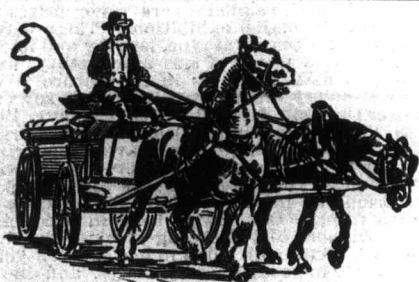
Among the swine breeders of this Dominion there are few better known, or that have won more laurels in the show ring, than Mr. J. E. Brethour, of Burford, Ont. At "Oak Lodge" are to be seen the finest assortment and the largest herd of Improved Large Yorkshires in America. This is one of the pioneer herds of this celebrated breed in America, selections from which have won the herd prizes at Toronto and all the leading fairs, with one exception, since its establishment, and were successful in winning twenty-one prizes at the World's Fair. The herd comprises over 200 head at present, fifty of which are breeding sows, due to farrow this spring. In looking over the order book, we noticed orders from all the provinces in the Dominion, reaching as far west as British Columbia; also to the following States: Pennsylvania, Maine, New York, Indiana, Kansas, Wisconsin, Michigan, Minnesota, Ohio, and as far west as Washington. We also found that three hundred and fifty pigs have been recorded from this herd during the past year. In looking over the breeding sows, we notice such ones as "Dominion Bell 2nd" (1712), a sow with a grand show record, having won in 1893, at Toronto, 1st in yearling class; was one of the first prize herd, and also secured the much coveted prize, Hollywell Challenge Plate. At the Columbian Exhibition this sow won first in yearling class and was one of the sweepstakes herd, and finished by winning the highest prize in the class, namely, the sweepstakes for best Yorkshire sow of any age. "Oak Lodge Primrose" is a lengthy even sow, of superior quality, weighing over 800 pounds, and a winner of several prizes last fall. Mr. Brethour considers her one of the best sows he has ever owned, and intends fitting her for the exhibitions of 1895. In another pen we noticed "Oak Lodge Rose 2nd," "Oak Lodge Donna," and "Industrial Girl." The first mentioned sow when thirteen and one-half months old weighed 500 pounds, and at the Toronto Industrial Exhibition she won 1st prize in a ring under two years old, where sows were shown having from nine to ten months the advantage. This sow composed one of the first prize pen at the Industrial, and was also a winner at London. The second sow of this lot won second at Toronto, in the under twelve months section; also first at London, and was one of the first prize pen at Toronto. The third sow of same lot was 1st at Toronto and London, as sow under six months, and also added several other prizes to her credit at smaller exhibitions. These three sows are of a beautiful type, lengthy and level-backed, with plenty of size and quality, and ought to make winners in the future. We were also very much taken with such sows as Butter Cup (352), Helen 3rd (675), Roseberry Bell (271), Princess (185), and Canada's Pride (1057). Many of these sows have been prize-winners and successful producers of prize-winning stock. Our attention was also drawn to "Marion," an imported sow which has done so much for the Oak Lodge herd in producing prize-winners and breeding stock of the first quality. Although being in her seventh year, she is still in good breeding shape, and due to farrow this spring. One of her produce, Millie 3rd (425), is a grand specimen of the breed, possessing ample length and depth, splendid hams, good heart girth, fine, smooth head and shoulders, and standing on short legs. She has the credit of having produced the highest priced boar ever sold in Canada. There are many other sows which, if space would permit, are well worthy of mention. Some twenty head of the younger sows of the herd were running together at the time of our visit, and were specially noticeable for their uniformity of type, length, smoothness and quality. Among this lot we noticed the two sows which won second place for the pork-packer's prize at the Guelph Fat Stock Show—one weighing 220, the other 213, at five and a-half months old. Many have been sold from among the younger sows, not only for breeding purposes, but also for exhibition purposes, and have secured numerous prizes in the show rings of the different provinces. Mr. Brethour has booked several orders for show pigs the coming season, and from the number and quality of those on hand there should be no difficulty in selecting first-class animals for show ring purposes. These young sows are from such noted and prize-winning sires as Diamond 3rd (imp.), Kinicroft Hero (imp.), and Hollywell Emigrant; and also from prize-winning sows. We also noticed in the different pens a nice selection of young boars and sows from five months down, and a number of young sows suckling litters, ready for the spring trade. Seven stock boars have been used on this herd during the past season. They include three imported boars, two prize boars at the World's Fair, and two young boars of choice breeding and quality. Among these we would particularly mention "Dominion 3rd" (imp.), a winner of first at Toronto in the aged class last year, and heading the first prize herd; also winning at same exhibition, first, for boar and four of his get, and making the same record the following week at London Exhibition, where he did himself and owner the honor of defeating a boar recently imported, and which was reputed to be the best boar procurable in Old England. "Kinicroft Hero" (23), imp., is another grand stock boar which has never been exhibited, but has produced many prize-winners. "Oak Lodge Diamond" (924), bred by Mr. Brethour, is a splendid specimen of the Yorkshire breed, standing on short legs, plenty of length, with level back and well-sprung ribs, and hams well-fleshed down to hocks; he has a short head and well-dished face. This boar and two sows of the same litter weighed, at ten months old, 1,307 pounds, bred by Mr. Brethour, and the uniformity of type which they possess. Mr. Brethour's object has evidently been to produce animals that are suitable to the demands of the market, and at the same time profitable hogs from the breeders' and feeders' standpoint.

