

48.

Library of Parliament - Jan 94

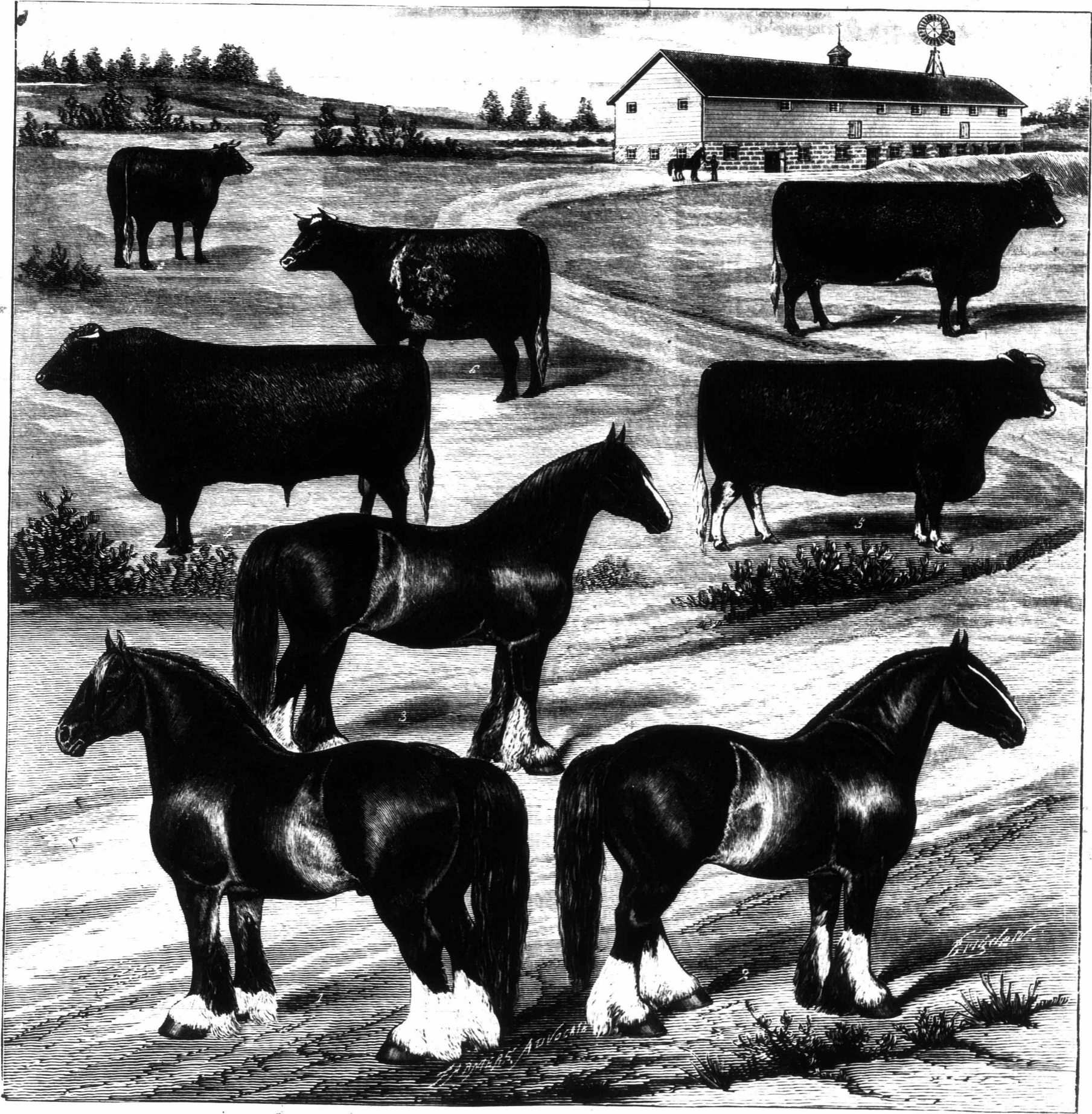
# THE FARMER'S ADVOCATE

AND HOME MAGAZINE

PERSEVERE AND SUCCEED  
FOUNDED 1866

\* AGRICULTURE, STOCK, DAIRY, POULTRY, HORTICULTURE, VETERINARY, HOME CIRCLE.\*  
REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875.

VOL. XXVIII. LONDON, ONT., AND WINNIPEG, MAN., APRIL 1, 1893. No. 331.



SPECIMENS OF CLYDESDALES AND SHORTHORNS,  
 THE PROPERTY OF MR. JOHN E. SMITH, BRANDON, MANITOBA.

## EDITORIAL.

Some idea of the popularity of the Hackney horse in England may be gained from the fact that at the late London show there were two hundred and thirty-five entries of stallions, and one hundred and forty-eight of mares. Of these, fourteen stallions and twenty-five mares belonged to the pony class under 14 hands.

Now is the time to cut the black knot from the cherry and plum trees. Directly warm weather begins the spores that propagate this fungus disease are ripening and spreading the evil. The branches cut off will burn as readily when first cut as they will after a few weeks time, and if not thus destroyed they will be just as liable to work harm as though left upon the trees. Wherever orchards are isolated there is very little trouble in keeping trees free from this scourge.

The creation of a live stock sanitary commission in the State of Texas is commented on by the Rural New Yorker in the following:—"Think of it! Actually insisting that the man to head this cattle commission must actually know something about the cattle business! In New York State such a section would be at once amended or killed entirely, because it might spoil the chance of putting some practical politician in a new place. In New York State, you know, a dairy commissioner can obtain all the dairy knowledge he needs in a lawyer's office. Why is Texas about a century ahead of New York in such a matter?"

Breeders from all localities report an active demand for pure-bred cattle; especially is this the case for young bulls. Whenever the prices of grain run unusually low, farmers turn their attention towards improving their stock. When beef, pork, butter and cheese are the products that are depended upon for cash sales, there will be found well-tilled farms that are yielding profitable crops. If manure is the sheet anchor of good farming, it is in the line of special stock feeding that best occupies the idle time of the winter season on the farm, makes fertile fields, produces paying crops, fills the coffers of those who arrange their farm operations by selling the products of their fields on foot, or in butter and cheese.

The farmers of a locality that we know have formed a Game Protective Association for the purpose of keeping at bay the city pot-hunters who usually range the fields and woods every fall. The association has raised funds to put up plenty of signs warning hunters off the different farms, and, if they still persist in coming, every one will be prosecuted for trespassing. That is right. These city hunters are a nuisance in any farming district. They tramp through crops, break down walls and fences, leave gates open, to say nothing of filling pockets and bags with apples or other fruits. They have no business on a man's farm, and we wish every farm community would form an association to keep in cheque this class of marauders.

Last November the ADVOCATE urged the adoption of a system whereby all live stock exhibits should be catalogued, so that visitors could, by comparing the number on the animal or pen with the catalogue, see at a glance the animal's name, owner and breeder, age, etc., etc., without having to hunt all over the fair grounds for the "man in charge." There should be no objection raised by exhibitors, as it would advertise their stock and save them an endless amount of inconvenience. We feel satisfied that even if a small charge was made for the catalogues, that they would be highly appreciated by both visitor and exhibitor. Why do not the representatives of the various breeders' associations endeavor to have this plan carried out at the coming exhibitions?

When the electors of an agricultural constituency are about to choose a candidate, "whatever their stripe of politics may be," would it not be better to select a representative man, one who would do battle in their behalf when occasion offers, instead of, as is generally the case, the candidate dictating to the electorate how they should meet the views of his party? The fact is the would-be representatives of the present day wish to cram down the throats of the electorate what they should want instead of studying the requirements of their constituents, which is our view of the duties of a representative. Yet the other course is the usual one pursued. Then how can agriculture hope to have any say in our legislative halls if city men are to direct the bill of fare, prescribe for their wants, and pull the strings which are to lead to the assistance of agriculture?

## Canadian Cattle Matters.

Pressure is continually being brought to bear by the representatives of a number of the cattle producing districts of England to at once and forever prevent further inland shipment of imported live cattle. Yet, judging by the tone of the discussions in Imperial Parliament, no permanent step is likely to be taken at present toward prohibiting Canadian stores or finished cattle from being shipped to inland points. It is true that the present restrictions are not likely to be soon removed, but at the same time there are so many British feeders, especially in Scotland, interested in this trade that there is undoubtedly a chance that the British authorities may be persuaded to release the obstructions as soon as they are assured that there is no danger of infection through our cattle.

We are perfectly satisfied that there is no shadow of a possibility that any kind of infectious disease can be lurking among the cattle of any locality in the Dominion. If such had broken out it would have been impossible to have suppressed the knowledge of its existence, and it would be contrary to reason if the news were not reported far and wide. But as yet no breath of rumor that any symptoms of such a calamitous visitation has come to light. It therefore behooves the Department at Ottawa to do two things:—First, to remove any possible chance by which infection may be introduced, either among our herds or among Canadian cattle in transit, and then to use every means to assure the British authorities that we never had and that there is no possible means by which it could be introduced into Great Britain through Canadian cattle. The latter the Department at Ottawa have endeavored to do to a certain extent, but could the Department expect to successfully plead their cause when they have been so lax in their regulations? And through this and nothing else have we nearly lost all hope of the freedom in a trade in future that we have so long enjoyed in the past. If Canadians think that the British authorities are not conversant with the regulations by which cattle are being shipped into and through Canada, they are greatly mistaken. In this particular they are kept far better posted than our people here, and it is no further use to deny that there has been a wretched laxity in our regulations, by which we have nearly lost a trade that is of the greatest importance to Canadian farmers.

Part of this has already been admitted. But what about the regulations while in transit? Canada has for years allowed Western hogs to be shipped through in bond, and once through the breaking down of a car these hogs were unloaded and hog cholera was introduced into a section of the country where it was never known before, and it took several years to stamp it out. In cattle transit more rigid measures are also required to be put in force, and much of the laxity has been caused by too great assurance of safety.

The trade has gone along for years, and although there have been occasional ripples on the surface through British inspectors giving false alarms, they have continued to pass our cattle, and Canadians have, like the boy and the wolf in the traditional fable, become so accustomed to the cry that they thought no danger was to be apprehended. However, we have at last awakened to the fact that there is a most dangerous foe lurking around, and it is now for us to find how to destroy the least vestige of its presence. Although none of our breeders and feeders have had any personal Canadian experience with these infectious diseases which have been the terror of British stockmen, they still have a pretty good idea how terribly contagious and infectious some of these are.

Many of our best breeders have had the experience before leaving their native England or Scotland, and the best opinions expressed go to show that there is always danger in buildings that have been occupied by animals that have had infectious pleuro—that such is the insidious nature of the contagion that sooner or later it will again break out, and many contend that nothing short of burning the premises where these forms of infection have existed will ever entirely keep the locality in safety.

Now if this is the case with buildings where the most careful and painstaking means have been practised to disinfect and purify them, what about ships and railway carriages where this duty is only carelessly performed at best?

The fact is in Canada we have no means of tracing how, when or where previous cargoes may have been handled by boats or railroad cars. And it would not be surprising if they could have been contaminated through some such means as these.

There is no sense in us taking chances of contagion being brought amongst us. It is quite possible for an outbreak to happen and a number of cars and boats become the very instruments for disseminating disease.

No particular care has been exercised. Cattle, through their sale and sale of their products, are now one of our largest exports—the chief means of bringing in money, considerably over \$20,000,000 of these having been shipped last year. This gives some idea of the calamity that would befall us if disease were really to break out. The Department cannot pay too much attention to this matter, which requires the most prompt action on the part of our Canadian authorities.

## Against Clydesdale Interests.

At the late annual meeting of the Clydesdale Breeders' Association it was resolved that all horses of this breed foaled and reared in Canada will be considered Canadian-bred, this rule to come in force after the present year.

This motion, although passed, was strongly opposed, it being a question that has been brought up at previous meetings and always negated by a large majority of breeders. We consider this action quite against the interests of Clydesdale breeding, and cannot see the fairness in the decision. At our leading shows, as generally known, there have been classes for imported Clydesdales and another for Canadian-bred draught horses. The latter class is supposed to admit only such horses as have been crossed up, while the offspring of imported sire and dam have shown in the class for imported animals. Now, it is the men who have brought to such perfection the horses which compose this Canadian-bred class who deserve much of the credit of the advance made in Clydesdale breeding in Canada today. Without the assistance they have contributed through their patronage, there would have been no demand for imported stallions. And it is difficult to conceive that anything but a personal interest should have led the leading members to pass so discouraging a measure, which means turning loose the produce of the best imported mares obtainable to fight against a class that has been the whole support of the trade in imported horses. Again, it is these men who have made the Clydesdale Association what it is; without their annual subscriptions and annual registering fees, the finances and annual stud book would both make a very small showing. Now, the class for Canadian-bred Clydesdales with five or more crosses is of the greatest importance to the horse breeding interest of the country. It is from this class that the sales to the Northwest have been made; in fact, it is from this class our sales in the past and our hope in the future lies.

There are several buyers in Ontario constantly buying and sending away car loads to Great Britain, and the future is still hopeful, if the Canadian farmer will but breed them larger and good enough; and what we have so often urged is to retain the best mares for breeding and sell the geldings, the demand for such is very good. In late years it was the young stallions and mares sold that brought the best prices; now the demand for stallions is passed by, and geldings are the best selling horses. And it would be suicidal not to encourage this class to the utmost. Any observing man who has taken any interest in the show of heavy horses of late years must have been wonderfully impressed with the uniform excellence of this class, and no men are more deserving of credit for the enterprise than the farmers who have yearly exhibited the splendid specimens that have been brought out, and the very fact that they (especially in the mare and filly sections) have always compared favorably with the imported animals is a proof that the prizes offered have assisted in developing this sort. Now that our draught horses are fast becoming the admiration of those who have purchased and used them in the cities of Great Britain is another proof that they should be further encouraged. Doubtless the hope of winning a prize in this class has prevented many an owner from accepting a tempting offer that would otherwise have taken the best mares and fillies out of the country.

We have no desire to prevent the encouragement of importing mares or breeding from them; these deserve all the assistance that can be accorded to them, but they have most of the younger sections to themselves, as few stallions or mares are imported and shown until three years old, and less of these will be imported, in all probability, for a few years to come.

Again, we consider, with the class of stallions and mares that have been imported, it is an admission of weakness in our breeding arrangements to admit that we cannot rear horses as well as the old country breeders.

**Poland-China and Duroc-Jersey Swine.**

In answer to a subscriber who made enquiries regarding the history of Poland-China and Duroc-Jersey swine, we will say that articles on these subjects have been prepared, but pressure of other matter will prevent their appearance until next issue.

**J. E. Smith's Clydesdales and Shorthorns.**

J. E. Smith's new stock barn at Brandon and a few of his magnificent horses and cattle are represented in the frontispiece of this issue. The barn is situated a short distance east of 1st street on Smithfield avenue, in the city of Brandon. The size is 50x112 feet; the basement of solid stone, 2 feet thick and 10½ feet high; the superstructure 16 feet clear. The interior is fitted with all the modern improvements and conveniences for ventilation, feeding, etc., and include a windmill for cutting fodder, crushing grain and pumping water. The object of the proprietor in establishing this barn is to have a central emporium for distributing the products of the Beresford Farm, know as the home of pure-bred Clydesdales and Shorthorns. It is also the intention to keep thoroughbred Herefords and Galloways. The two latter are now bred on separate farms owned by Mr. Smith, and quite remote from the Beresford Farm. Another feature is thoroughbred Large Improved Yorkshire pigs; orders for these are now being booked for spring delivery.

The Beresford Stock Farm was established in 1882, and is one of the largest in Canada. Its aim has always been to keep pace with the times and the demand, which has been steadily increasing with the development of the home trade and that of the West. The best sires have always been kept, both in horses and cattle. The breeding stock has always been selected with care from herds of renown; not only good individual animals, but descendants of good ancestors have always been purchased for the Beresford herd.

Mr. Smith being not only a breeder, but also an importer of both Clydesdales and cattle, an abundant supply of the several varieties of stock is for sale at all times, and parties can depend on getting what they want. Brandon being such a central point, the facilities for shipping are most excellent. During the past few years thousands of farmers from all parts of the province and territories have been attracted to Brandon to inspect the Experimental Farm, and we are quite satisfied that when paying their annual visit to Mr. Bedford they will now find it a pleasure to also visit this immense stock farm. Mr. Smith will be pleased to show parties over it, whether they wish to buy or not. There is conclusive evidence that farmers are trimming their sails to grow less frozen wheat and raise more cattle, of no ordinary class, judging from the number of young bulls leaving this establishment for different parts of Manitoba and the West, and Mr. Smith's efforts to place before the farmers stock equal to any in the Dominion is being heartily appreciated, but not more than it should be.

The following animals are represented in the cut:-

No. 1.—The young Clydesdale stallion, Sir Donald A. [1224], is a horse of very compact build, round body, short legs flat and well feathered, and has grand action. He strongly resembles his famous sire, Star o' Stewarton [588] (5376). Sir Donald A. was bred at the Beresford Farm, both sire and dam imported from Scotland, and his pedigree includes many of the most noted horses of Scotland, notably old Darnley (222). Sir Donald A. is now being fitted for Chicago Exposition, and his owner will be much disappointed if he does not prove himself worthy of his immortal grandsire, old Darnley, known as the hero of a hundred red tickets.

No. 2.—The Clydesdale mare Rosilee [541], bred by Peter Innes, of Newplace, Keith Hall, Aberdeenshire, Scotland; imported by Alex. Russell, of Unionville, Ont. Sired by the great Scotch stallion Rob Roy (713); dam Jess of Newplace (6292), by Daintie Davie (213). Rosilee is a broad set mare, with well sprung ribs and massive quarters, with a grand set of legs, and, as can be seen by her pedigree, is of good Clydesdale breeding. Rosilee is not yet seven years old, has three colts, all living and hearty, sired by Lord Randy (imp.) [1011] (5174), and is due to foal in June to the same sire.

No. 3.—Lady Beresford [1075] is rising four years old. She is one of the group awarded Bonanza Sandison's \$100 prize at the Brandon Summer Fair, 1892, for the best pedigreed mare with three of her progeny—Lady Beresford being the eldest filly, her dam being Lady Kenmuir, sired by Kenmuir Prince (1459), he by old Prince of Wales (673); dam of Ken-

muir Prince, Lily, by Lockfergus Champion (149); Lady Kenmuir's dam, Darling (Vol. X., S. C. B.), by Darnley (222). Lady Kenmuir is descended from the two most noted Clydesdale stallions in the world, Prince of Wales (673) and Darnley (222). Lady Beresford's sire is Bravery (imp.) (383), sire Strathleven (1539); dam Beauty (436), by Prince of Wales (673). From the above it is easily seen, by those versed in Clydesdale lore, that a much better pedigree could not be found in the annals of Clydesdale Stud Books than that possessed by Lady Beresford.

No. 4.—Windsor (56771), bred by S. Campbell, Kinellar, Aberdeenshire, Scotland, imported by J. & W. Russell, Richmond Hill, Ont., has proved himself one of the Shorthorn stars of Canada, not only as a show bull and prize-winner, but also as a stock bull. Windsor was awarded first prize at the London Provincial Show, also first at the Toronto Industrial as a two-year-old bull in 1889; first in Toronto as a three-year-old in 1890; also first in the class of three-year-old and over at Ottawa, and was shown in the herd awarded gold medal and diploma at Ottawa in 1890. Windsor is the sire of the young bull Prince Royal, which carried first prize at Toronto Industrial, 1891 and 1892, and first at Ottawa and Montreal, 1892. Windsor is a half-brother of the first and second prize bulls at Toronto in 1892. He is now king of the Beresford herd. Several tempting offers have been made and refused for Windsor, but Beresford needs the best, and at the present time Windsor is one of the things money won't buy.

No. 5.—Lady Irvine =9516= was bred by J. & W. B. Watt, of Salem, Ont.; sired by the veteran bull Barmpton Hero =324=, sire Royal Barmpton (imp.) =217= (45503), bred by A. Cruickshank, Sittyton, Aberdeenshire; dam Mimulus (imp.) =343=. Barmpton Hero has been acknowledged by all Shorthorn breeders one of the greatest bulls ever bred in America, not only as a show bull, but as a stock getter, many of the most prominent breeders in Canada to-day using the descendants of Barmpton Hero as their stock bulls. Lady Irvine has been a very successful prize winner as well as breeder. Her calves are always spoken for in advance. Her career in the show ring, together with that of her progeny, has done much to spread the fame of the Beresford Shorthorns.

No. 6.—Beresford Flower =15199=, got by Lord Lansdowne (imp.) =2712=; dam Lovely 20th =12301=, by Butterfly's Duke =390=, dam Lovely 19th (imp.) She is a true type of the Aberdeenshire Shorthorns, and a great breeder. She is a sister of Pauline, that carried so many prizes in Ontario, also in Manitoba after coming to Beresford. Beresford Flower is rich in royal ancestors, her sire being a Cruickshank Sittyton bull, and her dam of the noted Lovely family; her maternal grandsire Butterfly's Duke, by the 4th Duke of Clarence (33597), the \$13,000 bull, dam imported Butterfly Duchess—two of Bow Park's most successful show animals.

No. 7.—Matchless of Elmhurst 11th =12451=, bred at Elmhurst by W. J. Biggins; sire Royal Elmhurst; dam Matchless of Elmhurst 3rd =3881=, sire Baron Lonan 3rd, bred at Bow Park, Brantford, sired by the pure Booth bull, imported Royal Tudor (3511). Matchless of Elmhurst 11th is of one of the longest and most prominent Sittyton strains ever in Canada. Her stock has always proved a very profitable auxiliary in the Beresford herd.

No. 8.—Lady Greenway =15205=, by Lord Lansdowne (imp.) =2712=, dam Violet =2004=, by Barmpton Hero =324=. Lady Greenway, named in honor of Manitoba's Premier, is one that even he might be proud to possess. Sufficient to establish her reputation is the fact that the blood of the great Barmpton Hero flows through her veins.

Besides the Clydesdales illustrated Mr. Smith has twenty registered Clydesdales, and fifty brood mares, fillies and working horses—all high grade Clydes.

There are in all one hundred Shorthorns, all registered in the Dominion Herd Book; ten registered Galloways, the cows and the bull, Professor Troquhain, imported from Scotland by the late Thos. McCrae, Guelph, Ont. The herd of Herefords comprises twenty-seven animals, principally of the celebrated Tushingham strain. The stock bull is Tushingham 5th, and several of the cows are the get of Tushingham 2nd, first prize wherever shown in Ontario in 1892, and the best bull any age in the Hereford class at Toronto, 1892.

A bad road is a tax, and a heavy one at that. Want to escape that tax? Join the crusade against bad roads.

**"The Robertson Combination for Ensilage."**

Ensilage has come to mean any kind of fodder which is cured and preserved in a succulent state for the feeding of domestic animals. The silo has no power to add any nutrient to the fodder which is put into it for preservation. Its contents may become more digestible and palatable by the changes which proceed slowly under the action of ferments, or they may become less pleasant and wholesome if fermentation goes too far. Fodder which is deficient in nutrients before it is put into a silo, will experience no regeneration there. Degeneration into offensive material is the only and constant tendency, and that can be arrested.

To prevent deterioration and decay is the function of the silo; and to that end it should be constructed to exclude the atmosphere. To do so requires the use of building material of adequate strength. The fastening of its parts, at the foundation and at the corners of the silo, should be secure. I have found one ply of sound one-inch lumber, tongued and grooved, nailed horizontally on the inside of studs two inches by ten inches, or two inches by twelve inches, to be sufficient.

Indian corn—the great sun-plant of this continent—is undoubtedly the most serviceable crop which has been used for ensilage; but although it be ever so well preserved as to succulence, odor, flavor and color, it is an incomplete food for cattle. With a marvellous proclivity for storing up starch, gum and sugar out of the elements of the air, the corn-plant becomes a veritable accumulator of sun-strength and energy. Its carbo-hydrates or "heat-producing parts" are largely in excess of its albuminoids or "flesh-forming parts." These latter are present in no mean quantities in fodder corn per acre; but, for a wholesome, economical, complete food, they are out of correct proportion to the other constituents.