The Best Investment AND Where to Get It!

THE man aged 30 who invests, say \$216 per annum for seven years in a Building Association which is honestly managed, which meets with no losses, will in case of death, say after seven years, have provided for his estate to the extent of possibly \$4,000. The man who invests \$216 in the MANUFACTURERS' LIFE will, in case of death, the moment the premium upon his policy is paid, have provided for his estate to the extent of nearly \$15,000, if insured on the ten-twenty plan, and the same sum invested in a twenty-year endowment will add \$5,000 to his estate at death, and if he lives to complete the payment of his twenty yearly premiums HE WILL THEN HAVE IN HAND VERY NEARLY AS MUCH MONEY, IN ADDITION TO HIS POLICY OF \$5,000, AS IF HE HAD TAKEN THE BUILDING ASSOCIATION STOCK.

The Manufacturers'

Life Insurance Company,
YONGE STREET,
COR. COLBORNE.
Toronto.
13-1-y-om



See that off Horse?

ONLY three weeks ago we began mixing a little of DICK'S BLOOD PURIFIER in his feed, and now look at him. I tell you there is no CONDITION POWDER equal to DICK'S.—Am going to try it on the nigh one now.
Dick's Blood Purifier, 50c.; Dick's Blisters, 50c.
Dick's Liniment, 25c.; Dick's Ointment, 25c.
DICK & CO., P. O. Box 482, Montreal.

Horse Owners! Try GOMBAULT'S Caustic Balsam

A Safe Speedy and Positive Cure
The Safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle. SUPERSEDES ALL CAUTERY OR FIRING. Impossible to produce scur or blenish. Every bottle sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars.—
THE LAWRENCE-WILLIAMS CO., Toronto, Ont.

USE RAMSAY'S . . . VARNISHES. — IN — HANDY CANS.

\$3 A DAY SURE Send us your address and we will show you how to make \$3 a day; absolutely sure; we furnish the work and teach you free; you work in the locality where you live. Send us your address and we will explain the business fully; remember we guarantee a clear profit of \$3 for every day's work; absolutely sure; don't fail to write today.
IMPERIAL SILVERWARE CO., Box A Windsor, Ont.
21-L-om

IT PAYS TO ATTEND



Central Business College
TORONTO AND STRATFORD.

Students can enter at any time. Write to either school for Catalogue.
17-o SHAW & ELLIOTT, Principals.

SUCCESSFUL FARMERS USE FREEMAN'S HIGH GRADE BONE FERTILIZERS

They produce large crops of grain, roots, vegetables and fruit of superior quality.
WHEAT ONE-THIRD LARGER YIELD.
Having used your Sure Growth Fertilizer for the past three seasons, it is with pleasure I recommend its use to others. I commenced with one ton the first season, and two years ago purchased from you two tons, and last season two and one-half tons. Always used it on fall wheat at the rate of about 200 pounds per acre, and am fully convinced I had at least one-third larger yield and finer sample than where no fertilizer was used. Thanking you for your prompt delivery, I remain,
RICHARD SELDON, Tp. Clerk, North Oxford.
Pushing agents wanted in unoccupied territory. Send for Catalogue. 15-y-o
The W. A. FREEMAN CO., Ltd., Hamilton, Ont.

MY NEW CATALOGUE FOR 1895

of Beekeepers' Supplies and useful articles FREE.
Also, to those interested in Hand and Foot-power Wood-working Machinery, I will send a Catalogue of same on application.
JOHN MYERS, Stratford, Ont.
5-1-y-o

THE IMPROVED KNITTER

Will knit 15 pairs of socks a day. Will do all Knitting required in a family, homespun or factory yarn. SIMPLEST KNITTER on the Market.
This is the one to use. A child can operate it. We guarantee every machine to do good work. We can furnish ribbing attachments. Agents Price, \$8.00. wanted. Write for particulars.
Dundas Knitting Machine Co., Dundas, Ont.
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A PLEASANT TONIC

Which will strengthen unweakened tired people and invalids, and quickly restore their appetites, is
CAMPBELL'S QUININE WINE.
Prepared only by K. CAMPBELL & Co., Montreal.
Beware of imitations. 21-1-y-om

W. & F. P. CURRIE & Co.

Wholesale General Merchants,
100 GREY NUN ST., MONTREAL.

IMPORTERS OF
Scotch Glazed Drain Pipes, Chimney Tops, Vent Linings, Flue Covers, Fire Bricks, Fire Clay, Portland Cement, Roman Cement, Canada Cement, Water Lime, Whiting, Plaster of Paris, Borax, China Clay, etc., etc.