A main function of intelligent men on earth seems to be, to put and keep things in their right relationships to each other, and therefore the intelligent farmer has been putting carbo-hydrates and albuminoids, in the rations for his cattle, in the right relationships and proportions to each other—even at the expense of his purse. That has been done commonly by adding ripened grain, such as oats, barley, wheat and pease, to the bulky-fodder part of rations, or by buying for that purpose oil-cake, cotton-seed meal, or some other feeding commodity which is rich in albuminoids.

For a few years I have been seeking to find and put into the silo, with Indian corn, some other plant or plants which would furnish the necessary quantity of albuminoids, in a form which would cost very much less than ripened cereals, or concentrated by-products. Clovers and pease have been tried with indifferent success, and the climbing or pole beans have been grown, with cornstalks for trellis, without appreciable advantage.

The Horse Bean or Small Field Bean (*Faba Vulgaris*, var. *Equina*) seems to meet the needs of the case. This plant grows with a stiff, erect stem of quadrangular shape. It attains here a height of from three to four feet; and it grows in England and Scotland to a height of from three to six feet. It bears pods from within six or eight inches from the base of the stalk to near its top. The ripened beans are of a greyish-brown color, and of an oblong, round shape about ¼ inch in long diameter and about ⅓ inch in short diameter.

With us the plants have carried ripened beans in the lower pods, while the topmost ones on the same stalks were hardly out of bloom. By growing the Horse Beans as a fodder crop, in rows 3 feet apart, with 3 or 4 plants per foot in each row, we obtained an average yield of 6 tons, 1,610 pounds per acre of green fodder. Representative samples of the crop were analyzed by Mr. Frank T. Shutt, chief chemist of the Dominion Experimental Farms, and from his analyses it is established that the Horse Beans contained 370 pounds of albuminoids and 94 pounds of fat per acre. They were preserved in a silo in a layer by themselves, and also in mixture with Indian corn plants. They were grown also in alternate rows with Indian corn, and, moreover, were grown in the same rows with Indian corn,—the beans and corn being mixed before they were put into the planter. I have not exact data for the yield of beans in the latter case, but I estimated (and I think correctly) that the yield of bean-fodder was at the rate of 4½ tons per acre, in addition to the Indian corn, and without causing any less yield of corn than where no beans were grown with it. It will suffice at present to say that the cattle relished the Indian corn and Horse Beans ensilage.

Although albuminoids and carbo-hydrates (in the form of starch, gum, sugar and fibre) may be

contained in an Indian corn and Horse Bean mixture in nearly correct proportions, it is still an incomplete food, from deficiency in fat. The Sunflower (*Helianthus annuus*) grows luxuriantly over the whole of the temperate zone of this continent, and the seeds contain a large percentage of fat. The variety known as the "Mammoth Russian" was grown in rows 3 feet apart, with the plants from 3 to 18 inches distant in the rows. There did not appear to be any appreciable difference in the weight of the crop per acre, where the plants were grown close or more distant in the rows. They yielded at the rate of 7½ tons of Sunflower heads per acre. From the analyses made by Mr. Shutt, it was established that they contained 352 pounds of albuminoids and 729 pounds of fat per acre.

The combination for the feeding of cattle may be prepared as follows:—

Half a bushel of Horse Beans are mixed with one-third of a bushel of Indian corn, and are sown or planted on one acre, in rows 3 feet to 3½ feet apart. The method of cultivation to be followed is similar to that for the culture of fodder corn. When the corn reaches the glazing stage of growth, the product from two acres of the mixture, (which being grown together is necessarily handled as one crop), is cut and put into the silo, together with the heads from half an acre of Sunflowers. The Sunflower heads may be reaped with a common sickle, carried to the cutting-box on a cart or wagon, and put through it, on and with the Indian corn and Horse Beans.

The following Table shows the quantities of the nutrients which are contained in the crop from two acres of Indian Corn and Horse Beans grown together, and in the heads from half an acre of Sunflowers grown separately:—

	Albuminoids.	Carbo- hydrates and Fibre.	Fat.
	Lbs.	Lbs.	Lbs.
INDIAN CORN: 15 tons per acre=30 tons	1,092	10,302	324
HORSE BEANS: 4.5 tons per acre=9 tons	490	1,361	125
SUNFLOWER HEADS: 7.5 tons per acre=3.75 tons	176	1,186	364
	1,758	12,849	813

The 666 lbs. of albuminoids in the Horse Beans and Sunflowers are the equivalent of the albuminoids in 115 bushels of mixed cereals (barley, wheat and oats.)

Two acres of fodder corn, at 15 tons per acre, furnish 1,200 single feeds to 50 lbs. each. The albuminoids, in the Horse Beans and in the heads from half an acre of Sunflowers, are the equivalent of the albuminoids in a quantity of mixed cereals sufficient to give 4½ lbs. with every feed of the 1,200. It is to be expected that further experiments will demonstrate that the albuminoids in the Horse Beans and Sunflowers, being in a succulent condition, will be more easily and fully digestible than the ripened cereals. The cost to produce the "Robertson Combination for Ensilage" from 2½ acres, is \$15 more than the cost for growing 2 acres of Indian corn alone. The extra items are:—Sunflower seed for half an acre; labor of planting, cultivating and reaping half an acre of Sunflowers; and Horse Bean seed for 2 acres; total, \$15. Against that outlay of \$15, the return in albuminoids is the equivalent, for the feeding of cattle, of 115 bushels of mixed cereals. I have made no estimate of the value of the large quantity of fat in the Sunflower heads.

A group of milking cows are being fed on a ration, of which the ensilage part is made from mixing the heads of Sunflowers from half an acre with Indian corn fodder from two acres. The cows of another similar group are being fed upon a like ration, of which the ensilage part is from Indian corn alone, with 2 lbs. of grain per head per day more than is allowed the cows of the former or Sunflower group. The milk from the two groups, is set in deep-setting pails in ice water under the same conditions; and the following results are apparent from an average of nine tests:—

	From ration with Sunflower or Ensilage.	From ration with ordinary Indian Corn Ensilage.
	Percentage of fat in skim-milk	.35
Churning period, minutes	30	20
Percentage of fat in buttermilk	.25	.40

The butter from the cows, which are fed on the ration with Sunflower ensilage, has a richer flavor and a slightly higher color than that from the other lot.

The Sunflower ensilage has developed a most agreeable odor, and the cattle are greedily fond of it. Besides the points which have been mentioned, it should not be overlooked that Horse Beans belong to the family of plants which have the faculty of appropriating free nitrogen from the atmosphere for the formation of the albuminoids which they contain. It is possible to increase the fertility of soil rapidly and to a remarkable degree, by growing the crop and feeding it to dairy or fattening stock. Protection to the land and profit to the pockets of the farmers are the two fruits to be expected. These form a capital combination for Canadian farmers, and no personal proprietary right restricts the use of it.

Experimental Farm, JAS. W. ROBERTSON,  
Ottawa, Ont., 21st March, 1893.

## STOCK.

### Isaleigh Grange.

This farm, which is the property of Mr. G. N. Greenshields, Montreal, is now the seat of one of the largest fine stock breeding establishments in the province of Quebec. It is conveniently situated for railway accommodation, being within two and a-half miles of Danville, P. Q., which is on the main line of the G. T. R., between Quebec and Montreal, and near Richmond, the junction between the above line and the Portland branch of G. T. R. The farm contains eight hundred acres of easily worked land, which is very suitable for pasture and growing the crops required in stock feeding, while water in abundance is supplied by the living springs abounding throughout the property, and two never-failing streams conveniently situated for furnishing this essential on a stock farm. Many improvements have already been added since the farm came into the present proprietor's hands, among which are extensive stock and grain barns, sheep houses and piggery, all of which are equipped with modern appliances of most modern character.

Stabling for 100 cattle is provided, and 300 sheep have roomy and convenient quarters, while the piggery is the most perfect of its kind. This building is 100 feet long and 30 feet wide, is built in the most substantial manner, and is heated with steam, so that cold has no effect upon the occupants, let the weather be ever so severe outside. The main barn is 165 feet long by 40 feet wide, contains four threshing floors, with shafting conveniently placed for running the necessary machinery operated in threshing and cleaning the grain, as well as preparing the feed for the stock. A 25-horse engine supplies the power which drives the whole of this machinery, and is also further connected with the milk separator, the circular saw for cutting wood, etc. The engine-house, grain-grinding room, ice-house and dairy, together with a large store room, are situated close to the barn.

Guernseys are the cattle bred at Isaleigh Grange. At the head of this herd is the bull Ontario's Pride 1029, A. G. C. C., which is undoubtedly one of the best bulls of the breed on the continent, and pronounced by that astute judge, Mr. Wm. Crozier, of Long Island, to be one of the best dairy bulls of any breed in America.

The cows are also a remarkably fine lot, and, taken as a whole, display capital dairy points. They have large frames, are smoothly finished, and are among the most handsome of the dairy breeds. The cow Eliza C. 2nd, a lemon-colored fawn, with white markings, comes nearly to the perfection in type of what we consider a dairy cow should be; her grandly developed milk vessels, elastic touch, and handsomely turned horns all bespeak high breeding.

The four-year-old cow May Queen 7th is another grand, large cow that claimed our attention, although there were many others equally good here.

The calves were a remarkably good lot, the gem of the whole collection perhaps being a four-month-old bull calf, Isaleigh Choice, by Ontario's Pride, out of Eliza C. 2nd. This is really a marvellous youngster, showing wonderful size for his age, smooth and level all over, a beautiful handler; in fact, to our mind, about the perfection of what a dairy bull should be.

We cannot leave the cattle without paying a tribute to the herdsman, Mr. M. Mansell, a son of the well-known Shropshire breeder, Mr. T. J. Mansell, of Dudmaston, England. Mr. Mansell, who, we might say, has barely reached his twentieth year, deserves the greatest credit for the beautiful form in which he has brought the herd, numbering over eighty head, through the winter.

The Yorkshire herd, founded on stock from the herd lately owned by the manager, Mr. J. Y. Ormsby, has been increased last year by a large importation from the best herds in England, including two grand stock boars from the well-known herd of Mr. Sanders Spencer. One of these, Holywell Manor, winner of first last year at the Royal Show at Warwick, has been pronounced by good judges, both in England and Canada, a faultless type of a bacon pig. His magnificent hams and well sprung ribs, combined with his tremendous length and depth, cannot but please the most critical eye, while his clean, flat bone and excellent coat of hair indicate a grand constitution.

Among the sows, besides a few choice specimens from Holywell, we noticed a capital sow of Lord Ellesmere's breeding, the dam, we were told, of a prize-winning pen of boars at the Royal; and last, but not least, a beautiful yelt from the Metchley herd

of Mr. D. Gibson, Edgebaston, Birmingham, England. This sow has never been beaten in England, having won at the Royal and numerous other large shows. She is now carrying a litter of pigs to Holywell Prince, also a winner in the best company in England.

After leaving the main building, a few minutes drive with the manager brought us to the sheep barns, where we found, perhaps, as choice a collection of Shrops as can be found in the Dominion. It is not necessary, perhaps, to say much about the sheep, as a short description with illustrations appeared in our December (1892) number. We cannot, however, pass them over without mentioning a magnificent shearing ram, The Other One. This sheep, bred by Mr. George Thompson, of Wroxall, Warwickshire, England, was commended at the Royal, and received the reserved number at the Shropshire and West Midland Show at Welshpool, England, being considered one of the best yearlings of the year. While not overly large to the eye, he is a sheep of tremendous scale, showing a grand back and loin, short couplings, good brisket, and a magnificent fleece. The flock, which numbers over 100 head, exclusive of this year's lambs, of which there were at the time of our visit nearly 50, gives every evidence of careful and judicious handling without the slightest pampering, all the stock sheep being in strictly breeding condition. Besides the pure-bred Shrops, a flock of about 120 grade ewes are being lambed this spring, thus making the total number of sheep wintered at Isaleigh Grange 235, all in charge of an experienced English shepherd, the manifest signs of whose careful management it does not take an experienced eye to detect.

Before closing, we might mention that what especially struck us at Isaleigh Grange was the systematic manner in which everything is carried out, the manager, Mr. J. Y. Ormsby, whose reputation as a stockman is already known, being seconded in a most efficient manner in their respective departments by the farm foreman, Mr. M. Lockwood, and the shepherd, Mr. O. Lloyd, as well as Mr. M. Mansell, to whom we have already referred.

### Chatty Letter from the States.

(From our Chicago Correspondent.)

Marketing of live stock, except sheep, is falling far behind last year, though the decrease in cattle is comparatively light.

The fat cattle market is not at all strong, though prices are decidedly better than a year ago, when exporters bought choice cattle at about \$4.00. Some time ago Mr. Armour thought hogs would soon go to \$6.00, and now Mr. Cudahy thinks they will not go below \$7.00. The prices, however, have been on the down grade, and have made a big drop from the high point last month—\$8.75. The fact seems to be that the increased price of pork has reduced the consumptive demand to such an extent that prospects for higher prices, in the near future at least, are not good.

"Hogs scarce" is the one message that comes from all of the swine growing sections. Farmers and feeders are paying as high as 8c. @ 9c. per lb. for pigs and brood sows in many counties, and cannot get what they want at that.

There is a very full marketing of calves, looking as if cattle-men preferred good prices for veals rather than take chances on grown cattle. One day recently about 800 native calves were received, principally from Wisconsin, being the largest run of native "bawlers" this year. Sales were made at \$5@ \$7, largely at \$5.75@ \$6.75, averaging 95 to 114 lbs. As has been previously stated in these letters, Texas calves have been marketed during the past winter months in unprecedented numbers.

A Chicago man who has been travelling in Texas for two months says the business of stock-feeding is developing so rapidly that it will not be long before Texas will have an all-the-year-round beef crop. He thinks the supply of fed cattle will be pretty well out in about thirty days, and then grassers will be ready to move right along. Cattle men expect better prices than last year. Cottonseed meal and hulls constitute the chief feed of the Texas cattle this year.

Mexico has repealed the duty on American corn (maize), and the state farmers, especially those in the southwestern portion of the country, are rejoicing.

A company of Chicago capitalists is engaged in erecting slaughter and refrigerating plants in Mexico, and the people of that republic are being urged to raise more good animals.

Boston and Chicago capitalists are trying to establish a large beef and pork packing plant at Fort Worth, Texas, with some show of success.

Meat distributing centres are constantly multiplying.

Some hay-fed northwestern range cattle were recently marketed here. Eighty-four head, 1,248 lbs., sold at \$4.15, and 44 head, averaging 1,187 lbs., sold at the same price. These are about such cattle as could be raised in the Canadian Northwest. A lot of 73 corn-fed western range steers, averaging 1,271 lbs., sold at \$5.25. Some seven-year-old 1,850 lb. cattle, sold at \$4.60, while fat two-year-olds sold at \$5.50. The owner of the seven-year-olds was holding to get a better price from year to year.

**THE FARMER'S ADVOCATE & HOME MAGAZINE**

THE LEADING AGRICULTURAL JOURNAL IN THE DOMINION.

PUBLISHED BY  
THE WILLIAM WELD COMPANY (LIMITED).  
LONDON, ONT., and WINNIPEG, MAN.

JOHN WELD, Manager. F. W. HODSON, Editor.

The Farmer's Advocate is published on the first and fifteenth of each month.

It is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most profitable, practical and reliable information for farmers, dairymen, gardeners and stockmen, of any publication in Canada.

Terms of Subscription—\$1.00 per year in advance; \$1.25 if in arrears; sample copy free. European subscription, 6s. or \$1.50. New subscriptions can commence with any month.

Advertising Rates—Single insertion 30 cents per line. Contract rates furnished on application.

Discontinuances—Remember that the publisher must be notified by letter or post card when a subscriber wishes his paper stopped. All arrears must be paid. Returning your paper will not enable us to discontinue it, as we cannot find your name on our books unless your Post Office address is given.

The Advocate is sent to subscribers until an explicit order is received for its discontinuance. All payments of arrears must be made as required by law.

The Law is, that all subscribers to newspapers are held responsible until all arrears are paid, and their paper ordered to be discontinued.

Remittances should be made direct to this office, either by Registered Letter or Money Order, which will be at our risk. When made otherwise we cannot be responsible.

Always give the Name of the Post Office to which your paper is sent. Your name cannot be found on our books unless this is done.

The Date on your Label shows to what time your subscription is paid.

Subscribers failing to receive their paper promptly and regularly will confer a favor by reporting the fact at once.

We Invite Farmers to write us on any agricultural topic. We are always pleased to receive practical articles. For such as we consider valuable we will pay ten cents per inch printed matter. Criticisms of Articles, Suggestions How to Improve the Advocate, Descriptions of New Grains, Roots or Vegetables not generally known, Particulars of Experiments Tried, or Improved Methods of Cultivation are each and all welcome. Contributions sent us must not be furnished other papers until after they have appeared in our columns. Rejected matter will be returned on receipt of postage.

Replies to circulars and letters of enquiry sent from this office will not be paid for as provided above.

All communications in reference to any matter connected with this paper should be addressed as below, and not to any individual connected with the paper.

Address—  
THE FARMER'S ADVOCATE, or  
THE WILLIAM WELD CO.,  
LONDON, ONTARIO, CANADA.

**CONTENTS.**

EDITORIAL:—  
121—Illustration. 122—Editorial Notes; Canadian Cattle Matters; Against Clydesdale Interests. 123—Poland-China and Duroc-Jersey Swine; J. E. Smith's Clydesdales and Shorthorns; "The Robertson Combination for Ensilage."  
STOCK:—  
124—Isaleigh Grange; Chatty Letter from the States. 125—Our Scottish Letter. 126—Care of Colts.  
FARM:—  
126—Building with Concrete; Distribution of Seed Grain; Bromus Inermis. 127—Seed Catalogues for 1898; Tomatoes in Canada; Questions Asked and Answered.  
LEGAL QUESTIONS AND ANSWERS:—128.  
GARDEN AND ORCHARD:—  
128—Spraying Fruit Trees; Horticultural Notes.  
VETERINARY:—  
129—Veterinary Questions.  
DAIRY:—  
129—Branch Dairy Convention.  
POULTRY:—  
130—Poultry on the Farm; Poultry as a Branch of Canadian Farming; Poultry Questions.  
APIARY:—130.  
MISCELLANEOUS:—  
134—A Paper on Horse Breeding and the Treatment of Brood Mares and Foals; Hiring a Man for the Season.  
FAMILY CIRCLE:—131.  
QUIET HOUR:—131.  
MINNIE MAY'S DEPARTMENT:—132.  
UNCLE TOM'S DEPARTMENT:—132 and 133.  
STOCK GOSSIP:—136 and 137.  
ADVERTISEMENTS:—134 to 140.

**CANADIAN THORPE BARLEY.**

Except on rare occasions and in favorable localities, the English Two-Rowed Barley have not done well in Canada, but the Duckbill and the Canadian Thorpe—an improved variety of Duckbill—have done very well in all parts where the Six-Rowed Barley succeeds. For feeding purposes it is far superior to the last named; it is also a much heavier yielder, according to English reports. It is an excellent malting variety, but for this purpose should never be mixed with any other sort. It is an upright grower, long, bright and very stiff in the straw; seldom, if ever, lodges. During the last three years it has been tested by leading farmers residing in various parts of Ontario; also by the Dominion Experimental Farms. All have found it the variety par excellence, being hardier, withstanding frost and drought better than any other sort; in fact, being equal to the hardest wheats in this respect. The average yields of this variety will vary from 40 to 60 bushels per acre, when sown on suitable soils; when sown on rich cultivated lands, the yield has sometimes reached 70 bushels per acre. The grains are large and plump; if cut early and carefully harvested, are very bright and light in color. We have procured a quantity of this grain; the stock has been carefully hand-picked in the bag and field for the past ten years, and for ten previous years it was each year carefully selected in the field, so that it now is a well-established pedigree variety. For one new yearly subscriber to the FARMER'S ADVOCATE we will send 20 lbs. of this Barley, or for two new subscribers, 48 lbs.; for every additional new subscriber we will send 1 bushel (24 lbs.) bags free. The grain will be sent by freight or express, as desired by the receiver, who will pay R. R. charges. One dollar must accompany each new name sent.

**Our Scottish Letter.**

SHOWS AND MEETINGS.

Two events closely connected come before us at this season—the Glasgow Stallion Show and the annual meeting of the Clydesdale Horse Society. Between the two there is no direct union, but the indirect influence of the one upon the other is very apparent. The presence of the numbers attached to the pedigrees of the animals is the least of the indications of that influence with which all have been familiar since 1879. The complete revolution which has taken place in the method of hiring horses, during the past ten years, is undoubtedly due to the silent but steady influence of the movement in favor of pedigree registration, and the independence of this movement of all such abnormal and passing agencies as the foreign demand is conclusively established by what has been transpiring during the past six months. The anxiety of farmers to secure the most valuable horses for breeding purposes is now seen to have been due to no feverish excitement arising from an excessive foreign demand, but to a steadily-growing conviction that no horse should be chosen for breeding purposes during the bustle and anxiety of a great show and competition. There was too great nerve tension and too little time to make a leisurely survey under such circumstances, and consequently no less than fifty-four of the best horses were under hire before the gates of the show were opened.

How widely supported is the system of pedigree registration followed in the Clydesdale Stud Book is evident from the fact that in the three open classes there were but five aged horses, two three-year-olds, and no two-year-olds that would not register, and in the whole show there was not a single horse that could be styled cross-bred. The total number of three-quarter-bred Clydesdales in the whole show was ten, and this indicates a remarkable change in less than the same number of years. The competition for the Cawdor Cup forms an important link between the Stud Book and the show, and the interest taken in it is one of the healthiest signs of the present state of Clydesdale breeding. The tone and temper of the annual meeting of the Clydesdale Society were indicative of buoyant hope, and while there was some difference of opinion in regard to points of administration, it was quite apparent that the future was not regarded with foreboding, but with an optimistic and cheery confidence. A society confined to one section of the community, and offering no inducements to its members but the patriotic maintenance of a valuable breed, may well be hopeful when, at the close of its sixteenth year, in spite of a season of depression it counts on its roll no less than 1478 members, and is adding new supporters from month to month to take the places of those dropping out of the ranks by the efflux of time. The Clydesdale Society has weathered many storms; its infancy was cradled amidst strong opposition, and its mid-life passed in a keen conflict; and while never possessing either the possibilities or the realities of wealth to which its Southern neighbors have attained, it has been loyally supported alike by the leaders and the rank and file of the Clydesdale world. Its future will not be unworthy of its past.

The show yesterday, 10th inst., opened under very favorable weather auspices.

**AGED HORSES.**

The judging of the Glasgow premium and the open prizes proceeded on parallel lines. The entries for the £80 premium for the aged horse numbered 79, and included some notable prize-winners, including Prince of Princes, and Williamwood, from the Eastfield stud; Mr. Dunn's Master Robin; Gerard, Go Ahead, and Lord Ailsa, from Croy Cunningham; Mr. Johnston's William the Conqueror, Craichmore Darnley, and Royal Signet, from Hattay; Johnnie's Style and St. Stephen, from Meadowfield; Moneycorn, from Blackhall; Hamish M'Cunn and Juryman, from Berryyards; and Royal Stuart, from Westburn. Quite a large number of horses were drawn up for the Glasgow premium—indeed, far too many—but eventually the leet was reduced to the following ten, viz:—Mr. Dunn's Master Robin, a very handsome horse, looking extremely well, and without question the best mover on the causeway in the class, Mr. James Johnston's William the Conqueror, which last year won several prizes; he is looking very well, and has grown into a big, powerful horse. Mr. Riddell's Moneycorn, the winner of the premium last year, wearing very well, and in every respect a very handsome horse. Mr. Alex. Scott's Hamish M'Cunn, which, since last season, has thickened greatly, and now appears to be a much shorter legged horse than he formerly was. Mr. Walter Park's two horses, Craichmore Darnley and Royal Signet, both of which had been successful in securing good premiums: The former is a horse of great substance, with grand lines all over. Royal Signet stood well forward, and is growing into a first-class horse with splendid action. Messrs. J. & J. Wilson's Royal Stuart was also among the horses drawn. He is a good mover, and a very thick, powerful horse. Mr. Riddell's horse, Sir James, bred by Sir James Duke, and the winner of the Lesmahagow premium last year, was likewise in the leet. This is a very good horse of beautiful quality, and was greatly thought of by visitors. Mr. Alexander Scott's Juryman, an old favorite, and Mr. W. Renwick's Johnnie's Style, looking well and active, both of them sons of Darnley, were among the horses of favor. After a careful ex-

amination two animals were drawn from this lot, namely, Moneycorn and Master Robin. These horses are of distinct types, Moneycorn being a big, upstanding stylish horse, but perhaps a little wanting in rib; Master Robin, a very fine, short-legged horse of prime quality. After a few minutes' consideration, Royal Signet was drawn over along with these two horses, and the premium was awarded to Moneycorn. Mr. Riddell then withdrew his horse from further competition, and the judges of the open class—Messrs. Robert Bryden and Robert M'Allister—took their work in hand. For the open class there were several important additional competitors, the most notable being the H. and A. S. champion of last year, Mr. Taylor's Rosedale; Mr. Kilpatrick's celebrated horse, Prince of Kyle; Mr. Riddell's grand big horse, Gallant Prince, and the Messrs. Crawford's well-known prize horse Goldfinder, that was first at the H. and A. S. Show at Stirling in 1891. The short leet of seven consisted of all of these horses, with Master Robin, Williamwood, which in days past more than once defeated Rosedale, Johnnie's Style and Royal Signet. It was subject of general remark that never had the merit of the horses in the leet been excelled. There have been perhaps as good horses, but there certainly never were better. The judges had no difficulty in placing the first and second horses—Prince of Kyle and Rosedale. It was generally admitted that the first was looking better than he had ever before done. He has thickened out wonderfully, and is at present a horse of fine proportions, with rare quality of bone, and moving to perfection. Mr. Kilpatrick had certainly cause to be proud of his horse. To our mind he was walking better than when he was younger, and his closely-coupled frame and fine cantour were the subject of universal admiration. Mr. Taylor's finely-built horse Rosedale has always been a great favorite. He was the Duke of Hamilton's premium horse last year, and this season is under hire to the Dunblane, Doune and Callander district. His position was regarded as in every way well deserved—and could he but trot with the same freedom in front as Prince of Kyle, would probably be as stiff a competitor as that gallant Clydesdale ever faced. Difficulty was experienced by the judges in placing the third horse. At first their order was Goldfinder third, Master Robin fourth, and Gallant Prince fifth, but second turn there seemed to be a disposition to place Gallant Prince further up, and eventually matters came to a dead-lock. Mr. Weir was drawn by ballot as referee, and was asked to decide between that horse and Goldfinder for third place. He undertook the task, and after an examination in his usual masterful style, he put Gallant Prince third, and Goldfinder next. This placed Master Robin a stage further down, and our judgment would hardly have gone this way. Following the type of the first and second horses it seemed to us that Master Robin, in view of his own unexampled merits and admirable balance of points, should have been placed third. He has few equals, and no superior if absolute justness of points be considered. The only objection that can be made to him is that he is a little lighter than is requisite in a heavy draught horse. Johnnie's Style, which wears well, was sixth, Royal Signet seventh, and Williamwood eighth. Although we have not inserted their numbers, all of these horses will be found registered in the Clydesdale Stud Book.

**THREE-YEAR-OLDS.**

This was not nearly so strong a class, either in numbers or merit, as the aged horses. The winner of the Glasgow premium, Mr. Spittal's choice big horse, The Summit 9442, was first in the open class. He was got by Sir Everard 5353, the winner of the Glasgow premium three years in succession, and thrice first at the great spring show. Glenlichorn, a son of Ardnacraig, bred at Kippendavie, and owned by Mr. Riddell, was second. Mr. George Alston was third with his beautiful horse, Vanoras Prince 9461, and a capital horse, Lightsome Lad 9273, out of the dam of Royal Signet, and got by Craichmore Darnley, was fourth. He is owned by Mr. David Logan. Mr. Andrew Montgomery's powerful and strong, well-colored horse, the MacKerrall 8303, own brother to Newtonaids, the sire of Rosedale, was fifth. Choice Goods 9161, a stylish horse from Eastfield, was sixth, and Scotch Fashion, from Blackhall, seventh.

**TWO-YEAR-OLDS.**

In this class there was a reversion to something like the merit of the aged class. Mr. David Mitchell, of Millfield, was first with his immense, dark-colored, big horse, Prince of Millfield 9650, one of the grandest horses of his age seen for many a day. Mr. William Clark was second with Prince of Elgin 9646, bred by Mr. W. Robertson, Linkwood, Elgin, and got by Prince of Kyle. Yet another son of the same sire, Scottish Standard 9674, owned by Messrs. Crawford, was third, and sons of Sir Everard 5353, owned by Mr. Taylor and Colonel Stirling, were fourth and fifth.

**CAWDOR CHALLENGE CUP.**

The decks were now cleared for the Cawdor Cup competition, and great interest was excited by the war of the Titans. Speculation was busy regarding the prospects of the older horses when pitted against the marvellous two-year-old, Prince of Millfield, the superb son of Orlando and Sunray. Seven judges took the bench—the six who had acted in the open classes, with the thoroughly capable addition of Mr. James F. Murdock, referee. It was a great sight. There entered for competition—Prince of Millfield, Master Robin, Goldfinder, Rosedale,

Prince of Kyle and The Summit. The judges drew out the three first prize winners—Prince of Kyle, The Summit and Prince of Millfield, and by an unanimous vote awarded the championship to Mr. Kilpatrick's great horse, with Mr. Mitchell's phenomenal two-year-old reserve. There were many choice horses shown in the aged class, on which we have made no note, but of which it would be fair to write something commendatory. The actions of the two sets of judges showed that there are but shades of difference amongst Clydesdale fanciers when the best are concerned, but amongst the rank and file divergence becomes more marked. The three competitors for the Cawdor Cup were such horses as no breed need ever be ashamed of. SCOTLAND YET.

#### Care of Colts.

BY DR. TORRANCE, V. S., BRANDON, MAN.

Many colts are lost annually from the want of a proper knowledge of their requirements on the part of their owners. When the foal is dropped, if it be in a stable, the greatest care should be taken that the surroundings are as clean as possible. The afterbirth and all soiled bedding should be removed and fresh straw provided, and in this way a frequent source of danger to the colt may be avoided—blood poisoning through the navel. The swollen joints of young foals, and abscesses that gather in various parts of the body and are often referred to some supposed injury, are generally the result of blood poisoning from some septic material having been absorbed into the system through the moist surface of the navel cord. For this reason the surroundings of the colt should be kept as clean as possible, and, if the season admits, both mare and colt will be much better out of doors than in. The danger of blood poisoning is much greater if the navel cord has been ruptured close to the body than if it has broken at the usual length, and in such cases the cord should be first washed clean and then ligatured by tying a piece of stout cord tightly around it. When mares foal out at pasture there is little danger of this disease attacking the colts, and on the Western ranches, I believe, it is practically unknown.

Bleeding from the navel sometimes occurs, and should be prevented by applying a ligature as described above.

Occasionally a colt will be observed to void its urine through the navel, and in this case, too, the ligature should be applied, but of course if the natural passage is undeveloped or obstructed from any cause, a fatal termination must be expected, unless professional skill can open the proper channel.

Constipation is, perhaps, the commonest ailment of new-born foals, and is the cause of great fatality. When the colt is born its rectum contains a quantity of dark-colored, waxy fecal matter, which has accumulated there during the colt's existence in the womb, and frequently the colt is unable to expel these hard feces without assistance. Nature makes provision for this difficulty by arranging that the first milk secreted by the mare shall act as a purgative on the foal, and thus increase the action of the bowels and get rid of the obstacle. Owing, however, to the fact that many mares are fed chiefly on dry feed up to the time of foaling, the first milk sometimes has this purgative quality to only a slight extent, and other means must be resorted to. An injection of a quart of warm water should be given by means of a syringe, and repeated frequently until the desired effect is produced. Failing in this, a dose of two or three ounces of warm oil may be given; but, if the youngster is weak, it will be better to give him his medicine through the mare, and with this object the mare may be given a dose of aloes, or oil, which will readily act on the colt through the milk, and without causing griping pains.

Diarrhoea is not so common a malady as the opposite condition, but is more serious and difficult to treat. It may come on during the first or second day after birth, and may be caused by the first milk of the mare having too marked a purgative effect, and before attempting to check it by giving medicine, it is better to wait a day to see if it will not stop spontaneously, as in many cases it will do so. Should the diarrhoea begin at a later period the cause may not be apparent. Generally indigestion is the starting point, and a common cause of this is not allowing the colt to have a drink for three or four hours at a time. The mare cannot be spared from work, as the seeding is going on perhaps, so the foal is left shut up in the stable while the mare goes out to work. By the time she returns the colt is very hungry, and takes more milk than its stomach can digest, and indigestion and diarrhoea are the result. It should be remembered that a young colt's stomach is small and requires food often, and therefore during the first two weeks it should not be required to go more than three hours at a time without nourishment.

In treating diarrhoea in young animals the object should be to induce a healthy action of the bowels by mild remedies, in preference to giving powerful astringents, which may stop the trouble for a time, but give way to more violent purging in the end. If indigestion is present, a teaspoonful of powdered charcoal, mixed with a beaten egg and a little water, is a good home remedy, and may be given two or three times a day. The milk of the mare may be rendered less laxative by feeding her on dry feed in preference to grass or mashes. Enemas of starch and laudanum are also safe remedies, and if the colt is suffering pain and straining often, a teaspoonful of laudanum may be given by the mouth.

But the object of this paper is rather to advise the breeder how to avoid some of the common causes of mortality among young foals than to discuss the treatment of their diseases, and we will conclude by advising the owner of a sick colt not to put off sending for the veterinary surgeon until he thinks the colt is going to die, or he will then often find, too late, that the surgeon will coincide in that opinion.

## FARM.

### Building With Concrete.

BY G. A. LACEY.

One of your subscribers brought me your last issue, as to me having some knowledge and likely to give a satisfactory reply to James Munro's query as to the building of concrete houses and walls. I have had some little experience with concrete, and I give you the result:—

Twenty-three years ago I built a house, 24 x 30, story and a-half; put up 2 x 4 scantling frame, boarded it inside, and filled the space, four inches, with concrete; tacked three feet of boards on outside, taking them off and raising them as soon as the concrete set. I carefully measured the lime and gravel, thoroughly mixed it three or four days before using. My mixture was one shovel of fresh slacked lime to three shovels of gravel. The gravel was pretty sharp sand and stones as large as would go in the space, with plenty of smaller gravel stones as taken from the pit. The house stands today, and the concrete has become as hard as glass.

Eleven years ago I bought a lot in this village, and, as there was plenty of gravel in the cellar, I built my house of concrete, 32 x 34, two stories, with bay windows, eighteen feet walls—the higher I got my house the deeper I got my cellar. I mixed my concrete nearly in the same proportions, though employing laborers it was difficult to make them believe that such mud would make good concrete, and when not closely watched would make the concrete richer with lime. The house stands today as perfect as it was built, except where the concrete was made richer than a fourth, it shelled a little, but nothing to hurt. My cellar was 18 x 30, with good strong foundation walls. The foundation under the other portion of the house was a trench two feet wide down to the gravel—about two feet. I filled the trench with small stones, pounded them down, and built stone on the small stones above the surface from a foot to eighteen inches. The idea of the trench filled with small stones was to prevent moisture. On the stone wall I put a two-inch plank, ten inches wide all round, to carry the weight of the superincumbent mass of mortar evenly, in case of any weakness in the foundation trench cracking the wall. No crack came in it. Walls one foot thick, bond timber, strapped and lathed.

Last summer I put up a building of concrete for a store, with offices over, 28 x 60, 25 feet walls. As before, I took the gravel from the cellar—the cellar is seven and a-half feet to joists. After taking the surface soil from the space to be covered by the building, I dug to the depth intended for the cellar walls, throwing the gravel to the centre. Having built the cellar walls, laid the sleepers, and made platforms of plank to mix the concrete on inside the building, three on each side, threw the gravel from the cellar to the platforms for mixing. After the cellar walls were completed I laid a two-inch plank ten inches wide on the wall, and put up a 2 x 4 scantling frame, setting it fourteen inches in so that the walls, twelve inches thick, would go two inches in the scantling—the scantling answering for bond timber, and leaving two inches for air between lathing and plastering. I used one and a-half inch plank, fourteen inches wide, to hold the mortar, lapping two inches, raising a foot at a time. The advantages of the scantling frames are: The walls can be carried up perfectly true, and the cost is about the same as bond timber and strapping. The corners should be of the plank, three feet long, clamped with iron to prevent spreading. I found that mixing the concrete on the floor and raising it with shovels the cheaper plan of getting it up. When it got too high for the man on the floor to shovel it in, I had a movable platform made to which he could raise it, and another man to raise it from the platform. It took no longer to put up the twenty-fifth foot than the first, and the concrete was the better from the additional handling. As it really is building a house in moulds, blocking or other ornamentation of the outside is simply a question of the taste of the builder. To be more minute as to my way of building would necessitate your making an untimed story of it in your valuable and interesting publication. I will give any of your readers, should they desire, such further information as I can, by letter. To sum up, I believe concrete made from good gravel and lime to be as durable as stone or brick, and considerably cheaper. If good gravel and lime are used properly and thoroughly mixed age only hardens it, and a house built of it should be better in a century than when built. It would become a perfectly solid stone.

A subscriber writes us:—I think your plowing match man, W. A. Hale, is a little off. What a pity he had not been born a hundred years ago; he might have suited the times better. I hope the boys of Ontario are learning to plow for profit, and not merely past time, or rather to potter away their time. Think the ADVOCATE should not only advocate better plowing, but better plows also, because, as a rule, they are far behind the American plows.

### Distribution of Seed Grain.

Wm. Saunders, director of the Dominion Experimental Farms, has long interested himself in the good work of distributing samples of the most promising varieties of grain among the farmers, believing that only in this way could new varieties be tested properly, and their fitness for all the varying conditions of soil and climate of the Dominion be shown. With this end in view, last year 16,005 sample bags of promising sorts of grain, weighing 3 pounds each, were sent free through the mail to 9,114 farmers residing in different parts of the Dominion. This large quantity of grain, over 25 tons, was all of first quality, and consisted of the most promising sorts which have been tested on the several experimental farms. By instruction of the Hon. Minister of Agriculture a similar distribution is now in progress for this year, and already over 3,000 samples have been sent out, and a large number are being mailed daily. The object of this distribution is to place in the hands of good farmers in all parts of the country samples of the best varieties of oats, barley, wheat, peas, etc., so that they may shortly be available for seed in every district in the country, and eventually result in the displacing of poor, mixed and enfeebled sorts with varieties possessed of greater vigor and fertility. The number of samples sent to one applicant is limited to two in each case, and on this basis a very large number can still be supplied. With careful and judicious handling, these three-pound samples will generally produce from one to three bushels the first year, and at the end of the second season the grower usually has seed enough for a large field. The advantage resulting from this large distribution of the best sorts of grain obtainable will no doubt in a few years be generally manifest in an improvement in the quality and an increase in the quantity of the average grain crops of the Dominion. A circular is sent with each sample which the recipients are expected to fill up and return at the close of the season, with particulars as to the character and growth of the grain. The request is also made that a sample of not less than one pound of the product be returned to the Central Experimental Farm, so that information may be had as to the measure of success attending its growth. Samples are sent to applicants as long as the supply lasts. Letters can be sent to the Experimental Farm at Ottawa free of postage.

### Bromus Inermis.

This new Russian forage plant is being introduced by the Steele, Briggs, Marcon Seed Co., of Toronto, who speak very favorably of it for the Northwest, Manitoba and British Columbia. It has also been highly recommended by the Experimental Farms at Ottawa, Brandon, Indian Head, and elsewhere. They state that they have a large amount of evidence in support of their claim that it is unequalled by any other grass for its power of resisting drought, its nutritive qualities and productiveness. One of the members of the firm saw it growing on the Experimental Farms in Iowa and Kansas, and also at Brandon, and in all cases it has given the best of satisfaction. Messrs. Steele, Briggs & Marcon have received the following reports, which speak for themselves:—

PROF. SAUNDERS reports as follows:—Bromus Inermis.—Of all the grasses not in general cultivation which we have tried, this is by far the most promising. The seed germinates readily and the young plants soon become established. It is conspicuous for its free leafy growth and tall stems, which bear an abundance of seed. It flowers here in the last week of June, and has produced nearly four tons of hay to the acre. It is very hardy, early, and a heavy cropper, and produces a heavy aftermath of succulent leafy shoots.

GRASS EXPERIMENTAL STATION, Garden City, Kansas:—Bromus Inermis.—This is also nearly related to the fescue grass, but endures the summer heat and drought much better and will grow on a much harder and poorer soil. It produces a great amount of long and tender leaves near the ground, while the culms are rather slender and are not produced in very great abundance, so that it is better fitted for grazing than for hay. It is one of the few species which remains green through the entire year, and bears grazing well. One plot of this was sown three years ago, and, so far, it has held the ground to the complete exclusion of all other grasses and weeds.

BRANDON EXPERIMENTAL FARM REPORT:—Bromus Inermis is a very promising grass here. This did not winter-kill the least; grew thirty-two inches high, and yielded two and a-half tons of excellent leafy hay.

SUTTON & SONS, Seedsmen, Reading, England:—It is a perennial, and in our experiments has proved to be one of the earliest grasses to start in the spring. It grows with remarkable rapidity, and yields an immense quantity of succulent herbage, equally suitable for soiling or for ensilage. All kinds of stock eat it greedily, and the analysis made shows that it is richer in flesh formers than the Italian Rye Grass.

VILMORIN, ANDRIEU & Co., Seedsmen, Paris, France:—It is a native of the black lands of Russia, but is extensively grown of late in Austria, where it yields large crops of hay even in the most unfavorable and driest seasons. It is a perennial, spreading rapidly by means of its underground roots; the stalks are very numerous and leafy, attaining a height of from five to six feet.

This firm declare they are willing to stake their reputation on these assertions.

**Seed Catalogues for 1893.**

Below we give the names of reliable seedsmen who have favored us with copies of their catalogues. Each firm will be pleased to send copies free upon application. Those of our readers who wish to get reliable seeds, or to know what new varieties are being offered either in vegetables or flowers, will find it to their advantage to send for these annuals, as each contains useful information which can be used to good advantage by the farmer and gardener.

**J. S. PEARCE'S, LONDON, ONT.,** embraces field, vegetable and flower seeds; all the promising new varieties of spring grains and ensilage corn are offered. This firm has long enjoyed the confidence of the farmers and gardeners. A complete stock of dairy supplies is always kept on hand.

**THE STEELE, BRIGGS, MARCON SEED CO., TORONTO,** issue a very handsome and richly illustrated catalogue. This firm is noted for sending out the best class of seeds, keeping abreast of the times and testing everything new in grains, vegetables, roots, etc.

**RENNIE'S** Illustrated Guide for Amateur Gardeners, issued from Toronto, still keeps up the high standard which it has attained in the past, and will be found to contain much practical information. This firm is widely and favorably known.

**WM. EWING & CO., MONTREAL.** The annual catalogue of this firm includes not only select seeds, but also farm and garden supplies and tools. Their claim is that only seeds of good quality, and which have been tested, are sent out, while useless varieties have been weeded out and replaced by superior kinds.

**D. M. FERRY'S** descriptive seed annual contains a complete assortment of vegetable and flower seeds.

**A. G. HULL & SONS'** catalogue, from St. Catharines, contains a full list of fruit trees, vines, plants and ornamental trees.

**JOHN A. BRUCE & CO.** issue their 42nd annual spring catalogue. This announcement in itself is sufficient proof of the confidence which the people have in this firm.

We have received United States catalogues from the following firms:—J. Salzer Seed Co., La Crosse, Wis.; J. W. Livingston's Sons, Columbus, Ohio; Pitcher & Manda, New Jersey.

**LOVETT'S** Guide to Fruit Culture. This is the annual publication of J. F. Lovett Company, Little Silver, N. Y., and is one of the handsomest that comes to our office. This book presents the products of the well-known Rumson and Monmouth Nurseries.

The largest and one of the most attractive catalogues received at our Northwest office is that of

**RICHARD ALSTON,** Royal Greenhouses, Winnipeg. Mr. Alston has made a new departure in the catalogue line this year, having numerous photo-engravings, illustrating scenes in his greenhouses and plants of his own growing. The particular lines listed are plants, bulbs, seeds, cut flowers and canary birds, but he claims special merit in supplying cut flowers in any desired style for weddings, funerals, etc.; also in roses, of which he has a wonderfully beautiful collection, Chrysanthemums, Begonias, Carnations, Gloxinias; and in vegetables, Alston's Early Manitoba Cauliflower. As an encouragement to his many patrons he purposes holding a Chrysanthemum show next November, offering liberal cash prizes. Mr. Alston has been winner of almost numberless prizes, and holds the only silver cup ever offered for competition in Winnipeg. Send at once for a copy of this catalogue, as you will find in it much to interest and instruct you.

A particularly neat catalogue is that issued by **BRAXTON & BOWYER,** proprietors of the Fort Rouge Greenhouses, Winnipeg. As we were recently through the greenhouses of this enterprising firm we are able to testify as to the large and varied assortment of bedding plants, bulbs, roses, fuchsias, geraniums, etc., they have in stock. They will also have a great quantity of cabbage, cauliflower, tomatoes and celery plants of the choicest varieties. They speak very highly of their "Fort Rouge White Kidney" potato as being a "robust grower and very prolific." Their catalogue contains much useful information.

Another interesting catalogue is that of **MR. A. BOWERMAN, WINNIPEG,** containing a list of his Northern-grown evergreen, forest, fruit and ornamental trees and shrubs. Those wishing to make their homesteads more attractive will doubtless take advantage of Mr. Bowerman's liberal prices and place their orders early. Nurseries and greenhouses are on Portage avenue. Write him for a catalogue.

**KEITH & CO.,** one of the oldest established seed firms in the city, have just got out an illustrated catalogue and gardener's assistant, and will be pleased to mail copies to all who enquire for them. From personal experience with this firm we can recommend them to the general public, and doubtless they are prepared to treat their customers even more liberally than heretofore.

**J. M. PERKINS,** seedsmen, Winnipeg, has issued a very neat catalogue, fully illustrated, containing much useful information as to the care and cultivation of flowers and vegetables, as well as a full list of seeds of the most desirable varieties. Mr. Perkins is increasing his business every year.

**Tomatoes in Canada.**

(Written Especially for the FARMER'S ADVOCATE by B. Gott.)