MANUFACTURERS OF BESSEMER STEEL
SOFA, - CHAIR - AND - BED - SPRINGS
A LARGE STOCK ALWAYS ON HAND.
WM. CURRIE. 7-y-o F. P. CURRIE.

LEADER CHURN.

Ask your dealer for the
LEADER :-: CHURN
WITH PATENT GAS VENT.
Best Churn in the market, or write direct to manufacturers for Catalogue.
DOWSWELL BROS., HAMILTON,
MANUFACTURERS OF
Churns, Wringers, Washers & Mangles.
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BOYS FOR FARM HELP

The managers of Dr. Barnardo's Homes will be glad to receive applications from farmers of others for the boys whom it is proposed to send out from England in several parties during the coming season. All the young immigrants will have passed through a period of training in the English Homes, and will be carefully selected with a view to their moral and physical suitability for Canadian life. Full particulars, as to the terms and conditions upon which the boys are placed, may be obtained on application to MR. ALFRED B. OWEN, Agent, Dr. Barnardo's Homes, 214 Farley Ave., Toronto. 17-o

The People's Wholesale Supply Co.

35 COLBORNE Toronto,
STREET.

ARE SUPPLYING FARMERS WITH ALL KINDS OF GOODS IN RETAIL QUANTITIES AT WHOLESALE PRICES.

We quote to-day No. 1 Montreal Sugar, Granulated, \$3 50
Light Refined Sugar, 2 80
Golden Yellow Sugar, 2 70 per cwt.

FREIGHT PAID AS USUAL.

35c. Japan Tea for 25c. Our Special Blend Tea, 30c. lb.
THESE TEAS ARE GREAT VALUE.

FOR BOOTS, SHOES, DRY GOODS, GROCERIES, HARDWARE, PATENT MEDICINES, &c. &c., see our Spring Catalogue, sent to every farmer on application. When you want a good set of No. 1 Long-tug Team Harness, any size collar, either cloth or leather faced, for \$23.00, or a first-class set Single Harness for \$14.00, see our Catalogue, and send all orders direct to

The People's

35 Colborne Street,

R. Y. MANNING, Manager. 1-f-om TORONTO.

THE BEST FENCE MADE



Agents Wanted in Every Township.
Send for Circulars and particulars.

THE LOCKED-WIRE FENCE COMPANY

Ingersoll, Ont.
THE Latest Best and Cheapest
WIRE - FENCE
For particulars, apply to H. A. STRINGER,
141 King St., London, Ont.
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THE KEYSTONE DEHORNER

Cuts clean on all sides—does not crush. The most humane, rapid and durable knife made. Fully warranted. Highest World's Fair Award. Descriptive Circulars Free.
A. C. BROSIUS, Cochransville, Pa.
Duty prepaid. 21-L-om

BIG IN Harness CUT

The following prices good for the next Three months only; send your orders in immediately. SATISFACTION GUARANTEED:
No. 1 Team Farm Harness, Hip Straps, complete, \$22 00
Silver-Mounted Buggy Harness, 8 00
Brest Collar, 25c. each.
Sweat Pads, \$1 75
7-8 Team Lines, 75c. per pair.
Brest Straps and Martingales, 75c. per pair.
dozen Hame Straps, 50c.
No. 1 Team Collars, \$1 75 each.
THESE ARE A FEW LEADING LINES, EVERYTHING ELSE IN PROPORTION.

CANADIAN HARNESS CO.,

176 KING ST. EAST, TORONTO, ONT.



THE GRANGE

IS selling No. 1 Labrador Herring at.....\$4 75 per bbl.
No. 1 Salmon Trout..... 5 00 "
Smoked Salmon..... 05 per lb.
No. 1 Finnan Haddie..... 07 "
Smoked Herrings, two boxes for 25c.
Redpath's Extra Standard Granulated Sugar.....\$8 50 per 100.
Golden Yellow..... 2 70 "
Extra Bright Refined..... 3 10 "
Finest May Pickings Japan Tea..... 25 per lb.
Special Blend Black..... 30 "

Any of the above goods delivered within our freight limits on orders amounting to \$10.00.
Write for our new spring catalogue.

The Grange Wholesale Supply Co.

126 King St. East, (Ltd.), TORONTO. G. W. HAMBLY, Mgr.

17-y-om
An Authority Says:—"Eighty per cent. of all the Baking Powders sold are Alum Powders."
Such being the case, purchasers should bear in mind that

MCLAREN'S GENUINE COOK'S FRIEND

is guaranteed free from that and all other injurious ingredients.
Proprietor's name and Trade Mark on every package.
7-L-om

GANG CHEESE PRESSES.



Either Wood or Steel Frame. Cheese Hoops, Vats, Curd Mills, Curd Knives, Empire State and other Milk Cans, and all Cheese-factory Requisites.—Write for prices.

W. W. CHOWN & CO., Belleville.
5-f-om

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