During the late few years the interests in "tomato growing" have been very much more active than ever before known in this country. Instinctively, being a little less Americanized than you are to the south of us, the essential love of the tomato did not easily come to us by way of inheritance, but it had to be brought to us by dint of progressive culture, like our love of grammar, and at last we have successfully "learned to like it". Personally, I feel that in treating this subject I am not, according to the exhibition catalogues, strictly speaking within the proper range of my favorite culture. This has been the loved employment of my mature years, viz., fruit growing; but, on account of the tomato being of such general usefulness and enticing beauty, and, moreover, so much like an apple, I still, notwithstanding, almost invariably persist in classing it as a fruit, and I think you can hardly blame me for doing so. The essential qualities of the tomato which we look for, and which it must possess before it can be at all popular with our growers, are strictly the following: 1st, Earliness to the greatest possible extent. 2nd, Smooth, round and beautiful exterior. 3rd, Proper uniform size and good bright color. 4th, Good quality as to flavor and texture of flesh; that is, the flesh must be pretty solid or meaty, as it is called—that is, not loose or watery. Each of these qualities is essential to success, and the more of them we can get combined in any one tomato the nearer that one comes to the top. In this relation we are very much pleased with the class of tomatoes known as Livingston's, embracing his well-known Early Ruby, Paragon, Favorite, Royal Red, Beauty and Perfection. This class of tomatoes comes as near to filling the bill required as anything at present offered by any of the lists. Their earliness, their fine and tempting appearance and color, their agreeable flavor, and their solid meaty flesh, win for them golden opinion and general favor, and mark them out as possessing more good qualities than any other class of tomatoes in the market at the present time. Again, Ignotum has become of late years a great favorite with our growers, and to a very wide extent; and very properly so, for it possesses many very desirable and really good qualities, especially good shipping qualities, as well as size and beauty. It is early and a good cropper; desirable color and fine flavor, and good, solid, meaty flesh; good size, smooth and pretty, and is free from blemishes and rot. All these things are desirable, and, of course, count very decidedly for its general adoption. The Optimus, the Volunteer and the Dwarf Champion are also each and all of them good and serviceable varieties, and have already secured for themselves a very large place in the attentions of many growers. Indeed, so many really good and serviceable types of tomatoes are offered at the present time, possessing so many good qualities in general, and serviceable for almost every possible use and intention, and all doing so well in this country, that it is found a matter of extreme difficulty, when making up our seed lists, to properly choose between them, and to be sure we have what we want. I desire, however, before closing this part of my paper, to say a word or so respecting the larger varieties of tomatoes lately coming to notice, viz., Turner's Hybrid, or Mikado, and the Ponderosa. The first of these is a great favorite over the extent of this country, and is rapidly growing to be more and more so, possessing, as it does, almost every desirable quality, either for domestic use or for the market. But for the latter and later claimant we seem for the present at least to have no place for it, as the bill is now better filled without it. Its behavior here, and under our conditions, is about as follows: It is of large size (far too large, as it cannot be carried without mashing and ruining itself), and if ripened altogether too soft in flesh; poor quality; bad, dirty color, and does not ripen evenly over the fruit, but will invariably remain hard and green over the stem side. Such qualities as these in a tomato will successfully spoil it for our uses. The Mikado, on the other hand, being quite free from all these grave objections, will supplant it and keep its own in spite of all the puffing that can be done for it. Indeed, the requirement is now not so much for an exceedingly large tomato, but for medium size, smooth and solid, and possessing as good internal qualities as can be crowded in, and then put into the market in the easiest, safest and speediest way possible.

**OUR METHOD OF CULTURE.**

Sometime ago we took a sudden itch, a sort of furore for tomato-growing, and determined there and then to invest some labor and capital upon it. The result was an increased interest in tomatoes and tomato-growing, marketing, preserving uses, etc. Our method of procedure was as follows: Sow the seeds of the varieties desired in shallow boxes in the greenhouse early in March, and get the plants up in the regular plant boxes, holding a dozen each, to be good, strong, stalky and thrifty as possible, and plant out in the open ground about the middle of May, and so have them to come in for market about the last week in July or the first of August. This plan worked very well, but was with us quite risky, on account of late spring frosts about setting-out time. But, to get over this difficulty, one of our most enterprising growers proposes to have cover boxes for shelter for each plant whenever frost threatens. His plan is to sow the seeds as described in early February, and plant out in the open ground in early April, and so protect and thus secure for

himself the early market before his neighbors have fairly got their eyes open. In planting out we would say, let the plants be placed on good ground, but not too strong, three feet apart in the rows, and the rows four or five feet apart, and set to each plant a good, strong stake four feet long. Train the plants to these stakes and fasten securely with bars; pinch all laterals, and allow only a certain amount of fruit for each plant, and the result will be very pleasing indeed. From our own personal experience in this matter this will produce the best results and secure the earliest, largest and best samples of these fruits that can possibly be realized. In the matter of markets, we would make every effort to secure those nearest to us possible, for the simple reasons that, being heavy and bulky, the transportation expenses will be less, and the fruit can be put into market in better appearance and condition. We would not advise saving our own seeds on a large scale, but in a small way, and for one or two years it may perhaps be safely done. To do this, select the earliest, the finest and best of the varieties desirable, and carefully separate the seeds into a vessel containing the purest rain water, and allow the whole to stand for a week or ten days, that all pulp may come to the surface, and the clean seeds will be found at the bottom free and nice. Strain off the top and wash in clean water, and dry in the sun on brown paper thoroughly, then place in paper bags properly labelled for next spring's use. These seeds will be equal to any seedman's and will have the further quality to you that you know exactly what they are. The methods of using tomatoes are many and various, but in this country the greatest bulk of them are used for canning, in either domestic or factory work. I may, perhaps, be pardoned for giving here my wife's method of canning tomatoes, as for some reason or other I have learned to relish and prize hers as something appetizing and rather better than any others I have been permitted to test. She selects good specimens, well and thoroughly ripened, of any of the varieties we grow, and in a large vessel pours boiling hot water upon them, and then removing the peelings she slices them into a large dish, or other open vessel, and allows them to stand so for some four or five hours and then drains off the surplus liquor. Then, adding one pound of the best granulated white sugar to every three pounds of the prepared fruit, the whole is boiled smartly for from thirty to forty-five minutes, and at once canned and sealed hot. If this process is well and properly done, and the fruit such as we grow in this country, the result will be very desirable and most acceptable for any season of the year for many months afterwards. I did not intend that all this as here presented should apply to the whole wide extent of this country, but it is essentially true and applicable to the whole of this part of Western Ontario in which it is my good fortune to be located. This whole subject being as it is of such great commercial interest to this country, and realizing and recognizing you and your readers as leading authorities in it, we are at all times most pleased to receive from you any new or recent developments relating thereto.

**Questions Asked and Answered.**

Can you inform me through the ADVOCATE of any way to destroy ground moles? (I suppose that to be the name.) I find every piece of good, rich soil, especially newly laid down, they burrow it up in heaps almost same as if plowed.

AN OLD SUBSCRIBER.

We have never heard of any serious injury being wrought by moles in Ontario, and it is usually supposed that they more than make up for anything which they destroy by the destruction of quantities of vermin. Will any of our readers who are troubled in this way kindly give their experience?

Thorah Farmer would like to have some of our readers give their experience with tread horse-power in cutting feed, crushing grain, and cutting roots for stock, and if a two-horse power tread will give sufficient power. Also, their experience with windmill for same purpose, and what size wheel would be necessary to give sufficient power; and which power from their experience would they advise, considering convenience and cost, a beginner to get.

In your March number enquiries were made about fencing. I will endeavor to describe what I have found in my experience the best and cheapest fence. As the saying is, no one can talk on any subject better than those who have had experience. We dug holes 11 feet apart and 3 feet deep; we used rails from the top of the fence for posts, cutting them in 8 foot lengths; then we laid two rails close to the posts, and then wired a small post on the inside; laid the rails between the posts five rails high, put another wire on the top, then one rail on the top of the wire, making your fence in all six rails high. As to filling posts on low, springy land, I would advise you to fill in with stone; on high, dry land, ground filling will do. Yours,

SUBSCRIBER.

There's no politics in good roads. The question can be freely discussed without touching on any sore spots or creating any hard feelings. Whenever two or more farmers meet there should be started an animated debate on the subject of ways and means for the improvements of our public highways.

## LEGAL QUESTIONS AND ANSWERS.

[Answers to legal questions of subscribers, by a practicing barrister and solicitor, are published for our subscribers free.]

To the Editor of the FARMER'S ADVOCATE.

DEAR SIR,—Will you kindly answer the follow questions through your paper and oblige:—A bought a piece of land of a company and hired B to break, backset and put in a crop on it. B has not been paid. A offers B a first mortgage on this year's crop. If A gets into difficulties can B hold the crop against all comers (the company included) until it is returned?

J. T. R.

ANSWER.—B's rights will depend entirely upon what agreements A has entered into with the company, and what rights A has given to the company. Before we can answer we must see the agreement or mortgage between A and the company.

## GARDEN AND ORCHARD.

## Spraying Fruit Trees.

The successful use of Paris green as a means of destruction for the codling-moth and curculio is being further demonstrated each year by practical fruit growers, who declare that the practice of spraying their trees makes the difference between success and failure. Any fruit grower who neglects to spray his fruit trees is considered as foolish as a man who would grow a large acreage of potatoes and neglect to use Paris green on them to destroy the potato bug. To those who have never used it, but will do so for the first time this spring, a few words of explanation will doubtless be of use. For codling-moth, use 1 pound of Paris green to 200 gallons of water. Never spray while the trees are in bloom, for it will not only be a waste of labor and material, but will be liable to injure the blossoms at this stage. The law also forbids the use of any poisonous material on fruit trees while in blossom. The codling-moth deposits her egg in the blossom as soon as the fruit is set; in a short time the egg hatches and the larva works its way into the apple towards the core. To be effective the Paris green must be applied in such a fine spray that a portion will fall into the calyx where the eggs are laid and before the calyx closes with the growth of the fruit. Spray as soon as the blossoms fall and again in about ten days; two applications are usually sufficient, unless washed off by rains. For curculio spray as soon as the blossoms fall, and then two applications at intervals of about ten days, or sooner if rain has fallen. The mixture must be of less strength for plums, or the foliage will be injured. Use one pound of Paris green to 250 or 300 gallons of water. The different brands of Paris green will often vary so much in strength and purity that it is a good practice to spray a couple of trees, noting the result, and if any of the leaves turn brown use a less quantity of Paris green. As the Paris green does not dissolve, merely being held in suspension in the water, great care is necessary to keep the mixture properly stirred, for if this is not done the Paris green will settle to the bottom and the last of the barrel will be so strong that the leaves will be found to be severely burned. This is a convenient and well tried remedy, and there is absolutely no danger when ordinary care is used. A great deal of nonsense has been written about the danger of eating fruit which had been sprayed. Such statements are about on a par with the exploded notions that potatoes are rendered poisonous through the plants having been sprayed with Paris green. To test this matter the chemist at the Ottawa Experimental Farm analyzed a sample of apples which had been sprayed, but could find no trace of Paris green, though the process used would reveal so small a quantity as one fifty-thousandth of a grain of arsenic. Similar results have been obtained by chemists at the different experimental stations in the United States. Neither is there any danger to stock, for when four times the usual amount of poison was used on trees, Prof. Cook pastured sheep and a horse under them without injury. While spraying for the above enemies it was found that we were killing two birds with one stone, for all leaf-eating insects grew less, such as canker worms, tent caterpillars, web worms, Tussock moth, bud moth, fern slug, etc. For insects which live by puncturing the bark and sucking the juice, spray with kerosene emulsion. The proportions are as follows:—One half of a pound of ordinary soap is dissolved by boiling in one gallon of water, and when it is boiling hot it is poured into two gallons of coal oil (kerosene), and churned with a syringe or a force pump, and in about five minutes it becomes thick and creamy; when this cools it consolidates into a jelly-like mass, which can be diluted with nine parts of cold water. Such insects are destroyed by the oily material filling up the air pores along the body, so that the insect cannot breathe. For plant lice spray whenever they are noticed in sufficient numbers to cause alarm. The Oyster-shell bark louse is one of the worst pests of the orchard, the more so because in many cases it is not recognized as an enemy until it has overrun the whole orchard. At this time of year it may be seen on the trees in the shape of a small elongated scale like a miniature oyster shell. This is really the dried up body of the female insect, beneath which will be found a large number of white eggs. In the month of May the young emerge from beneath the scales in countless numbers. They are minute creatures, hardly visible to the naked eye.

They then climb up to the young wood, where the bark is tender, and through it they insert their little tube-like beaks, and never move again, but remain fixed by their beaks, sucking the sap out of the tree. They gradually secrete a waxy fluid which covers and protects them. Spray with kerosene emulsion in May or June, after the young lice have left the parent scale, but before their own has grown so as to protect them.

Spraying with copper compounds for the prevention of fungus diseases is rapidly gaining in favor, and the value of these remedies has been shown, not only by the experimental stations, but also by the fruit growers in the improved quality and appearance of their fruit.

Prof. Craig, Horticulturist of the Experimental Farm, Ottawa, has published a valuable bulletin on "Spraying for the Prevention of Fungus Diseases," from which we take the following:—

A complete spraying outfit, including chemicals, might be purchased by a person who would be prepared to spray under contract, by the acre, or at a stated figure per tree. If this system of combating fungus and insect enemies was introduced, it would obviate much of the prejudice and inconvenience now connected with the work, and spraying would probably in a few years, to the great benefit of orchardists, become the general practice.

SPRAYING MIXTURES—1. DILUTED BORDEAUX MIXTURE.

Copper Sulphate	4 lbs.
Lime	4 lbs.
Paris Green	4 oz.
Water	50 gallons.

This may be prepared by dissolving in a barrel, four pounds of powdered copper sulphate. In another vessel slake four pounds of fresh lime with as many gallons of water. Spread a piece of coarse sacking, held in place by a hoop, over the top of the barrel in which the copper sulphate has been dissolved. Strain through this the creamy mixture of lime and water. Paris green may then be added, after which the barrel should be filled with water. This forms an excellent insecticide as well as fungicide, and, therefore, useful to destroy Codling worm, bud moth, and canker worm. It should be used soon after being prepared.

2. AMMONIACAL COPPER CARBONATE.

Copper Carbonate	5 oz.
Ammonia	2 qts.
Water	50 gallons.

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

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

## TREATMENT OF APPLE AND PEAR SPOT.

1. Before growth begins in spring, spray with a solution of copper sulphate, one pound to fifty gallons of water. On no account should this be applied after the foliage has appeared, as it will severely injure it.

2. Just before the blossoms open spray with diluted Bordeaux mixture. Repeat this after the blossoms have fallen, and make a third application two or three weeks afterwards. If the season is wet and rainy a later application may be advisable.

If Paris green is added to the two latter applications as recommended in No. 1., this will destroy the Codling moth also.

## GRAPE DISEASES—(Downy Mildew, Blackrot, Anthracnose.)

Spray the canes with copper sulphate, one pound to fifty gallons, before growth begins. Follow this solution with diluted Bordeaux mixture (omitting Paris green) or ammoniacal copper carbonate immediately after the fruit sets. Repeat at intervals of three weeks, till the bunches begin to color. Ammoniacal copper carbonate should always be used for the later applications.

## PLUM AND PEACH ROT—(Monilia.)

Without being fully tested, the following course of treatment is recommended for trial. Spray as soon as the fruit sets with sulphate of copper, three ounces to forty-five gallons; follow this with diluted Bordeaux mixture to which Paris green has been added, for the purpose of checking attacks of the curculio. If rot develops late in the season, as is sometimes the case just before the ripening of the fruit, spray again with sulphate of copper solution, or ammoniacal copper carbonate.

## GOOSEBERRY MILDEW.

This disease can be effectually treated by using either ammoniacal copper carbonate or Bordeaux mixture (No. 1), but as potassium sulphide (liver of sulphur) serves the same purpose, is somewhat cheaper and more easily prepared, it is, therefore, recommended here. Dissolve eight ounces in twenty-five gallons of water.

Treatment should commence with the first signs of growth, and continue at intervals of ten or twelve days till five or six applications are made.

SUPPLIES.

Chemicals for spraying can now be obtained from most druggists. Pumps of all sizes are offered for sale by the leading seedsmen, dealers and manufacturers, at prices ranging from \$3.50 to \$10 or \$12. The barrel pump may be mounted on a stoneboat, cart or wagon, as convenience or circumstances may suggest. Such a pump may be fitted to a barrel and made ready for use at a cost not exceeding twelve dollars. The copper knapsack pump, so called because it is carried on the back of the operator, has a capacity of four or five gallons, and furnishes a convenient means of spraying low growing plants, such as grapes, currants, gooseberries and potatoes.

## Horticultural Notes.

BY W. W. HILBORN, LEAMINGTON.

All grape vines not already pruned should be at once attended to.

Spray your fruit trees this spring; it will pay you. Dissolve one pound of sulphate of copper in a barrel of water and spray early, or before the foliage appears. After the blossoms drop use the following formula:—Sulphate of copper, 3 lbs.; unslaked lime, 2 lbs.; Paris green, 1½ oz.; water, 22 gallons. Three or four applications should be made at intervals of ten days or two weeks.

Red Raspberries should be cultivated very early in the spring, and all suckers not required to form canes should be cut off as weeds as soon as they show through the ground; if they are kept well cut off early in the season there will be little trouble with them later on. This will apply to Blackberries as well.

Raspberries and Blackberries should be transplanted as early as possible to obtain the best results. If you do not get enough transplanted early, try leaving a few suckers or sprouts to grow, and when they are about one foot high, transplant some cloudy day. I have often had better success with this method than with the early spring setting.

If you wish to spray your trees or vines before the blossoms drop, leave out the Paris green. To spray for curculio, one oz. of Paris green to twenty gallons of water is sufficient. No good will result from spraying before the fruit is stung by the curculio, as it is the larva that must be poisoned and not the beetle that stings the fruit. You cannot poison the beetle.

Growing fruit at the present time requires much study. Insect enemies have increased to such an extent that only those who are willing to fight them can grow fruit profitably. Were this not true, everyone could produce such quantities that there would be no market for it.

Try an Essex guarded hoe; they are the best I have tried for all kinds of hoeing, where there are no large weeds; more work can be done in a day, and done better. They are to be had from many of the seedsmen now.

*Ampelopsis Veitchii* (Japan or Boston Ivy) is the best climber to cover a brick wall, it clings fast, and will cover a wall more evenly than any other vine; it also colors up beautifully in autumn.

Shaffer Raspberry should be more largely planted for family use. There is none more productive, and the fruit continues to ripen for a long time. The fruit, however, is a dull purple and rather soft, is not therefore desirable for market, except where you can deliver the fruit directly to your customers; then, when once known, it is sought after, especially for canning.

The busy season for the farmer begins this month, and too often the garden patch is left as a secondary consideration. It is the general belief among farmers that they have not time to plant and care for a good garden. This, however, is not correct. The farmer has time to grow what will pay him the best. Want of forethought and knowledge how to manage a garden is perhaps the greatest cause of failure to have them. While the garden may not be a direct source of bringing in the dollars, the whole family will receive a direct benefit which will equal more than twice that they will receive from the same amount of labor bestowed upon any other part of the farm.

The land for a garden should be prepared in the fall, so that all it will require in the spring is to cultivate and harrow well, then mark off in rows far enough apart to cultivate with a horse. Select good seeds of standard varieties, and do not sow too thickly or the young plants will be so close together that they will not succeed, and there is little time to thin them when it should be done. No greater mistake is ever made than to allow the weeds to get the start of the vegetables. A steel toothed garden rake is the best hoe, if used just as the weeds are coming up through the ground. A man can do as much in one hour at this time with a rake as he can in half a day with a hoe after the weeds get up two inches high.

To start early Melons and Cucumbers, make a few frames out of thin boards eight inches wide and just large enough to be covered with a 10 by 12 pane of glass. Prepare good hills by digging out holes one spade deep, then put in two shovels of well-rotted manure and thoroughly mix with good soil. Then draw over this good top-soil without manure to the depth of two inches, in which to plant the seeds. This may be done and the seeds planted a week or ten days earlier than it would answer to plant without the frames. In placing the frames over the seeds, slant them to the south and draw the earth up nearly or quite to the top of the box on the outside to keep out cold. After the plants come up they should be ventilated a little during the middle of the day, if the weather is warm. It is surprising how much faster they will grow under glass thus protected than they will grow in the ordinary way. If planted too early, before the soil has warmed up, the seeds are apt to rot.

PLANTING TREES.—The best time to plant a tree is just when they are starting into growth; at this time they are full of vigor, and every effort is put forth to make growth. If left a little later, or until growth has taken place, part of the energies has been expended, and the tree receives a shock just in proportion to the new growth made. Some trees start into growth much earlier than others, hence require to be planted earlier. Most evergreens are



late starting and can therefore be left somewhat later. Many people have recommended June as the best time to transplant an evergreen, or when the new growth is two or three inches in length. It can be done at this time successfully, if careful attention is given, but it is not as good a time to transplant as stated above, just when growth begins. Many trees fail to grow, from the fact that they have not had their roots protected from the wind and sun while out of the ground. It sometimes happens that the trees are shipped in bulk from the nursery with the roots exposed, but perhaps the greatest injury is done after the trees have been received at the nearest town or village where the agent has delivered them. I have often seen farmers go after their trees with a rig too small to properly hold them, and tie them on the back of the buggy, or put them in the wagon box with little or no covering, then tie the horses to a post, there to stand two or three hours while the family are shopping, then be surprised that the trees did not make a good growth; the greatest care in planting will not make up for thus exposing the roots. Ten minutes will sometimes so injure an evergreen, if exposed to a strong wind and bright sunshine, that it will either die or make such a poor growth that it will be of no use. Dig the hole large enough to admit all roots without cramping, cut off all broken or injured portions of the roots, and plant a little deeper than they were in the nursery. If the soil is at all moist use no water; when water is used, put it in the bottom of the hole and let it soak down before planting the tree, and not put it among the roots. If put among the roots it forms a paste or mortar that shrinks away from them when drying and admits air, just what we should guard against. If water is put on top of the ground after planting, do not allow it to come in contact with the trunk of the tree, but put it in a circle at a little distance away. Never allow manure to come in contact with the roots of any tree, plant or shrub when planting—use it as a mulch around the tree and work in lightly; this will hold moisture, especially if stirred frequently during the growing season. It is a mistake to cultivate deep around trees or plants. Years ago nearly everybody had all the red currants they could use. At the present time I presume not one in fifty has a supply of them. Two enemies have attacked the bushes, which, no doubt, explains the cause. The currant borer, that goes through the heart of the branches and destroys them, may be cut out and burned. The currant worm, that eats up the foliage in a few days, requires watching closely. A tablespoonful of white hellebore, dissolved in a pail of water and sprayed over the bushes when the leaves have grown to about the size of a grain of corn, will prove an effectual remedy. By applying the hellebore thus early, the worms are easily kept in check. If this method is followed up every year, I have usually found one application each spring to be sufficient. With a little attention we can grow just as large crops of this fine fruit as ever.

VETERINARY.

Veterinary Questions.

Will you please inform me through your paper what will cure warts on cows' teats, and oblige, SUBSCRIBER.

Warts on cows teats are not usually troublesome, and in such cases are better left alone. They may be removed either by the use of the knife, or by caustic, as nitrate of silver or caustic soda.

I have a yearling heifer which has an enlargement on the side of the face about the size of an egg; it is hard and movable. I do not think there is any matter in it, can't say how it came, looks something like lumpy jaw; if you think it is, would it be wise to keep her for a cow or not.

Yours, W. C. WATSON.

There are two general methods of treatment:—The tumor may be removed either with the knife or by the iodide of potassium treatment.

The removal of the tumor by the knife can only be accomplished in the earlier stages of the disease, while it is small and before the bone is diseased. The whole of the tumor must be removed, and some antiseptic dressing used. A good one is corrosive sublimate, one part to a thousand of water. If care is taken to remove all the diseased tissue, a complete cure may be expected.

The iodide of potassium treatment consists in the internal administration of the iodide of potassium in doses of from two to three drachms, according to the size of the animal. In the course of a week the usual signs of iodism occur, such as discharges from the nose, weeping of the eyes, and scurfy appearance of the skin. When these symptoms appear the medicine should be discontinued for two or three days, when it may be renewed for a week, and so on according to the progress of the disease. If the animal will take the iodide of potassium in its feed it may be given in bran mash; if not, it will be necessary to dissolve it in a pint of water, and give as a drench. We would advise drenching, for the practice of administering medicine in the food will often prevent the animal taking sufficient nourishment.

The treatment of this disease is so often unsatisfactory that, unless the heifer is a very valuable one, we would not advise keeping her for a cow.

The above will also answer Mr. Quail's question.

We would like to hear from any of our readers who are trying the iodide of potassium treatment as to their success.

DAIRY.

Branch Dairy Convention.

One reason why the FARMER'S ADVOCATE has been able to accomplish what it has is because it goes regularly freighted with practical information directly to the agriculturist. Just so in dairying. The men who are handling cows or their products must be reached personally in order to awaken enthusiasm and effect improvement. The wisdom of the directors of the Western Ontario Dairymen's Association in holding branch district conventions, four in number, this season, was more than vindicated, for example, by the immense gathering held at Tilsonburg. The large hall was crowded to the door, in fact a number were actually crowded out, and every speaker was given the very closest attention. Judged by these conventions and the local cheese factory meetings, the interest in dairying was never anything like as great as at present. The forenoon of the Tilsonburg meeting was spent by the visitors inspecting the premises of Mr. E. D. Tilson, whose mammoth new dairy and stock barn, with brick (cement plastered) siloes, will, when completed, be probably the most elaborate and costly in Canada.

President John Geary, of London, in his opening address, felt grateful that farmers were appreciating the efforts of the association. He expected that winter dairying would bring the export of Canadian butter up to \$5,000,000 or \$6,000,000 in a few years. This summer fifty or sixty cheese factories would divide the pay of their patrons by the Babcock test.

Secretary Wheaton read a telegram from Hon. John Dryden regretting his inability to be present owing to the death of a relation, but conveying his best wishes and promising to render Ontario dairying all the aid in his power. Mr. Wheaton, who is doing excellent work as secretary, ably justified the continued need for this Association to promote dairying, to maintain the co-operative system, and to furnish the people information on new phases of the work. Since his appointment he had attended over fifty meetings, addressing some 4,000 patrons of factories. Everywhere he found an increasing interest in this business instead of selling raw products.

Mr. J. A. Ruddick, of Prof. Robertson's staff, gave the results of seventy-five experiments at the Perth Experimental Dairy Station, from which he drew the conclusion that paying for milk at the cheese factory by the fat percentage was a fair and just system.

The following table exhibits the result of his experiments, June, July and August milk being used:

Lbs. Milk.	% Fat.	Lbs. Fat.	Lbs. Cheese.	Lbs. Milk per lb. Cheese.	Lbs. Cheese per lb. Fat.	Price, 9 1/2 ¢.	Value Milk per 100.
5,000	3.2	160	452 1/2	11.03	2.83	9 1/2	\$ .88
"	3.3	165	458 1/2	10.89	2.78	9 1/2	
"	3.5	175	468	10.67	2.67	10	.93
"	3.7	185	477	10.48	2.57	10 1/2	
"	3.9	195	503 1/2	9.92	2.58	10 1/2	1.03

As 3.50 per cent. milk was the average quality used in these experiments the price of cheese made from 3.50 milk was fixed at ten cents. Prof. Robertson's estimate is that every two-tenths of one per cent. increase in fat in milk increases the value of the cheese one-eighth of a cent per pound. The difference in quantity of cheese alone would not make quite the difference the table shows. As a striking object lesson he displayed on the platform two cheeses, one made from 700 pounds 3.2 per cent. milk, the other from 700 pounds 3.9 per cent. Both were made in the same way by himself, about the same time, contained about the same amount of moisture. At three weeks old the 3.9 per cent. cheese weighed 72 1/2 pounds, while the 3.2 per cent. cheese went but 61 pounds. That the former was several inches larger was evident to everyone in the hall. The fat lost in the whey was not in proportion to the fat in the milk. As a rule the richer milk was more easily worked, being in better condition through having been well stirred and aired. Good milk and good dairymen went together. Patrons should be particular to stir the evening milk thoroughly, else the cream would rise and become leathery, part of it being lost, and so a proper sample of it would not be got for the Babcock. He took samples every day and tested once a week. The maker would need some extra help, and the apparatus would cost about \$50 and the acid \$10 per season. On the whole the rich cheese did not shrink so much. Took milk samples from weigh can with small dipper holding about a gill. This system would prevent adulteration. It would tend to improvement, that was sure, and consequently there should be better returns. No one desired to force this plan on the patrons; it was a matter for them

to decide. "How does my milk test?" (in addition to how much) is now the universal question.

Prof. Robertson, the Dominion Dairy Commissioner, recently returned from a trip to England, brought a hopeful message for the farmers of Ontario. Our cheese still holds its place of pre-eminence. The British consumptive demand is for finer foods—finer butter and bacon—for which they will pay handsomely. In view of the fact that 87 tons of butter, worth \$500, only took from the farm as much fertility as one ton of hay, sold for \$10, the dairy farmer really could not help producing wealth. The air was full of lamentation about agricultural depression in England and broken-down farms; but on land not any better naturally as much rent as \$10 per acre was paid and the tenant was prospering, because of more intelligent methods and a change from continuous grain selling. He urged the necessity for improved and better equipped factories, and recommended makers this spring to thoroughly sprinkle the interior (ceiling included) of their make rooms with a solution of bi-chloride of mercury and water, one part of the former to 4,000 of the latter. They should be careful not to over ripen the milk. A large sized cheese (68 to 70 lbs.) was wanted. Bandage should be a little smaller than the hoop. Strong boxes should be used and about twice as many nails as usual, as there were great losses from breakages. Make them neat and close fitting. The brands should be neat also, 4 or 5 inches long, the letters about 3/4 of inch in length. The word "CANADIAN" should be branded on the side of every cheese, so that we may get the full benefit of our reputation. Stencil the weight on the box. By the use of numerous charts he outlined the subject of animal nutrition and the feeding of dairy cattle. The main point was to keep the cow's skin in good condition, supplying her with such foods as will promote the largest flow of the best milk of which she is capable. He announced that enough seed for 2 1/2 acres, at a cost of about \$2.00 or \$2.70, of the new (Robertson) ensilage combination would be distributed (freight paid) to farmers applying to him by letter or card at Ottawa. It consisted of corn and English horse beans sown together, and Mammoth Russian sunflowers, making a perfectly balanced food and marvellously cheap. In a test at Ottawa, increasing the meal in a ration fed cows (prior to test under good feeding) had not been followed by an increased fat percentage in milk. The cheapest silo, and one he recommended, was single boards (tongued and grooved) inside the studding, tar paper being put under the boards outside the studding. Covered the silo with 2 or 3 inches cut straw, and longer straw above that. Twice as much butter was made at the Mt. Elgin and Woodstock creameries this winter as last. One patron, Mr. Price, reported that the skim milk paid for all the extra feed he had to give his cows in winter, so that he had the butter money clear. Shallow pans would take more cream out of "stripper" milk than deep setting, but adding "fresh" cow's milk would facilitate creaming.

[Ordinarily, however, farmers would do well to bear in mind that they will have their cream in far better condition with less work by deep setting. We would not advise any one to discard deep setting in favor of shallow pans, especially in winter. Better have a fresh cow coming in now and then through the winter.—EDITOR.]

Mr. E. Caswell remarked that the short, fat, chunky hog would not bring the long price. The Canadian Packing Co. preferred the medium Yorkshire style of hog, not corn fed.

Mr. John S. Pearce entered a strong protest against the cry of "hard times" among farmers. He took a more hopeful view of things, and urged progress and improvement. If certain farmers were hard up it was probably because they had not kept pace with the times. Many did not raise as much wheat per acre as their fathers did, while they were living far more expensively. They should increase the grain yield and the capacity of their herds, and cheapen production, as they could not regulate prices.

Mr. Macdonald, Superintendent of the Geary Butter Factory, alluded to the wonderful strides made by Quebec in cheese making, intimating that Ontario would have to look to its laurels sharply. What was called the "Canadian Jersey" of Quebec was not a Jersey at all. She was a small cow, entirely black, giving very rich milk. He tested one going 8 per cent. fat. They were descended from the ancient Brittany cows. By richer feeding a farmer could get more milk, and so a greater quantity of butter.

Mr. Andrew Pattullo, of Woodstock, spoke vigorously in favor of improved methods of road making, such as grading, draining, beautifying the sides, making repairs when needed, and the more general use of road machines, stone crushers, etc. He suggested that the men who were responsible for piling huge piles of boulders (called gravel) in the middle of the roads in Oxford this winter should be arrested and fined.

Dr. McKay, M.P.P., of Ingersoll, also spoke in favor of better roads, and congratulated the dairy farmers of Oxford on their progress.

## POULTRY.

## Poultry on the Farm.

BY IDA E. TILSON, WEST SALEM, WIS.

I went out among my neighbors lately, and, by a sort of natural selection, the topic of poultry culture everywhere came up. Two of the daughters of the land were found pounding up old dishes for their hopeful biddies, wherein I commended them, adding my usual cautions about such dangerous work. A very rough and wasteful woman, however, would be required to furnish useless crockery enough for any kind of a flock, hence I have had recourse to chips from the marble works: they break about as easily as crockery does, and are much relished, being both grit and lime. Of course, a solid hard-wood block, a thick, flat stone, or some like base must be secured for our pounding operations. In New England are regular manufactories of grit, which works up some surplus rock. Unless bidy has gravel to separate and grind her food, this latter may easily become a clotted, compact mass, sealing the openings from crop and gizzard. Leg weakness, though sometimes caused by accidents and injuries, usually results from indigestion: so I have cured cases both of bound crop and of leg weakness by simply placing afflicted fowls in a little pen containing nothing but gravel and water. Gentle kneading also helps such a crop, which, if gassy and bloated, can be reduced with a small soda pill. I was asked whether bran packed and produced such conditions. If it constitutes not more than one-third of any pudding there can be no danger.

Let nothing be an exclusive diet, but everything tried if you would meet each fowl's appetite and case. For instance, the other day I fed a pudding composed of bran, shorts, oil meal, corn meal, ground oats and barley, a little of Pratt's poultry food, salt, red pepper, a few table scraps, and a lot of refuse honey (since hens like sweets), which together proved the most "fetching" dish I had presented. It gathered my whole flock. Every hen could find something within that suited her, and was pleased. I am often asked about poultry "foods" and condition powders. Probably any standard kind is good, used carefully, but I think they are primarily designed for lazy folks, who rather buy than invent variety. Some have an impression that the abattoir lard-scrap I recommend may be too greasy. Heavy presses make such hard cakes of them, they must be chopped with an axe into available pieces again. I cook with considerable water, and when soft and separated stir in meal till thick, and feed only twice or thrice a week. Home-made scraps are, of course, much richer, because subjected to less power. Crumble the latter fine, and mix a little in each pudding. One lady desired a remedy for soft-shelled eggs, which answer in a nut-shell, (or more properly egg-shell this time) is less grain and more diversity of food. Lime water made about the color of rice will cleanse bidy's interior, and furnish some needed material; give for a while only, and but every second or third day. Lime water is another of those things so good I got to overdoing it, till I found, according to homeopathic belief, that persistent use brought back again the very bowl and other complaints which it at first cured. Milk is full of the soluble salts of lime, which scientists have claimed is not the case with bone meal. Whether I feed the latter or not, my hens get so much variety I am rarely troubled by soft eggs, but, after repeated tests, am convinced the use of ground bone secures more eggs in number.

Another lady visited had accidentally raised early pullets last spring, and received, to her surprise and pleasure, plenty of eggs this winter, which experience might be entitled "A Lucky Accident," like a more ambitious story. Summer chickens may get the size, but do not compass the maturity. To show, however, what judicious feeding can accomplish for these late pullets, I will add that a few July chickens of my own raising laid as soon this winter, or even sooner, than those purchased of May hatches.—Early pullets, built upon bone meal, milk and all kinds of food, but not stuffed with corn, will prove an irresistible combination, and show the old rooster something worth while to crow about. Mr. Gregory, the Mass. seedsman, whose nine hens averaged 174 eggs a piece in a year, secured the best egg record I have met. His fowls were mixed Brown Leghorn, Brahma and Plymouth Rock. Fanciers think too much of symmetry, and not enough of laying qualities. They have inbred for form at the expense of vigor, and the story is told of a Java hen, marked perfect at an English show, whose owner would give no egg record till taunted that his beauty was barren, when he hastily replied, "Oh, no! she has laid one egg." When laying days are over, however, a mixed flock is not so saleable as a uniform lot. An old poultry woman told me she made her money by cross-breeding for eggs, then dressed her surplus fowls before sale, because in that condition, minus top-knots, pantalets, etc., their remaining differences were slight and almost unnoticeable. It must be admitted that fanciers are now turning more attention to laying qualities, and cross-breeding, which requires judgment too, has different degrees of success.

Because I am writing about poultry on the farm, instead of a poultry farm, I will again describe my simple method of setting hens, premising that "Farm Poultry" briefly answers a subscriber by saying he must have an incubator to raise a large number of chicks, but an incubator is not recommended to anyone, and a brooder is not all bliss. The platform on which my movable nests rest is wider than the nests themselves, and provides bidy a lighting place. When she sets, an upright shingle, wider than nest entrance, is held in place before it by a brick resting on this platform, and thus forms a door which a setter can push outward, but nobody can push in. Hens fastened so they cannot get off at all will, from sheer contrivances, stand up, as two chicks put on choice eggs once served me. My temporary doors prevent outsiders laying with them, unless the setters themselves come off and out, which is seldom, and careful watching the first few days succeeds better than too much "bossin'".

## Poultry as a Branch of Canadian Farming.

BY GEO. NICOL, A. O. A. C.

The breeding of domestic fowls commenced at a very early date, and wherever the art of farming has been introduced there we find in some way associated with it the breeding of poultry. Yet it seems that the majority of farmers keep fowls chiefly because of the satisfaction they afford by furnishing supplies of excellent food for home consumption, while but comparatively few have studied poultry breeding and raising as a special branch of husbandry.

It is quite evident that we, the farmers of Ontario, have not fully availed ourselves of the benefits that might be derived from this important branch of agriculture.

The annual poultry products of France are estimated at \$200,000,000, twelve million dollars' worth of which is exported to England, while in the United States we find that the poultry products exceed in value the entire cotton, corn, wheat and hay crops, and are estimated at over \$500,000,000 annually. Yet, notwithstanding this large production and high tariff, that country imports from Canada a large quantity of poultry and eggs.

At the present time in some of our markets good beef is being sold by the carcass as low as four cents per pound, while all kinds of poultry find a ready sale at from eight to ten cents per pound. State eggs are not and cannot be worth much in any market, but fresh eggs are always in demand. I know of farmers who have no difficulty obtaining contracts for the supply of fresh eggs at thirty cents per dozen.

Eggs to the amount of 2,000,000 were exported from Canada to the British markets. I have not heard the results, which would doubtless depend very much on the temperature of the storage, as eggs and slaughtered fowls can be kept in cold storage for almost any length of time, but if kept in a temperature much above the freezing point they soon become unfit for human food. There is much difference of opinion in regard to the value of different breeds of fowls. It has not as yet, and doubtless never will be, decided which of the many varieties is the most profitable under all circumstances; there seems to be a prevailing desire for a general purpose fowl, and with that object in view the Plymouth Rock, Wyandotte, Langshan, and other breeds have been produced by crossing.

As a fancier, although discountenancing cock fighting, I would prefer the Game on account of their noble carriage, graceful appearance, and the excellent quality of their flesh and eggs.

If the production of eggs were among the leading objects I would prefer the Leghorns, the Spanish or the Hamburgs, because they lay a greater number of eggs than the Asiatic breeds. When the raising of chickens for market is the chief object, it is not by any means a fact that the largest kinds are the most profitable, because the amount of food consumed by them is about in proportion to their size. The Brahma and the Cochins, where the chief bulk consists of neck and legs, are not worth as much in any market as plump birds of more moderate size.

Aside from direct profit which may be derived from the sale of poultry products, the use of fowls on the farm, and especially in the orchard, now that insects injurious to fruit have increased to such an alarming extent, is of great importance.

During some months of the year the food of turkeys, when allowed a large range, is chiefly insects, and on them they grow faster and thrive better than when fed and kept on grain in limited space, hence on many farms turkeys are profitable stock.

In all large cities the increased demand for geese and ducks has caused a considerable advance in price, and although all farms may not be adapted for raising this class of fowls, still wherever there is a constant supply of water they can be produced with profit, and the supply is not likely to exceed the demand.

Taking all things into consideration I doubt that there is any department of the farm which gives more satisfactory results than the production of poultry and eggs.

## Poultry Question.

To the Editor of the FARMER'S ADVOCATE.

DEAR SIR.—Can you tell me through the ADVOCATE what will stop our hens eating their eggs? I believe they eat more than we do.

Yours, etc.,

SAMUEL WHITTOCK,  
Glen Adelaide.

[This is a bad habit, and once formed is difficult to break off. It is generally caused by a want of lime or of gravel, or from fowls being kept in idleness, with open nests left in their feeding quarters. To prevent the habit from being formed, remove the cause—provide a plentiful supply of gravel and sand and lime, vary the food, and while the fowls are kept indoors, cover the floor with chaff, scattering grain among it, which will give them good exercise and keep them out of mischief. Provide nests in a darker place and apart from the feeding room.]

## APIARY.

## The Apiary.

BY ALLEN PRINGLE, SELBY, ONT.  
WHAT TO DO WITH HIS HONEY.

The Glengarry correspondent mentioned in this department of last issue, who had lost most of his bees during the protracted cold weather, and had a lot of honey left in the hives, wished to know how to handle the honey to the best advantage. One thing is certain, such honey taken from the hives of dead colonies is never number one in quality, no matter whether it be clover, basswood, buckwheat, or other. The placing of such honey on the market is one of the chief causes of lowering not only the reputation but the character of honey among consumers. Before the days of the honey extractor, not much more than a quarter of a century ago, neither the "strained" honey nor the comb honey was at all equal to the honey of to-day. Not that the nectar of the flowers was different, but the manner of its getting from the flowers to the time it reached the table was so different that while the one was in those days passable, the scientific output in these days is simply superb. True, the comb honey, secured in "cups" in those days (and still so secured among the old-fashioned bee-keepers) was, and is, in some cases where the queen does not choose to turn the "cap" into a brood nest, a good article, which, however, is the exception. But the "strained" honey! From it "Good Lord deliver us" from the eating, who have had our palates tickled by the "pure quill"! Of course, "where ignorance is bliss, 'tis folly to be wise;" and that "strained" honey was enjoyed by our grandfathers with the keenest kind of relish! How was the stuff made? Why, when the bees died in the winter or spring the honey was cut out of the hives—that is the combs were all cut out, honey, bee-bread, dead bees in the cells, dead larvae and all—and this conglomeration was duly mixed up and cut up and squeezed, and put into a linen sack and hung up by the fire place to drain and "strain." Every now and then the aforesaid sack would get another squeeze, till all the juice (here we have "bee-juice" if not "bug-juice," sure enough) had oozed out through the pores of the sack. That was "strained" honey; that was the delectable dish fit for the gods and men or angels and women of those days! Sometimes a little better article of the strained honey would be obtained, when in the fall a certain number of the weaker "skips" would be "taken up"—that is, doctored with fire and brimstone (what did the poor bees do to deserve this), and as the honey combs thus obtained were usually free from brood, being late in the season, the strained honey (therefrom would at least lack the one flavoring element of "bee-juice.")

But, in contrast to all this, how is our present day liquid honey obtained? From clean combs in top stories, from which the queen with her brood is excluded, and from which the bee-bread is excluded, and everything foreign to the pure honey. Then the combs, instead of being mashed up and squeezed, are simply uncapped with a sharp knife made for the purpose, and a few revolutions of the basket of the honey extractor, in which they are placed, suffice in obedience to the centrifugal force to throw the honey out of the combs, clear, pure and nice. The comb honey, too, being secured in supers above the brood nest, from which the queen is excluded by a honey-board of perforated zinc, is much superior in quality as well as appearance to that from the brood chamber of box hives, travel-stained and mixed up with the brood comb. The question of our correspondent, what to do with the honey from his dead hives is easier asked than answered satisfactorily to him. As already intimated such honey ought not to be placed on the market at all, especially in the hands of dealers. What you cannot use yourself, sell directly to the consumer as a second class article, telling him, unequivocally, how it was obtained. Never mind "straining" it; give it out just as it is in the comb, so that the buyer may see just what he is getting. If he chooses to strain it, let him strain it. If he should happen to be fond of bee-bread and bee-juice mixed up liberally with his honey, a sort of hash, let him suit himself, and nobody will be to blame.

FAMILY CIRCLE.

A Birthday Greeting.

What shall I wish thee for the coming year? Twelve months of dreamy ease? No care? No pain? Bright spring - calm summer - autumn without rain...

THE STORY.

Mrs. Goldenrod's Boarder.

Of all the boarders I ever had, none ever interested me like Gentleman George, as we always called him. Who he was, or where he came from, we could not tell. He rang our bell one terribly stormy night, and there he was, standing out in the wind and rain.

"Can you accommodate me with a night's lodging?" he asked. And he looked so poor, and sick, and tired, that Matthew (that's my husband) said, "Let him come in, Maria; he has an honest face, and we'll take the references on trust."

He was quite young, not over three and twenty, though he looked much younger; and that very night he was taken down with a fever, and Matthew and I together nursed him for a little over six weeks, (fortunately there were few with us, and we were not very busy just then.)

He was very quiet, and seemed to be in a dreamy state, and mixed in with a great deal that was wild and imaginary. He spoke as though he were sorry for himself, and low and lonely; as though every man's hand was against him. But I couldn't believe any bad of him. His face was so pure and innocent like, yet so haggard and withal pretty as a picture.

We watched over him through all the long hours of those weeks, which he spent in feverish unrest and delirium. It seemed to us that he would never come to himself. But one day as I sat by his bedside, all of a sudden he turned over and gazing upon me with a startled, bewildered expression in his wide open, beautiful blue eyes, said:

"Where am I? How long have I been here?"

"You are among friends," I answered. "And have been here a matter of six weeks or so."

He started as though I had killed him almost, saying, "I haven't a dollar in the world. How can I ever repay you?"

"Don't you worry about that," said I. "All you have to do is to get well, then it will be time enough to talk about pay."

"You better have let me die," he replied, with a great sigh. "And think I to myself, 'You're not a very cheerful patient.'"

But all I said to him was: "Oh, you're weak and low spirited now, and don't see things in a proper light. Wait a little while and everything will appear different."

He shook his head, and I looked the other way and pretended not to see, for there was no use talking to him; but it made my heart bleed to see him so hopeless.

It was only a day or so after that when Matthew says to Gentleman George, (and he is in the room with my sewing, I took it up to sit with him, less he should feel lonely.)

"Is there any friend that you like to send word to about your illness? I've had it on my mind to ask, and if so be—"

"I have no friends," he replied hastily, turning as red as Polly looked standing over the fire. "There is no one who cares to hear of me."

"That's very bad. You're young to be so alone in the world, and you look to be just the sort of man calculated to make friends."

"You're mistaken, Matthew. I'm just the sort to loose 'em," he replied with a faint laugh that somehow sounded sadder than funeral wails. And I just made a sign to Matthew to say no more. Matthew is well meaning, but not always quick to see when he is on the wrong track, and most prone to words that are least appropriate. Men are mostly so, especially those who have followed the sea. Among polite circles, it may be different.

"All right, my dear, I won't say any more," answered Matthew aloud, like a great gawk. And he got up and went away. With that I drew near and began to talk to him of something else, that the poor fellow might think I hadn't noticed what was said. But it was of no use. He had been set to worrying, and in a minute or so he began again.

"You've been very kind to me. You've took me in a perfect stranger, and looked after me as well as my own mother could have done. I was wrong when I said I had no friends. If you and Matthew aren't friends, I don't know what to call you, and I never can find words to thank you." And he held out his hand to me. Such a white hand as it was against my brown, rough one, and so thin that one could almost see through it. "Thanks are all that I can give you just now," he went on, steady like, "but if I am spared to go out again, I will repay you somehow for the money I have cost you. The kindness I can never repay."

"Don't you worry about that, sir," says I, "but—"

"Don't call me 'sir,'" he said quickly, "my name's George, and the only friends a man has can surely call him by his name."

That is the way we came to call him Gentleman George—not to his face of course; but when we spoke of him to others or between ourselves.

He gained strength pretty steadily after that, and in a week or so was able to get up and about. Right glad I was to see him walk down the street of a morning with Matthew, a tinge of color gradually making its way into the face that had been so white, and his head held high like one who had ought to be ashamed of.

Then for a few days I scarcely saw him at all. He was down by the Harbor trying to get work, and among so many rough, hardy, sturdy looking men, he stood but a poor chance. It grieved me to see him looking so disappointed as he came in night after night. At last Matthew and I made bold to tell him that he was not adapted for this kind of work. "It is entirely too hard," said Matthew. "You should have something in an office, writing and figuring, that's the vocation for you."

"What office would take me without a recommendation?" said Gentleman George, with a queer look. "No, no, Matthew, I've had enough of offices, and offices of me. To sit behind a desk again would drive me mad, I think."

And with that he got up and went out. "I'd take him if I had an office," said Matthew, after he had gone. "I'd take him with or without a recommendation. There's heaven's own writing on his forehead. I can read it and I never saw one."

"He isn't fit to rough it with longshore men, or to live in this way at all. Oh, Matthew, I'm sure that he belongs to a refined family, and I would give a good deal to see him back among his folks again. I feel sure he must have relatives somewhere."

"He says he hasn't and he ought to know," answered Matthew, "but he is a true and worthy man, or I never saw one."

All that day I kept thinking and thinking, and worrying more and more about this poor young man; for I had grown as fond of him as though he had been my very own. But the more I thought, the more I worried, so there seemed to be little use in that.

Well, he didn't come home to supper that night, and it was the first time he'd missed since he'd been in our house and Matthew hadn't seen anything of him either.

"He must have gone out to the new works at Martinsville, and that's a long way," said he. "I daresay he thought he might get a job there."

That seemed likely enough, so I thought no more about it. But the children were greatly disappointed when he did not come in; they were all exceedingly fond of him.

It began to grow dark, and still he did not come. I grew uneasy, wondering what could be keeping him, for he wasn't overstrong yet. It must have been near nine o'clock, and dark as pitch, when I heard a step crossing the lawn in front of our door, and I says to Matthew, "There comes Gentleman George," when in he comes, and I saw at once that something good had happened, there was such a laugh in his eyes, and he carried his head so high.

"There Mrs. Goldenrod," said he, "there's the first installment, and I hope to pay the whole of my debt before long now. And with that he hands me one dollar and a quarter, and I didn't know whether to laugh or cry, between the money and the look he gave me and all."

"Thank you, George," said I, "you've always been welcome to the best we could give you, and if we had never seen a penny of your money, we should have never felt different. Have they taken you on at the Works? Take care! I am afraid you are not strong enough for that."

"No, they haven't taken me on at the Works," he answered smiling; "they never had the chance, Mrs. Goldenrod, so we mustn't blame them for that. It's quite another line I've gone into. I'll tell you about it after supper. You'll give me something to eat, I suppose, though I'm awfully late."

We sat down to supper, and soon as we had done, Gentleman George says, "I hope you won't object to a little music now and then of an evening, I've brought home a violin."

"Where did you get that, George?" asked I, wondering. "You're thinking my first day's work has been pretty well paid for. You're right; yet not altogether as you think. But never fear; all that I have brought home has been honestly come by."

"Don't think that I questioned that for a moment, George; I never did. You wouldn't have been the first to do it if you had," he answered, quiet like with a little laugh, though not as if he were enjoying himself much. "You and Matthew trust me, don't you?"

"Of course we do," said Matthew; and I added, "absolutely and entirely," wondering what was coming next. "I'm glad of it," Gentleman George had a pleased smile. He wasn't smiling when he said that, yet I never before saw him look so pleasant. "It does me good to hear you say that, and I shall not forget it in a hurry. Now you must hear my violin." He took it up and began to scrape away, quick at first as if he was a bit put out; then beautiful and slow, and feeling, so that it was a pleasure to hear.

"How beautiful!" we both exclaimed, soon as we could get our breath. "You like it, do you? I'm terribly out of practice, or—Hullo, young people, what do you want?"

There, standing in a row behind him, with their fingers in their mouths, and their bare feet on the cold oil-cloth, were the three children. As soon as they spoke to them, they began to laugh, and Polly said in her baby way, "We've come to pity moosic. Make it again, George."

"No, no, not to-night," he says, catching her up and kissing her. "George has been making pretty music all day, and he's tired, he wants to go to sleep, Polly."

"Polly wants to go to sleep too, but pity moosic aaked her up. It won't wake her up any more to-night; I'll carry her up stairs, Mrs. Goldenrod, if you'll trust me so far, come along, you small fry. And off he marches with our Polly in his arms and the boys following hard at his heels, laughing and chattering like a couple of magpies."

"And now you can guess what I've been doing all day," said Gentleman George, when he came down again, and was standing by the fire. "You don't mean to say—"

"And I pointed to the fiddle. That I've turned fiddler? Yes; I'm first violin in the band that we've been playing about town the last few days. That's my new position. Mrs. Goldenrod, and he laughed a queer sort of a laugh. We're all Germans, yet not exactly brass. We're a sort of peripatetic band, constructed on improved principles, and we have a singer or two among us as well. You must come down on the beach one of these mornings and hear us. The gentleman that played the fiddle," and he laughed again. "He had an accident last night, and won't be able to leave his bed for weeks, poor fellow. I heard of it, and offered to take his place. As they had no one else, and my playing happened to please them, they weren't particular about references. It seems that references don't count for much in a peripatetic band. Anyway I am regularly engaged, and we expect to make lots of money, so I'm told."

"Dear me," said Matthew with a grin, and "Do you like it, sir?" said I, for I was fair taken back to hear him, and it seemed a queer sort of trade for Gentleman George.

"Like it? No, I don't know as I like it," he replied slow and thoughtful, "but I should have preferred something less public and without a uniform. We wear a uniform, of course. It is pretty but it attracts more attention than I like, being a quiet man; and I find it a little trying. But the work is light, and beggars shouldn't be choosers. Oh, I shall get along very well with the fiddle and the coat of my friend Fritz. I ought to thank my stars that I've dropped into such an easy berth."

Well, the short of it is, that if Gentleman George didn't like his work he never said a word of complaining, and weeks went by, and the season changed, and still he was out day after day, wet or fine, a fiddling away with the rest of them. It gave me quite a turn the first time I saw him. I came upon the band round a corner, sudden like, and there was Gentleman George standing in his uniform coat of green and red, his fiddle on his arm, scraping away like mad, and a crowd looking on, and a couple of girls dancing near the gutter. He gave me such a look when he saw me that I did not know whether to laugh or cry; but, as I said before, he never complained, and while he set us laughing, children and all, with the stories he'd tell of his "experiences," as he called them, and mighty queer experiences—some of them were.

Varieties.

To do easily what is difficult for others is the mark of talent. To do what is impossible for talent is the mark of genius.

She that good thinketh good may do. And God will help her thereunto. For was never good work wrought Without beginning of good thought.

Sorrow for having done amiss is fruitless if it issue not in doing so no more. A girl's toilet is a part of her character. The maiden who is slovenly in the morning is not to be trusted, however fine she may look in the evening.

What worse chastisement could God give us than to allow us to run in the path of our own folly. The power to love is the power to suffer.

There are three short and simple words, the hardest of all to pronounce in any language, and the ability to utter which is the test of any girl's good sense. The words are, "I was wrong."

The wife who sews on buttons is better than the one who speaks seven languages to some men.

THE QUIET HOUR.

A Thought.

God knows success is sweet. And yet He thought Not best to give the long-for boon to all. Lest the desire to win it had been small. And His most wise design been set at naught.

By contrast's law our estimates are made; There were no beauty but for ugliness; No grandeur but for littleness; and less Of joy in heaven's sunshine but for shade.

So, friend, if you, or I, must work in vain, Remember that but for our fruitless toil Success had missed some portion of her foil. Let that thought blunt the stab of failure's pain.

CARRIE BLAKE MORGAN. From Demorest's Family Magazine for March.

Attractions of the Bible.

As a book of religion, around which cluster all our hopes of immortality, the Bible has merits of the very highest order; and these, with every serious mind, will be, as they ever ought to be, its greatest attractions. But, aside from the religion which it reveals to us, and the good news of salvation which it brings us, the Bible has other attractions. It is the book of our learning, not less than our religion; the basis of our civilization, not less than our salvation. It is the charter of our rights and liberties, as truly as it is the oracle of our faith, the manual of our devotions, and the anchor of our hopes. It has moulded into shape, and it has quickened into life, the whole body of our secular learning, as well as our theology. It has breathed its own vital spirit into all our science, literature, legislation, philosophy, social and political institutions. It has led the van of ancient and of modern civilization in its march around the globe. It has been the great well-spring of living water, out of which have issued all the glad streams of intellectual and moral health, that are now found flowing in every civilized land beneath the sun. Thus far, it has been the great educator and civilizer of man; and it is, doubtless, destined to be his greatest educator in all time to come, his most effective civilizer in every dark abode of heathenism throughout the world.

But, whilst it is chiefly as a book of religion, and especially of religious education, that the Bible has spread civilization among the nations; still it is true, that regarded simply as a book of learning, of taste and genius, of history and eloquence, it has exerted an influence which cannot be too highly estimated. As such, it has claims which commend themselves to every cultivated understanding. Independently of all its higher glories—the knowledge which it gives us of the way to heaven, and the hope with which it inspires us of a blessed immortality—there are attractions which may be felt and appreciated even by the irreligious and the worldly-minded.

As ancient Israel was the glory of all the earth, Jerusalem the glory of Israel, and her temple the glory of Jerusalem, even so is the Bible now to Christianity, and to the world. It is the most glorious outward and visible heritage which has come down from the past. It stands to the Christian and to the church as the temple did to the Jew. It is the throne of power. It is the symbol of all greatness. It is the shrine of all good. It is the centre of universal attraction. It is the radiating point of all blessed influences.

We may all look upon the Bible as we look upon the broad domain of nature, or upon the blue heavens above. It is common property. It is all ours. It all belongs to each of us, because our Father made it. We breathe a common air; we gaze upon the same loveliness; the same landscape smiles in beauty at our feet; the same heavens encompass us; in the Bible, as in the book of nature, we are all at home, for God, our Father, is over all and in all. LE ROY J. HALSEY, D. D.

A Christian is not his own, but keeps himself free for God's work. — St. Ignatius.

First let our own inner life be real, and then we may try to draw others to share its sweetness, its comfort, and its battle.

When we have yielded ourselves to Him, body, soul, and spirit, when His forgiveness has lighted the flame of love and gratitude in our own souls, then there flows forth the power of awakening the latent spark in others.

Partings may come, but it will only be for a time such a little time and then we shall meet, and never part, but be safe with God for ever. When we have that to look for, how little does any sorrow matter to us, and how short it all seems.

God's will must be everything to us, not our own; though we are sometimes tempted to ask for our own. We must "lay hold" on God's promises, grasp them firmly, they never fail; but we must trust and expect Him to fulfill them, and He will.

The Situation that has not its Duty, its Ideal, was never yet occupied by man. Yes, here, in this poor, miserable, tempered, despicable actual, where in thou even now standest, here or nowhere is thy Ideal; work it out therefrom; and working, believe, live, be free. Carlyle.

## MINNIE MAY'S DEPARTMENT.

## Our Irish Letter.

DEAR CANADIAN SISTERS AND BROTHERS:

I can scarcely realize another month's having flown since I wrote you before. I suppose it is that events lately crowded on me, and I shall tell you of a few.

I suppose you have all heard of the celebrated Sans-Souci Diamonds, which were amongst the plunder, in fact amongst the crown jewels plundered during the French Revolution, and which had been presented by a certain Madame de Montespan to one of the Louis—I forgot which. They were worn last month at our Queen's drawing-room by a lady, a Mrs. Aston. I should like to know how she became the possessor of them, but I don't. I fear we are verging towards a revolution here, though that is too tragic a name for what might look like one when only seen in print. We are mere windbags, half of us at least. It is simply abominable the way we respectable ladies and gentlemen are being bullied by this Home Riot affair. Some call the thing Home Rule, others Home Ruin, but I have invented my own appellation, which is Home Riot. There is to be a wonderfully large Orange demonstration here in Dublin on the 17th. I applied for a press ticket, but have had no reply. I suppose the secretary cannot see his way to granting my request; however, it may come, and if it does I shall have an account of the meeting in my next letter for you.

The vice-regal people held a drawing-room last week. Many personal friends were there, but they one and all told me they could give me no pleasant account of it. It was mere wreckage—people odd, dresses odder, refreshments oddest. I wish our dear old Queen would come amongst us, and hold even one before she becomes too old. We want something of the kind.

I played Patrick's Day for the last time the night we heard of the "Riot" having had its first reading; unless it is thrown out, I shall never try it again. I think myself a plucky little woman writing in this way. Perhaps my letter will not be taken, but please, dear friends, do not blame Minnie May for any shortcoming of mine. I am a very out-spoken little lady, and am given to form opinions for myself, and stick to them.

Our antiquarians have been put on the *qui vive*. Excavations for sanitary purposes were lately ordered to be carried out round St. Patrick's Cathedral. When digging the men came across one pillar, then another, and so on, until the shape of a church was discovered, and some of the walls. I've looked through this morning's paper to see if any fresh light had been thrown on the discovery, but see nothing of it. A thing of this kind sets one thinking. If the antiquarians, who may root out, to their own satisfaction, the when's and why's of this underground curiosity, give us ignoramus the benefit of their research, I hope the ending may not be a new edition of Dickens' delightful play upon the landmark in Pickwick's Papers, where Mr. Pickwick gloried in discovering the ancient cross, with the inscription which he hoped would immortalize the finder, but which when interpreted correctly was only "Bill Stumps, his mark."

The wedding I spoke of as coming off came, and a charmingly bright one it was. The very pretty bride (not pretty because she was one, which compliment one is apt to pay brides in general, but because she is sweet to a degree) was obliged to have six little train bearers—three miniature Lord Fauntleroy's, and three little Red Riding Hoods. We returned to the *dejeuner*, which passed as all things of the kind do. I thought it touching to see the bride's little mother (a degree smaller than your humble servant) give her only daughter away. She is a widow, so there was no father to take the happy duty off her shoulders. When it came to going away time, all we guests arranged ourselves down each side of the broad staircase and hall, with rice *ad libitum*, servants in a back hall armed with dreadful looking old shoes ready for a rush to the front. After a little while the murmur rose, "she is coming, time is up". Then from the upper landing there flew, I might say, down the stairs, straight through the hall door, down the steps, into the carriage, the very brightest looking little girl bride I ever saw. She said during the morning that she felt that she was not like the correct thing. She could not grow pale, her brunette complexion and soft brown eyes were things of beauty to behold. Her cousin, on whose arm the rush was made, is a "McNeill, of Park Mount," a name perfectly known in "upper ten" circles. He is familiarly known in the north of Ireland as "Long Ed." He is an Edmund McNeill, and measures six foot seven inches. She fitted under one of his arms, he holding the end of her long travelling cloak over her head with the hand of the other arm, to save her face from the showers of rice. When they had only been away a few minutes, lo! an alarm to return. What has happened? Quite an excitement prevailed for a second or two, but it only turned out to be the bride's Gladstone bag which had been forgotten, and they returning for it. This bag was a wedding present from Lord Cairns. Lady Cairns had given *carte blanche* for "Manning's" own make in the beautiful white corded silk wedding dress. I dreamed on some of the cake, but having a husband I was satisfied to spend a dreamless night. If any of my Canadian friends go to the Chicago

World's Fair, I wish they would go and see an Irish jaunting car, Irish horse and Irish man, who are all being taken out to exhibit from Blackrock, where I hail from, or, I should say, from near Stillorgan. The man's name is Byrne, his trap is a clean specimen of our Jarveys. I advisedly say "clean," as some of our Irish cars and cabs are not so.  
SUSAN STUDDERT KENNEDY.

## Dress.

BY JESSIE J. LAMBERT.

(Written for the FARMER'S ADVOCATE.)

"For the apparel oft proclaims the man." Did you ever consider that our clothing is often a true reflection of ourselves. So far as dress can improve our personal charms, I can understand the love for it, for then it gratifies the desire for admiration, and, to a certain extent, is not blamable, for personal attractions are the gift of Providence, and therefore to be estimated in due proportion to their worth. The earth is not constructed on the principle of producing so much food for man's bodily wants; it has its cornfields, but it has also its wild flowers, on hill and moorland, to give us a sense of simple and touching beauty. Every woman ought to believe in the science of human beauty, and to cultivate it they should make the most and best of that which nature has given them. I am a believer in the right of a woman to look her best; it is not only her right, but it is really a duty for the mother of children to dress well and look her best; she should be to them the ideal woman, and ideality and slovenliness never go together. A dowdy woman seldom has good influence; slovenliness spreads to everything—a slovenly dress helps to create a slovenly mind; disorder without means confusion within. A neatly dressed person always meets with a respect which a slovenly one cannot demand. The art of dressing well lies in wearing that which is suited both to the time and place, and to one's position in life. It is not necessary that a person should be dressed in costly garments, or that they be made in the latest style, but it is necessary that they be clean, whole and appropriate, and it is very desirable that they be becoming, and at least passably well-fitting. To be well dressed is to be comfortable, and to be comfortable means to be one's self, not ill at ease and likely to commit any mistake for which one would feel ashamed afterwards. Good dressing means propriety, not necessarily expense. No lady need be ashamed to dress plainly and cheaply. Not every woman can dress well, with even reckless expenditure, but a clever woman can dress with intelligent economy and artistic taste. There is a class who innocently wrong themselves by their dress. If a woman paints her face, dyes her hair, and draws in her waist, she may not be morally bad, but she will be quite sure to be mistaken for quite another person than the lady she is.

"Still to be powdered, still perfumed,  
Lady, it is to be presumed,  
Though art's hid causes are not found,  
All is not sweet, all is not sound."

The woman who delights to array herself in cheap laces, sham jewelry, and inferior silks, is generally as artificial as her attire, lacking the ring of sincerity, just as her garments lack the marks of genuineness. She is committing a grievous wrong when she centres all attention on the feathers that bedeck, and the flowers that will go out of fashion to-morrow. To seek admiration in this way only is the surest way to lose respect and love. A vain woman is not lovable, and has been said to have many points in common with that most unmusical of fowls, whose beautiful plumage does not hide his ungainly feet nor overcome the harshness of his untuneful voice. Vanity is not a becoming sin. The inordinate love of admiration is indicated by an undue attention to dress.

The foolish mother spends her ill-spurred pence to purchase a bead necklace, and does not fail to impress on the child the pleasure of putting it on for the first time. The untidy school girl sticks an artificial flower into her torn and dirty hat, and exults over her companions in ideal splendor. A little older, and she spends her scanty wages in finery, and goes without decent and necessary clothing. A little older and her wages will not suffice the growing desire, and theft, iniquity, and final ruin are to be traced to this propensity. The inordinate love of dress and display which young women cherish, and the time given to the ministering to their personal vanity, leads very many into a reckless and heartless state, and to an utter distaste for the things which would profit their spiritual, intellectual and social nature.

## Some Queer Advertisements.

Babies taken and finished in ten minutes by a country photographer.

Wanted—A female who has a knowledge of fitting boots of a good moral character.

For Sale—A handsome piano, the property of a young lady who is leaving Scotland in a walnut case with turned legs.

To be Sold—A splendid gray horse, calculated for a charger, or would carry a lady with a switch tail.

A lady advertises her desire for a husband "with a Roman nose having strong religious tendencies."

A newspaper gives an account of a man who "was driving an old ox when he became angry and kicked him, hitting his jawbone with such force as to break his leg."

## UNCLE TOM'S DEPARTMENT.

MY DEAR NIECES AND NEPHEWS:—

"Now the noisy winds are still;  
April's coming  
All the Spring is in her train,  
Led by shining ranks of rain,  
Pit, pat, patter, clatter,  
Sudden sun, and clatter, patter!  
First the blue and then the shower;  
Bursting bud and smiling flower;  
Brooks set free with tinkling ring;  
Birds too full of song to sing;  
Crisp old leaves astir with pride,  
Where the timid violets hide—  
All things ready with a will,  
April's coming up the hill."

So writes an American poetess, Mary Mapes Dodge. Our feelings keep time to the words, for who is not glad when Winter's bands of ice are breaking and Spring's winds, sunshine and showers appear? These are soon followed by leaf and bud and blossom, and soon we will be ushered into summer. The wild flower and the violet will be in bloom, and the blue flag in the swamp. Your city cousins buy iris bulbs from the florist along with their Chinese lilies and hyacinths, and what do you think they turn out to be after all their watering and sunning and care? Merely *flags*, not so pretty nor so lasting as those you see down there where the cows are eating by the creek side. "Once upon a time," as the stories we used to like to hear began, a little girl used to feel badly over the fact that she was not pretty. This silly child was presented by her teacher with an ordinary, onion-looking bulb and asked to give it water and sunlight. She did so, and was rewarded in time by a beautiful flower, full and rich in color and delicate in perfume. As she watched it unfolding day by day, what lesson do you think she learned? It was this: unsightly surfaces may cover wonderful possibilities of life and beauty, and we hope she learned what all of us learn as we grow older, that beauty lies not so much in face or figure, grace or carriage, as in thoughtful common sense from which come kind words and actions. These bright spring evenings bring many memories back to us older folks as we sit and hear your merry voices at your play—memories which lie "too deep for tears"; buried away, which only this time of year at even-tide recalls. "History repeats itself," even in the lives of persons, and as you rake the lawn, make your gardens, drive your horses, it calls to mind how we, with others now far, far separated, did similar things in other days. Not one sound of enjoyment would I hinder. The days are going by— even to-morrow you will be older than to-day; but I'm afraid Uncle Tom's reverie has been too long to-night, and lest he weary you with his sombre tone he will close.

UNCLE TOM.

P. S.—I want to remind all those who have not yet sent their photos, to do so at once if they wish to appear in our "Souvenir Group," as I hope to have it ready for distribution early in May.

I have been much gratified at the interest taken in selections for the "Poet's Corner." I have been literally deluged with bushels of poems, but on account of the space occupied in publishing the three selections, henceforth I will be unable to obtain room in our department for more than one selection each month, which, of course, will be entitled to the prize of one dollar.

## POETS' CORNER.

## Selected Poetry.

BY FLOSSIE GRAHAM, HAWTHORNE P. O., ONT.

The poems of Alice and Phœbe Cary were published in a joint volume during the lifetime of the sisters. The first venture in this way was made in 1819, and the large public interested in their works has ever since then instinctively connected writers, who, bound together by peculiar ties, were as akin and divergent in their natures. Subsequently to the first venture, they issued their volumes of poetry separately, but after their death the editor of their writings, Mrs. Mary Clemmer, again associated them. Her memorial contained their later poems, followed by the last poems of Alice and Phœbe, and finally by Ballads for Little-Folk again a joint collection. Alice Cary was born 1820, and her sister Phœbe in 1821, in Cincinnati. They were the authors of many beautiful gems of poetry. In 1851 they moved to New York, where they supported themselves by writing poems and prose sketches for newspapers and magazines. They died in 1871, within three months of each other.

## "Nobility."

ALICE CARY.

True worth is in being, not seeming—  
In doing each day that goes by  
Some little good—not in the dreaming  
Of great things to do by-and-by,  
For whatever men say in blindness,  
And spite of the fancies of youth,  
There's nothing so kingly as kindness,  
And nothing so royal as truth.

We get back our mete as we measure—  
We cannot do wrong and feel right,  
Nor can we give pain and gain pleasure,  
For justice avenges each slight.  
The air for the wing of the sparrow,  
The bush for the robin and wren,  
But always the path that is narrow  
And straight, for the children of men.

'Tis not in the pages of story  
The heart of his ills to bequile,  
Though he who makes courtship to glory  
Gives all that he hath for her smile;  
For when from her heights he has won her,  
Alas! it is only to prove  
That nothing is so sacred as honor  
And nothing so loyal as love!

We cannot make bargains for blisses,  
Nor catch them likes fishes in nets;  
And sometimes the thing our life misses,  
Helps more than the thing which it gets.  
For good lieth not in pursuing,  
Nor gaining of great nor of small,  
But just in the doing, and doing  
As we would be done by, is all.

Through envy, through malice, through hating,  
Against the world, early and late,  
No jot of our courage abating—  
Our part is to work and to wait.  
And slight is the sting of his trouble  
Whose winnings are less than his worth;  
For he who is honest is noble,  
Whatever his fortune or birth.

"The Old Homestead."

When skies are growing warm and bright,  
And in the woodland bowers,  
The spring-time, in her pale, faint robes,  
Is calling up the flowers,  
When all with naked little feet,  
The children in the morn  
Go forth, and in the furrows drop  
The seeds of yellow corn  
What a beautiful embodiment  
Of ease, devoid of pride,  
Is the good old-fashioned homestead,  
With its doors set open wide!

But when the happiest time is come  
That to the year belongs,  
When all the vales are filled with gold  
And all the air with songs,  
When fields of yet unripened grain  
And yet ungarnered stores  
Remind the thrifty husbandman  
Of an pier threshing floors,  
How pleasant, from the din and dust  
Of the thoroughfare aloof,  
Stands the old-fashioned homestead,  
With steep and mossy roof!

When home the woodsman plods with axe  
Upon his shoulder swung,  
And in the knotted apple tree  
Are scythe and sickle hung;  
When low about her clay-built nest  
The mother swallow trills,  
And decorously slow the cows  
Are wending down the hills,  
What a blessed picture of comfort,  
In the evening shadows red,  
Is the good old-fashioned homestead,  
With its bounteous table spread!

And when the winds moan wildly,  
When the woods are bare and brown,  
And when the swallow's clay-built nest  
From the rafter crumbles down;  
When all the untrod garden paths  
Are heaped with frozen leaves,  
And icicles like frozen spikes  
Are set along the eaves,  
Then, when the book from the shelf is brought,  
And the fire lights shine and play,  
In the good old-fashioned homestead  
Is the farmer's holiday!

But whether the brooks be fringed with flowers,  
Or whether the dead leaves fall,  
And whether the air be full of songs,  
Or never a song at all,  
And whether the vines of the strawberries,  
Or frosts through the grasses run,  
And whether it rain or whether it shine  
Is all to me as one,  
For bright as brightest sunshine,  
The light of memory streams  
Round the old-fashioned homestead,  
Where I dreamed my dream of dreams.

"Nobody's Child."

PRIBE CARY.

Only a newsboy, under the light,  
Of the lamp-post plying his trade in vain;  
Men are too busy to stop to-night,  
Hurrying home through the sleet and rain.  
Never since dark a paper sold;  
Where shall he sleep, or how be fed?  
He thinks as he shivers there in the cold,  
While happy children are safe in bed.  
Is it strange if he turns about  
With angry words, then comes to blows,  
When his little neighbor, just sold out,  
Tossing his pennies, past him goes?  
"Stop!" some one looks at him, sweet and mild,  
And the voice that speaks is a tender one:  
You should not strike such a little child,  
And you should not use such words, my son!  
Is it his anger or his fears  
That have hushed his voice and stopped his arm?  
"Don't tremble," these are the words he hears;  
"Do you think that I would do you harm?"  
"It isn't that," and the hand drops down;  
"I wouldn't care for the kicks and blows;  
But nobody ever called me son,  
Because I'm nobody's child I s'pose."  
Oh men! as ye careless pass along,  
Remember the love that has cared for you;  
And blush for the awful shame and wrong  
Of a world where such a thing could be true!  
Think what the child at your knee had been  
If thus on life's lonely billows tossed;  
And who shall bear the weight of the sin,  
If one of these "little ones" be lost!

William Cowper,

born 1731, was the poet of the religious revival of the eighteenth century. His most important poem is *The Task*, in which praise of the quiet country life which he loved is mingled with reflections upon religious and social topics, and satirical touches upon the fashionable vices and follies of his time. He was of a highly sensitive nature, and was subject to fits of melancholy, which cast a gloom over his whole life. The chief characteristics of his poetry are clearness, simplicity and fidelity to nature. He departed this life in 1800, leaving behind him noble foot-prints in the paths of time.

The Negro's Complaint.

Forced from home and all its pleasures,  
Africa's coast I left forlorn;  
To increase a stranger's treasures,  
O'er the raging billows borne.  
Men from England bought and sold me,  
Paid my price in paltry gold;  
But though slave they have enrolled me,  
Minds are never to be sold.  
Still in thought as free as ever,  
What are England's rights, I ask,  
Me from my delights to sever,  
Me to torture me to task?

Fleecy locks and black complexion  
Cannot forfeit Nature's claim;  
Skins may differ, but affection  
Dwells in white and black the same.

Why did all-creating Nature  
Make the plant for which we toil?  
Sighs must fan it, tears must water,  
Sweat of ours must dress the soil.  
Think, ye masters, iron-hearted,  
Lolling at your jovial boards,  
Think how many backs have smarted  
For the sweets your cane affords.

Is there, as ye sometimes tell us,  
Is there One who reigns on high?  
Has He bid you buy and sell us,  
Speaking from His Throne the sky?  
Ask Him if your knotted scourges  
Matches, blood-extorting screws,  
Are the means that duty urges  
Agents of His will to use?

Hark! He answers—wild tornadoes,  
Strewing yonder sea with wrecks;  
Wasting towns, plantations, meadows,  
Are the voice with which He speaks.  
He foreseeing what vexations  
Africa's sons should undergo,  
Fixed their tyrant's habitations  
Where His whirlwinds answer—no.

By our blood in Africa wasted,  
Ere our necks received the chain;  
By the miseries that we tasted,  
Crossing in your barks the main;  
By our sufferings, since ye brought us  
To the man-degrading mart;  
All sustained by patience taught us  
Only by a broken heart.

Deem our nation brutes no longer,  
Till some reason ye shall find  
Worthier of regard, and stronger  
Than the colors of our kind.  
Slaves of gold, whose sordid dealings  
Tarnish all your boasted powers,  
Prove that you have human feeling  
Ere you proudly question ours.

"Human Frailty."

Weak and irresolute is man;  
The purpose of to-day;  
Woven with pains into his plans  
To-morrow tends away.  
The bow well bent and smart the spring,  
Vice seems already slain;  
But passion rudely snaps the string  
And it revives again.  
Some foe to his upright intent  
Finds out the weaker part;  
Virtue engages his assent,  
But pleasure wins his heart.  
'Tis here the folly of the wise  
Through all his heart we view;  
And, while his tongue the charge denies,  
His conscience owns it true.

Bound on a voyage of awful length,  
And dangers little known,  
A stranger to superior strength,  
Man vainly trusts his own.

But oars alone can ne'er prevail  
To reach the distant coast;  
The breath of Heaven must swell the sail,  
Or all the toil is lost.

Robert Burns,

born 1759, died 1796, is commonly called Scotland's greatest poet, and was positively the most popular writer of lyrics in the English language. The greater number of his poems are written in his native Ayrshire dialect, which, however, he frequently exchanges for English, especially in his more serious strains. He is the poet of freedom, as well as of beauty. So long as there is warm blood in the heart of Scotchmen, it will thrill under his spirited poem entitled "Bannockburn, or Robert Bruce's Address to his Army. His "Man's a Man for A' That", "Man was Made to Mourn", and many others of the same type, will endure while the language lasts. He was a Scotchman. His variety of poetry is equal to his originality: humorous, gay, tender and pathetic come all in a breath. The comic slides easily into the serious, the serious into the tender, and the tender into the pathetic. The following three verses are taken from "Man was Made to Mourn":

Oh, man! while in thy early years,  
How prodigal of time!  
Mispending all their precious hours,  
Thy glorious, youthful prime!  
Alternate follies take the sway;  
Licentious passions burn;  
Which tenfold force give nature's laws  
That man was made to mourn.

A few seem favorites of fate;  
In pleasure's lap caressed;  
Yet, think not all the rich and great  
Are likewise truly blessed:  
But, oh! what crowds in every land  
Are wretched and forlorn!  
Through weary life this lesson learn  
That man was made to mourn.

Oh, death! the poor man's dearest friend,  
The kindest and the best!  
Welcome the hour my aged limbs  
Are laid with thee at rest:  
The great, the wealthy fear thy blow,  
From pomp and pleasure torn!  
But, oh! a blessed relief to those  
That weary-laden mourn!

"Song of Death."

'Tis evening on the battle field, the wounded and dying of the victorious army are supposed to join in the song.

Farewell, thou fair day, thou green earth and ye skies,  
Now gay with the bright setting sun!  
Farewell, loves and friendships, ye dear tender ties,  
Our race of existence is run!

Thou grim king of terrors, thou life's gloomy foe,  
Go, frighten the coward and slave!  
Go teach them to tremble, fell tyrant! but no,  
No terrors hast thou for the brave!  
Thou strikest the poor peasant—he sinks in the dark  
Nor saves e'en the wreck of a name;  
Thou strikest the young hero—a glorious mark!  
He falls in the blaze of his fame.

In the field of proud honor—our swords in our hands,  
Our king and our country to save,  
While victory shines on life's last ebbing sands,  
Oh, who would not die with the brave?

Puzzles.

1—DOUBLE LETTER ENIGMA.

In the "summer time" so gay,  
Amongst the "autumn leaves" I play;  
In the "winter's chilling blast,"  
Merry springtime's here at last.

In the whispered fond "good night",  
In the morning's "early light",  
With the "merry birds" I sing,  
As they fly upon the wing.

Hidden 'neath these lines doth lie  
A day we all should glorify;  
'Tis hallowed for its sanctity,  
For't gave us all our liberty.

FAIR BROTHER.

2—CHARADE.

One day I spied the ADVOCATE  
With puzzles FIRST galore,  
Though of puzzles there were many  
Of puzzlers there were more.

Now I thought it was SECOND crime  
To join this happy band  
Of puzzlers, if Uncle Tom  
Should take me by the hand.

Some of them may be wealthy,  
Without a LAST some more,  
Some stay a while, then go away,  
Of steady puzzlers we have four.

Miss Armand and Miss Lily Day,  
Mr. Edwards and Fairbrother,  
But there! I did forget Fred Hall,  
You'll not find such another.

Henry Bobier and G. W. Blythe,  
I quite forgot them too,  
I see Minnie May's essayists have done wrong,  
Not so with Uncle Tom's crew.

They are COMPLETE of such things,  
I am very glad to say,  
But I think I am taking up space which might  
Be used in a better way.

ADA SMITHSON.

3—ENIGMA.

It's taken with us when we die;  
What some almost possess;  
What the miser gives away,  
He can do nothing less.

The prisoner says it in defense,  
When placed before the bar;  
What some may be to others,  
Who perfect strangers are.

What no one cares to work for;  
What everyone should owe;  
What you may stand in need of;  
I trust it may be so.

Now, as the first of April is here,  
Don't put yourselves about;  
For should you fail to guess this,  
You will be nothing out.

GEO. W. BLYTHE.

4—DECAPITATION.

Come all ye honest puzzlers,  
Who to the Dom belong,  
Send in your little bits of verse,  
And help the cause along.

Come let us see, for ninety-three,  
Who doth comprise the crew;  
As we speed along, "mid breakers strong,  
In the ADVOCATE canoe.

With "Uncle Tom," our captain long,  
"Miss Armand" as first mate;  
And a boat so tried and trusty  
We'll get whole, I calculate.

"Miss Lily Day" stands at the helm,  
"Miss Fairbrother" is cook;  
"Sir Henry Reeve," you'll all perceive,  
Doth keep the log (or book).

The cabin-boy's a "Blyth" young man,  
Who answers "Beck" and call;  
"Miss Smithson" to the bos'n said,  
Come up first, you, "Fred Hall."

Friend "Bobier," too, a jolly tar,  
Is in the foremost watch;  
But "Edwards," last three months have flown,  
Hath slipped beneath the hatch.

FAIR BROTHER.

5—CHARADE.

One day as Patrick was sitting COMPLETE a load of hay;  
The Waverly novels by Sir Walter Scott reading;  
Ada Armand came PRIME that way,  
Said she, "A riddle I've got, Sir Pat, for you to solve to-day."

"My time I cannot waste," said he,  
"In solving a trick for you just now";  
But still her trick she pressed upon him  
She said, "He must or else there would be a row."

HENRY REEVE.

6—ANAGRAM.

I saw a man in a prison cell  
And asked him the reason why;  
He answered low "My being here  
Is just the work of one fly."

ADA ARMAND.

7—DIAMOND.

My first is in our photograph;  
My second is a deed;  
My third up near the house-top  
May often be perceived;  
My fourth is a geometrical figure;  
My fifth an animal wild;  
My sixth may be a measure;  
My seventh's in "reconciled."

ADA ARMAND.

8—ENIGMA.

I roll, dance and prance along,  
I rage, I roar in noisy song,  
I'm white and black and sometimes blue,  
Perhaps green is my usual hue.

J. FRED. HALL.

No. 9.

My first is one of our fairest flowers;  
My second's a space of twenty-four hours;  
My whole's a puzzler of fame,  
I'm sure you all have heard her name.

I. IRVINE DEVITT.

Answer to March First Puzzles.

1 Patrick, a trick, trick, rick. 2 In-sat-i-ate-insatiate.  
3 Sir Walter Scott—Waverly Novels. 4 Ada Armand. 5—  
Cannot.

Names of Those Who Have Sent Correct Answers to March 1st Puzzles.

Henry Reeve, Henry Bobier, Oliver and Addison Snider,  
Thos. W. Banks, I. Irvine Devitt, Agatha Prudhomme, Geo. W.  
Blyth, Edith Fairbrother, Ada Smithson, A. R. Borrowman.

A Paper on Horse Breeding and the Treatment of Brood Mares and Foals.

Read before the Brandon Farmers' Institute by T. M. Percival, Brandon.

The subject for our discussion to-day is one of such magnitude and importance, relating, as it does, to the noblest of animals relegated to the service of man, it is impossible in one short paper to give anything of a detailed account of their breeding or management; I will, however, endeavor, in as plain and concise a manner as possible, to touch upon some of what I consider the most important parts of the subject. It is only by a thorough discussion, and getting the experience of each other, we can obtain the best results.

First—Do not recognize luck in breeding. "Luck is a fool, pluck is a hero," is one of the grandest of many maxims voiced by sages, and with it as a central figure many edifices of success have been reared.

"Success," Matthews says, "always a coy maiden, is now, when crowds of wooers have made her saucy, harder than ever to win." And so it is in all enterprises, especially so in breeding of horses.

The haphazard system of mating in the past has left the majority of would-be horse breeders in this province with a large number of nondescript colts on their hands, which will be difficult to sell at a price to cover the cost of raising—in fact, in the present state of the horse market, difficult to sell at any price; whereas, a good animal of a fixed type will sell, even now, at a profit. However experienced and painstaking a breeder may be, he will, from some cause, have a few weeds. It is therefore of the utmost importance, in attempting to breed horses successfully, that we should, at the outset, know what type of horse we wish to raise, and never from any cause be led away from our ideal.

Second (and of paramount importance)—Never breed an unsound mare or use a sire that is unsound (by the term unsound, I mean any hereditary unsoundness); if you do, the chances are you have an unsound offspring.

Third—Use great care in the mating of your mares. There is now in this district a sufficient variety of stallions to suit any class of mares; there is therefore no excuse for a man using an unsuitable sire. Take particular notice of your mare's size, style and general formation, and then select a stallion to mate. Say, for instance, you have a mare between ten and twelve hundred, I would use a Hackney or Cleveland Bay, and the result would be a stylish driver or saddle horse for sale, or a good serviceable horse for the farm; if a filly, breed again on the same line and keep to it, in the end you will have a class of horses that you would not have to go away from home to sell. Again, suppose you have a 1300-lb. mare or upwards, breed to one of the heavy breeds, and keep to that line of breeding.

There is no greater folly than extreme crosses. Cross breeding is not satisfactory between heavy and light breeds of horses. Now, for instance, say you have a team of mares about 1150 or 1200 lbs., clean boned and active; you want to breed them to something and would like to get something heavier, you breed them to a big Shire or Clyde, thinking by that means to get what is termed an agricultural team, with the result, in nine cases out of ten, you have a fair farm team, at the same time a team there is no market for if you want to sell them; whereas, if you had bred them to a coach horse, Cleveland Bay or thoroughbred, you would have had a grand team for the farm or a carriage team that you would have had no difficulty in finding a market for. In giving these illustrations, I do not wish it to be understood that the weight of a mare is a safe criterion as to what sire to use. As I stated in the beginning, you must carefully study the general make-up of your mare, and then decide, but keep to the line. What we want is a horse to suit the people that can and will pay good prices for what they want. There is and will be a demand for heavy horses, carriage horses, high stepping drivers and saddle horses, and those who raise them of good quality and sound will have no trouble in selling them. We have a good class of mares, also stallions with which to mate them, and one of the finest climates in the world for stock. What is wanted is sound judgment in mating, a clearly defined ideal always in view, generous treatment and careful handling of our stock. Once fairly engaged in stock breeding, stick to it, bring your energies to bear upon it, and you will find it interesting and profitable.

In conclusion, I will just touch upon the treatment of the brood mare and colt. I will assume that the mare is due to foal early in the season, before she can be turned on the pasture. In the first place, for the health of the mare and also of the unborn foal, it is absolutely necessary that the mare should have daily exercise; steady work, if the trails are good, or an hour's run in the yard will do. Never back them when hitched up, or let them flounder about in the deep snow. One great cause of the loss of colts is driving on bad trails and walking in deep snow. So long as the trails are bad, and there is any danger of the mare breaking through, keep her off it, but when there is good, firm footing, steady work and careful handling are best. If you want your mare to bring forth a strong, healthy foal, you must give her plenty of out-door exercise in some form. As she nears the time of foaling, say two or three weeks before she is due, provide a roomy, loose box, well ventilated and light, free from draught, and lots of clean, dry wheat-straw for bedding. Turn your mare in loose and get her accustomed to being alone; also get her quiet and accustomed to your moving about and handling her; by so doing there will be less danger of exciting her, if she requires any assistance when foaling. Mares, as a rule, foal very quickly, and it is best not

to interfere with them unless absolutely necessary, though they should be carefully watched, so that assistance can be given if required.

Carefully watch your colt for the first ten days, and see that its bowels act properly, as the first ten days are the most critical in a foal's existence. If you can get them over the first ten days, they usually require very little attention, if the mare is fed judiciously.

The mare should be fed some two or three weeks before she is due to foal and some time after soft food, such as boiled oats, bran, and linseed that has been boiled for 12 hours or longer, so as to loosen the system and provide a generous flow of milk. If from some cause the mare should not have sufficient milk, the best substitute is cow's milk, one-fourth water and a tablespoonful of honey to a pint of milk.

Costiveness, diarrhoea and inflammation are the principal ailments a young foal is subject to. The two first careful treatment will overcome; the last is, in most cases, fatal.

The following are well-tryed and the best remedies that have come under my notice:—Costiveness Rectal injections of luke-warm water every half hour, or syrup of rhubarb with a few drops linseed oil; dose, tablespoonful. Nothing acts more powerfully than injections, and the advantage is they do no harm.

Diarrhoea should not be stopped suddenly; tablespoonful brandy with half a teaspoonful of tincture of gentian and two tablespoonfuls lime-water, in a cupful of linseed tea every three hours.

Inflammation—Apply blanket, thickly folded and rung out in very hot water, to belly; rub the legs well; give teaspoonful laudanum in 2 ounces of water. Repeat dose in two hours if necessary.

Hiring a Man for the Season.

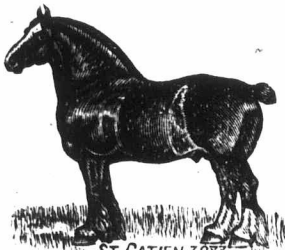
Every year it seems harder to get a good man, or men, to work on a farm, even at the present high rate of wages. There are so many avenues open to laborers here—the railways, the bush, city work on sewers, etc., all at far greater wages apparently than the farmer offers, or can offer, that farmers find it very difficult to get sufficient help. In many instances it will be found that the high-paid railway laborer is penniless in the winter, the quarryman is loafing round some tavern, and a great array of unemployed "bone and sinew" is in receipt of relief in winter. If these men will only try steady work for farmers, and work as faithfully on the land as they have been doing elsewhere, they will be more comfortable, live better, be better treated, and not work so hard as they have to do at chopping, shoveling gravel, etc. Again, is it not more manly to work on a farm during the winter for \$10 or \$15 per month, than to beg for relief from the city relief committee after having spent your summer's earnings in riotous living? I hope that some better plan will be put in operation this spring for furnishing farmers with good helpers.

NEW ADVERTISEMENTS.

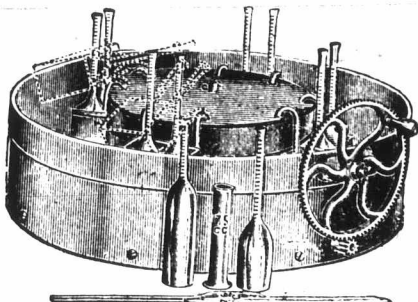
- Horse Sale—Cobbold & Shadwell, Toronto.
Galloways—A. Mann, Bowmanville.
Situation Wanted—Box 27, Compton, Que.
Poultry—Pearce & Brown, London.
Hay Implements—M. T. Buchanan, Ingersoll.
Jerseys—Mrs. E. M. Jones, Brockville.
Berkshires—J. G. Snell & Bro., Edmonton.
Shorthorn Bulls—J. Miller, Markham.
Poland Chinas—W. & H. Jones, Mt. Elgin.
National Pump Works—J. McMartin, Montreal, Que.
Paints—A. Ramsay & Son, Montreal, Que.
Pumps—W. H. Van Tassel, Belleville.
Baking Powder—W. D. McLaren.
Fertilizers—Nichols Chemical Co., Capelton, P. Q.
Corbin Disc Harrow—J. S. Corbin, Prescott.
Seeds—Wm. Ewing & Co., Montreal, P. Q.
Hay Caps—Symmes Hay Cap Co., Sawyerville, P. Q.
Wholesale General Merchants—W. & F. P. Currie, Montreal, P. Q.
Cream Separators—F. Wilson, Montreal, P. Q.
Herefords—F. A. Fleming, West.
Shropshires—J. & J. Smith, Paris.
Hobsteins—E. A. Folger, Kingston, G. T. R.
Poultry—L. W. Edsall, Selkirk.

Hackneys and Clydesdales

The choicest stud of Hackneys and Clydesdales will be found at the stables of R. BEITH & CO., Bowmanville, including the 1st prize and sweepstakes Hackney stallion, Ottawa, and 1st prize winner in Aged Class, Jubilee Chief. The Stud also includes a number of prize-winning Clydesdale horses and mares.



R. BEITH & CO., Bowmanville.
SHIRE HORSES.—A grand young imp. stallion for sale at a low figure.
IMPROVED YORKSHIRES.—Young stock of all ages at farmers' prices.
WHITE HOLLAND and BRONZE TURKEYS.—Orders booked for young birds for fall delivery. Correspondence solicited. Prices on application. 318-2-y-om WM. MULLEN, Hillsburg, Ont.



BABCOCK MILK TESTER.

Anyone interested in above should see our little treatise on the

"B-A-B-C-O-C-K."

SEND FOR ONE.

SEED AND DAIRY CATALOGUES FREE TO ALL WHO APPLY.

Our Celebrated M. S. S. and Other Ensilage and Fodder Corns.

WRITE US FOR PRICES.

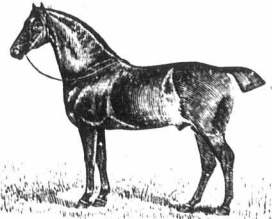
CORRESPONDENCE INVITED.

JOHN S. PEARCE & CO.

London. = Ontario.

ROBERT NESS, WOODSIDE FARM.

Importer and Breeder of Yorkshire Coachers, French Coachers, Clydesdales, Clydesdale Mares, Shetlands, and Ayrshire Cattle. The stock has taken more prizes than all importers and breeders combined in the province. I am prepared to sell at prices to suit the times. Give me a call. Canada Atlantic Ry. and G. T. R. on the farm, ROBERT NESS, Woodside Farm, Howick, P. O., P. Q. 329-1-y-om



BABCOCK MILK TESTERS.

ALEXANDRA

Separators (Hand and Power).

Butter Printers, = =

= Parchment Paper.

Nicest thing out for wrapping Butter.

PREMIUMS.

FOR ONE SUBSCRIBER.

- 1 Rose—Hybrid Perpetual, Red or Scarlet, 30
1 Rose " " Pink " " 30
1 Rose " " White " " 30
1 Rose—Climbing, Pink " " 30
1 Rose— " White " " 30
These Roses are all strong two-year plants, of the best named varieties; will bloom the first year planted.
2 Ampelopsis Veitchii, best climber for brick house, 30
1 Canna—Madam Crozy; best sort grown, 35
1 Hydrangea Paniculata Grandiflora, two years, strong, 30
12 Plants of either of the following valuable new Strawberries:—Woolverton, Saunders, Lovett, Beder Wood, Great Pacific or Parker Earle 30
Or 25 Plants of either Crescent, Bubach, Haverland, Mitchell's Early or Pearl, 30
Currants—1 Cherry Red, or 1 White Grape, or 1 Lee's Prolific, Black " " 30
Currants—3 Fay's Prolific, Red, or 3 Black Champion " " 30
All good two-year-old plants.
Gooseberries—4 Downing, best sort, 30
Grapes—4 Concord, or 3 Worden, 30

FOR TWO SUBSCRIBERS.

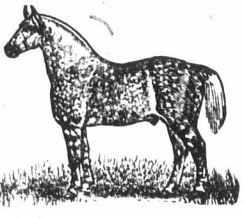
- 12 Plants of Cuthbert, Golden Queen or Marlboro Raspberries, and ten of any variety of the Strawberries named above with either lot of Raspberries, 60
1 of any variety of Grapes named below, or one each of any 4 varieties:—Worden, Moore's Early, Brighton, Niagara, Massachusetts, Wilder, Lindley or Salem, 60

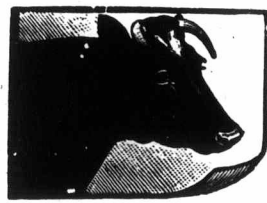
FOR THREE SUBSCRIBERS.

- Any 4 collections named for one subscriber, in above list, all to go to one address, 90
1 Industry Gooseberry, 2 years, 90
1 White Smith " " 90
3 Moore's Diamond Grape, 90
15 Finest Mixed Colors Gladiolus 90
All plants will be packed in the best manner in damp moss and oiled paper, and sent post free to your post office address.

La Compagnie du Haras National

30 St. James St., MONTREAL, CANADA.
65 Prizes & Diplomas in 1891 and 1892 for our French Coach Anglo-Normand Percheron and Clydesdale stallions and mares. For sale at reasonable prices. Give us a call.
Auzias-Turenne, General Manager.





# W. C. EDWARDS AND COY

IMPORTERS AND BREEDERS.

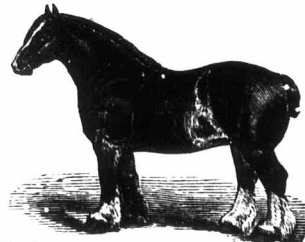


**SCOTCH SHORTHORNS.**  
The imported Cruickshank bull Grandeur is at the head of this herd of Imported and Home-bred Cows and Heifers of the most approved Scotch families.  
ALEX. NORRIE, Manager.

**ELMHURST STOCK AND DAIRY FARM**  
CLARENCE, ONT.  
Shorthorns, Shropshires and Berkshires

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. GEORGE CARSON, Manager. 316-y-om

## THORNCLIFFE STOCK FARM!



I have on hand the best young **CLYDESDALE** Horses and Mares on this continent. Bred from the well-known sires, Prince of Wales, Darnley, Macgregor, Energy, Lord Montrose, The Ruler, Carruchan Stamp, Knight Errant and other celebrities. My stock in the above lines were very successful at all the large shows last year. Call and examine our stock before purchasing elsewhere. Terms reasonable.

### SHROPSHIRE.

Orders can now be booked for Shearling Rams, Ram Lambs and Ewes, sired by the celebrated prize-winning English ram, Bar None. Also Rams and Ewes of this year's importation.



### SHORTHORNS!

CHOICE YOUNG HEIFERS and BULLS by the celebrated Cruickshank bulls NORTHERN LIGHT —AND— VICE CONSUL



**GRAND'S REPOSITORY**  
47, 49, 51 and 53 Adelaide Street, TORONTO.

**GREAT ANNUAL SPRING SALE**  
April 25th and 26th,

When will be offered for public competition upwards of **200 HORSES**

of all descriptions and classes, including well-bred **SADDLE & CARRIAGE HORSES,**

**GOOD STEPPING COBS,**

Light and Heavy Weight **HUNTERS,**

also Heavy Draught and General Purpose Horses, **Single Drivers and Roadsters,**

—AND— **STALLIONS OF ALL CLASSES.**

All the leading weekly and sporting journals throughout Canada and the United States contain notices of this sale. Thousands of posters and circulars are being distributed; in fact no expense is being spared to bring this

**GREAT ANNUAL SALE**

under the notice of buyers in all parts, who will always gladly respond and avail themselves of this opportunity to purchase High Class Stock. MESSRS. COBBOLD & SHADWELL, the new proprietors of Grand's Repository, intend to devote themselves to a strictly commission business, depending entirely upon the Canadian Breeders, Farmers and others having stock to dispose of to supply the great and growing demand for horses of superior quality. Intending shippers should communicate at the earliest possible moment and enable us to allot stable accommodation, which will prevent an endless amount of trouble that must occur if entries are received at the last moment; besides, we are daily receiving enquiries, both by letter and telegram, from buyers from all parts asking for information, which can be answered with greater satisfaction when all entries are in. Sale commences each day at 10.30 sharp. For further particulars, address:

**COBBOLD & SHADWELL, V.S.,**  
Proprietors and Auctioneers Grand's Repository, Toronto. 331-a-om

The Most Celebrated Stud of Clydesdales and Hackneys in Canada is owned by



### GRAHAM BROS., CLAREMONT, Ont.

The choicest animals that money and experience can buy, and well qualified to maintain the reputation of our stud for importing. More first prize and sweepstakes winners at the leading shows in Canada and the United States than all other establishments of its kind in the Dominion. The Clydesdales have immense size, large flat bone, with style, quality and choice breeding combined. The Hackneys have fine colors, style, quality, high knee action and choicest breeding. The home of the Champion Clydesdale Stallion, Queen's Own, and the Champion Hackney Stallion, Firefly. Parties wishing the best animals at reasonable prices are cordially invited to examine our stock. Catalogues free.

**GRAHAM BROS., CLAREMONT, ONT.**  
25 miles east of Toronto, on the C. P. R. 314-y-om

**SHAMROCK - AVENUE - CLYDESDALES.**  
The choicest collection of young Clydesdale Stallions, fit for service the coming season, to be found in Canada; good breeding and high class quality considered; prize winners, and sons of prize winners, including the first prize three-year-old and second prize two-year-old (imported) class, and winner of gold medal as best Dominion-bred Clydesdale stallion any age at Ottawa last year. Prices reasonable.  
THOS. GOOD, Richmond P.O., Ont. Stittsville Station, C. P. R. 329-d-om

**HEREFORDS FOR SALE.**  
Five extra fine Registered Hereford Bulls, from nine to eighteen months old. Intending purchasers should see them. Inspection of herd invited.  
F. A. FLEMING,  
Weston, Co. York, Ont.  
Farm half a mile from C. P. R. and G. T. R. Stations, three miles from Toronto Junction. 331-f-om

**MORETON LODGE HEREFORDS.**  
20-Choice Young Bulls-20 Good Animals, Well-bred and 25-Cows and Heifers-25 for Sale at very reasonable prices. Also Shorthorn Cattle, Cots. wold and Southdown Sheep, Berkshire Pigs.

**F. W. STONE, Guelph, Ont.** 329-1f-om

**FOR SALE.**  
During the latter part of March and April a number of Ayrshire calves from first-class milkers; also a yearling bull and Clydesdale stallion, four years old. Apply to F. W. TAYLOR, Welman's Corners, Ont. 330-a-om

**GALLOWAY BULL.**  
Pure-bred, 15 months old, grand sire Kough's Claverhouse, dam Sybel K. III.; quality first class. Will sell cheap. A. MANN, Bowmanville. 331-b-om

**FOR SALE-YOUNG JERSEY BULLS**  
that will please the eye and fill the purse. Best butter-stock I ever offered. Solid colors. All are show animals. Great tests behind them. One to ten months. Registered. Prices, \$75 to \$125. MRS. E. M. JONES, Brockville, Ontario, Canada. 331-b-om

**FOR SALE.**  
One choice young Bull sired by a Sussex bull, by Dryden's Imp. Sussex dam Crimson Flower, by Imp. Royal Barmpton. The accompanying cut is a half-sister bred by me. Also a few fancy show Heifers of the same breeding bred to young Indian Chief bull. Some fine Road Horses for sale.  
J. MORGAN & SONS, Kerwood, Ont 331.

### WRITE - F. A. FOLGER

RIDEAU FARM, - KINGSTON, ONT.



**Holstein - Cattle.**  
331-l-y-om

**H. I. ELLIOTT, Riverview Farm, Danville, P. Q.**  
Breeder of Scotch Shorthorns. Representatives of the most noted Scotch families: Duchess of Glastor, Lovely, Claret and Nonpareil. Herd headed by the imported Cruickshank bull, King James. 329-1-y-om

**BULLS FOR SALE.**  
A few good SHORTHORN BULLS for sale, bred from imported stock.  
S. B. CORWILL, BALLYMOTE, ONT. 331-a-om

**A SNAP - FOR SALE.**  
Registered Shorthorn Bulls. One two-year-old cost \$140 last spring, \$110 takes him now. One yearling cost \$125 last spring, \$100 takes him now. Right every way.  
J. Y. OMSBY, 224-1f-om: Isaleigh Grange, Danville, P. Q.

**SHORTHORN BULLS FOR SALE.**  
One two-year-old, got by Vice Consul (Imp.) 4132. ; four fourteen months, got by Wimples Heir 14529. Write for prices and pedigrees. Any person coming to see them will be met at station, if they let me know when to meet them.  
JOHN MILLER, 331-b-om MARKHAM, ONTARIO.

**SHORTHORN BULL CALVES FOR SALE.**  
Three reds, sired by Barnpton Chief - 14380 - a worthy son of the noted Barnpton Hero, and one roan, grandson of (Imp.) Tottilis, winner of lot at Toronto this year. All grand calves and good pedigrees. Also a few choice Berks just fit to wean. Prices reasonable.  
R. RIVERS & SON, 331-y-om Northwell Farm, Walkerton.

**H. & W. SMITH, Hay, Ont.** Thrifty young Bulls sired by silver medal bull, Prince Albert, and from prize-winning dams of best Cruickshank blood. Also cows and heifers for sale. Exeter Station, G. T. R., half mile. 319-y-om

### SHORTHORN BULLS.

Two young bulls for sale at prices to suit the times, one red and one roan, both sired by Imp. General Booth 54353. Address W. J. BIGGINS, Elmhurst Farm, Clinton, Ont. 318-1-y-om

### VALENTINE FICHT,

Maple Leaf Farm, Oriel, Ontario,  
Offers for sale at reasonable figures and on liberal terms, 30 head of well-bred Shorthorn bulls and heifers, yearlings, and two-year-olds also a three-year-old shire stallion from imported sire and dam (2nd prize, Toronto), and a grand lot of Cotswold sheep. STATION: Woodstock, on C. P. R. and G. T. R. 318-y-om

### T. W. HECTOR,

Importer and Breeder of Dorset Horn Sheep. The oldest flock in Canada. P. O.: Springfield-on-the-Credit. Stations: Springfield and Cooksville, C. P. R.; Port Credit, G. T. R. 329-1-y-om

### IMPORTED SHROPSHIRE

My stock was selected by myself, and consists of Shearling Ewes and Ewe Lambs from the leading flocks of England, and of the highest quality and breeding. Stock of all ages for sale.

### C. W. GURNEY,

Paris, - Ontario. 327-y-om

### SHROPSHIRE.

A fine selection of Shearling Rams and Ewes by Royal Uttington, also Ram and Ewe Lambs from imported ewes and sired by Royal Marquis, 170 head to select from. Address - J. & J. SMITH, Paris, Ont. 331-y-om

Having reduced my flock by recent sales I intend visiting Great Britain early in the spring to bring out my annual importation, when I shall endeavor to select the best, size and quality combined

### W. S. HAWKSHAW,

Glanworth Post Office. 326-y-om

### HILL HOME STOCK FARM SHROPSHIRE.

The highest type of imported and Canadian bred Shropshires. Special attention paid to character and quality. Choice young stock for sale. Telegrams - Burford; R. R. Station, Branford; P. O., Mount Vernon. 327-1-y-om D. G. HANMER & SONS.

### SHROPSHIRE AND YORKSHIRE.

Imported and Home-bred Ewes, Lambs -AND- SHEARLING EWES of best quality and lowest prices. ALSO YOUNG YORKSHIRE PIGS Come and see me before buying elsewhere. T. H. MEDCRAFT, Sparta P. O., Ont., Eight miles south-east of St. Thomas. 9-y-om

### LINCOLN SHEEP.

LAMBS AND SHEARLINGS of both sexes always for sale. Our last importation was made direct from the flock of Hy. Dudding, Esq. of Great Grimsby, and comprises the pick of a flock numbering 1700 head. If you want a pair or a few ewes send along your orders. J. T. CIBSON, Denfield, Ont. W. WALKER, Ilderton, Ont. on London, Huron and Bruce Rty.

STOCK GOSSIP.

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

Agriculture & Arts Association of Ontario.

47TH ANNUAL REPORT FOR 1892.

The following is the registration of stock of different breeds recorded last year:

Table with columns for Horses, Cattle, Sheep, Swine, and their registration statistics for 1892.

REGISTRATION RECEIPTS AND SALE OF HERD BOOKS.

Table showing registration fees and receipts for various stock associations.

RECEIPTS.

Table showing receipts from various stock associations.

LIVE STOCK ASSOCIATIONS IN AFFILIATION WITH THE AGRICULTURE & ARTS ASSOCIATION AND CLYDESDALE HORSE ASSOCIATION.

The seventh annual meeting of this Association was held at the Albion Hotel on the 8th of February last, and was fairly well attended.

SHIRE HORSE ASSOCIATION.

A quorum did not attend the annual meeting, so the officers for 1892 continue in that capacity for the present year.

DRAUGHT HORSE ASSOCIATION.

A few members have been added during the past year, and Mr. A. S. McVity is now acting as recording secretary.

HACKNEY HORSE SOCIETY.

This Society was well established at the March meeting, a constitution adopted and officers appointed.

DOMINION SHORTHORN BREEDERS' ASSOCIATION.

Although not in affiliation with the Agriculture & Arts Association, it is intimately connected with it.

The sixth annual meeting of this Association was held on the 10th of February last.

The annual meeting has not been held yet. There are several members, and it is likely to become quite an important association.

DORSET HORNED SHEEP.

We have recorded 112 of these during the last year. They are making quite a record at our shows, and are renowned for raising early lambs.

SUFFOLK SHEEP.

We have recorded 29 of these during the year. They have not as yet come to this country in any numbers, but they are well liked.

DELAVAL CREAM SEPARATORS

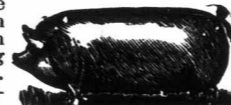
Fully Guaranteed Superior to any other Separators in the World.

SEND FOR CATALOGUES, TESTIMONIALS, ETC.

FRANK WILSON, 33 St. Peter St., MONTREAL.

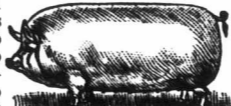
THE MARKHAM HERD, LOCUST HILL, ONT. (Farm one mile from Locust Hill St., C.P.R.) Registered Improved Large Yorkshire, Berkshire and Suffolk Pigs.

IMPROVED LARGE YORKSHIRE PIGS. Thirty-five choice Breeding Sows from the best English breeders.

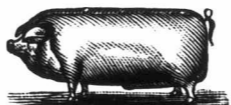


J. G. MAIR, Howick, P. Q. Importer and Breeder of Imp. Large Yorkshire Pigs.

IMP. LARGE WHITE YORKSHIRES AND BERKSHIRES. The undersigned offer for sale this month a few sows to farrow in June.



OHIO IMPROVED CHESTER WHITE SWINE. Our herd won 21 firsts, 17 seconds, 11 thirds prizes, including grand sweepstakes at Toronto, Montreal and Ottawa fall fairs of 1892.



THE OXFORD HERD OF POLAND CHINAS. W. & H. JONES, Mt. Elgin. Importers and breeders of Poland Chinas.

TAMWORTH SWINE, SHROPSHIRE, CLYDESDALES AND SHORTHORNS. John Bell, Clydesdale Farm, Amber, Ont.

BERKSHIRES. J. G. SNELL & BRO., Edmonton, Ont. A few of our best sows now have young pigs.

ISRAEL CRESSMAN, New Dundee, Ont. Breeder of Large English Berkshires. Young Hogs always on hand.

Duroc Jersey Swine. are the best all-round hog known. No squealing; quiet disposition; good graziers.

ISRAEL CRESSMAN, New Dundee, Ont. Breeder of Large English Berkshires. Young Hogs always on hand.

Duroc Jersey Swine. are the best all-round hog known. No squealing; quiet disposition; good graziers.

ISRAEL CRESSMAN, New Dundee, Ont. Breeder of Large English Berkshires. Young Hogs always on hand.

EUROPEAN ADVERTISEMENTS. ALCESTER PARK SHROPSHIRE. It will pay Canadian buyers to visit the above flock, which is founded on the best strains in England.

SHROPSHIRE, SHORTHORN AND YORKSHIRE. My Shropshire flock is founded on the best blood in England.

SHROPSHIRE SHEEP. The Loughcrew flock has been very successful in England and Ireland wherever exhibited.

EWES AND RAMS FOR SALE. Apply to J. DIXON, Loughcrew, Oldcastle, Co. Meath, Ireland.

Beam House Shropshires. WM. THOMAS offers for sale RAMS AND EWES from his famous flock, which has sent so many winners to the leading shows.

SHROPSHIRE I. JOHN W. EDWARDS, "The Hollies," West Felton, Shropshire, Eng. Invites all American and Canadian buyers to visit his flock.

SHROPSHIRE. Foreign buyers are invited to visit the Wolf's Head Flock, as there is always a good selection of ewes and rams for sale.

BARCHESKIE HERD OF AYRSHIRES. Andrew Mitchell, the largest breeder and exporter of Ayrshire cattle in Scotland.

ISRAEL CRESSMAN, New Dundee, Ont. Breeder of Large English Berkshires. Young Hogs always on hand.

Duroc Jersey Swine. are the best all-round hog known. No squealing; quiet disposition; good graziers.

ISRAEL CRESSMAN, New Dundee, Ont. Breeder of Large English Berkshires. Young Hogs always on hand.

HACKNEYS!

DUNCAN JENKINS, The Cross, Govan, Scotland, offers for sale Stallions and Fillies, the get of such sires as Danegelt, Anconeus, Sir Gibbie, etc.

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.

Removes Scurf, Roughness and Irritation of the Skin, making the coat soft, glossy and healthy.

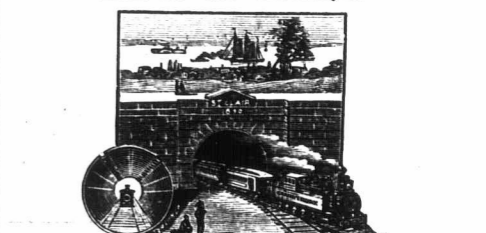
The following letter from the Hon. John Dryden, Minister of Agriculture, should be read and carefully noted by all persons interested in Live Stock.

"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."

Seventeen Gold, Silver and other Prize Medals have been awarded to "Little's Patent Fluid Dip" in all parts of the world.

ROBERT WIGHTMAN, DRUCICIST, OWEN SOUND, ONT. Sole Agent for the Dominion. 330-2-y-om

GREAT INTERNATIONAL ROUTE.



You may see both the St. Clair Tunnel AND THE WORLD'S FAIR (Chicago, 1893.)

Grand Trunk Railway. It is the only line under one management from all principal places in Ontario and Quebec.

FRUIT EVAPORATOR THE ZIMMERMAN. Different sizes and prices. Illustrated Catalogue free.

FARMERS, ATTENTION! We offer you from the best stock that money could produce, eggs from the following select strains of the great egg-producing varieties.

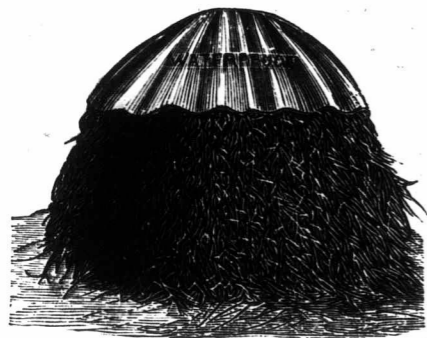
FOR SALE. Pekin Ducks, Aylesbury Ducks, White Guineas, Light Brahmas, White Leghorns, Brown Leghorns, Plymouth Rocks, Black Spanish, Langshans, Silver Polish, Incubators, Brooders, Poultry House Sprays, Mortars, Bone Mills, Clover Cutters, Parrots, Exhibition Coops.

L. W. EDSALL, 331-a-om SELKIRK, ONTARIO.

ADVERTISE IN THE ADVOCATE

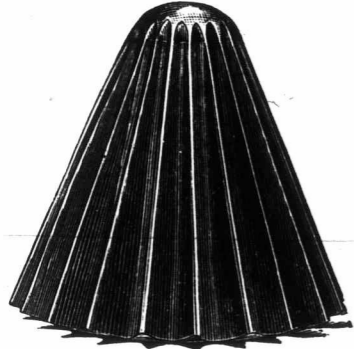


THE SYMMES HAY AND GRAIN CAP.



The most practical, cheap and efficient Hay and Grain Cap yet introduced. For particulars, send for circular.

THE SYMMES VEGETABLE AND FLOWER COVER.



Thoroughly waterproof, tough and durable. Size, 11 1/2 inches high and 12 inches diameter at bottom. Valuable for covering transplanted plants and flowers, protecting them from sun and frost. Manufactured by THE SYMMES HAY CAP CO., Sawyerville, P.Q.

WHITE LEGHORNS A SPECIALTY. Yard for 1893 headed by cock winner of 1st at Toronto, 1st at Ottawa and 1st both as cock and cockerel at the Ontario Poultry Show, Bowmanville. Eggs, \$1.50 per 13.

FREE GRANT LAND near Gainsboro, Carnduff, Oxbow, Estevan.

Having resided for ten years in the Souris district, and being thoroughly acquainted therewith as a practical farmer, I am in a position to locate farms for parties who wish to take up homesteads, and will furnish full instructions of how they may be obtained and save all travelling expenses. Improved and unimproved farms also for sale.

\$2.00

per acre will buy a few farms within six miles of the great

W-H-E-A-T

Other choice properties in town and vicinity cheap and on easy terms. Correspond with W. RICHARDSON, Real Estate, Loan and Collecting Agency, Saskatoon, Ave., Portage la Prairie, P.O. Box 753.

WANTED!

By young gentleman situation as farm foreman, manager, or any outdoor position of trust. Six years' experience. Good references.

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.

SPRAY-SAVE-MONEY.



APPLE SCAB, PEAR BLIGHT, GRAPE MILDEW, PREVENTED.

Curculio, Potato Bugs, Lice on Cattle, killed by spraying.

Send post card for illustrated catalogue of pumps and spraying mixtures, and you will put dollars in your pocket.

W. E. SAUNDERS & CO. 330-47-om LONDON, ONTARIO



GOOD CROPS OR POOR CROPS, Which Shall it be for 1893?

W. A. FREEMAN, Esq. Dear Sir—Having given your "Bone and Potash" a fair trial with most satisfactory results, I have much pleasure in adding my testimony to its excellence as a fruit producing fertilizer. I have used it at the rate of 3 lbs. per tree in full bearing. I have placed in the hands of Mr. Gage my order for eight tons, an increase of two tons on order of last year. Respectfully, (Signed) J. H. BENN.

Send for FREEMAN'S NEW CATALOGUE, Treating on Manuring and how to grow large and paying crops. — SENT FREE BY ADDRESSING — W. A. FREEMAN, HAMILTON, ONTARIO. Please mention this paper. 335-a-om

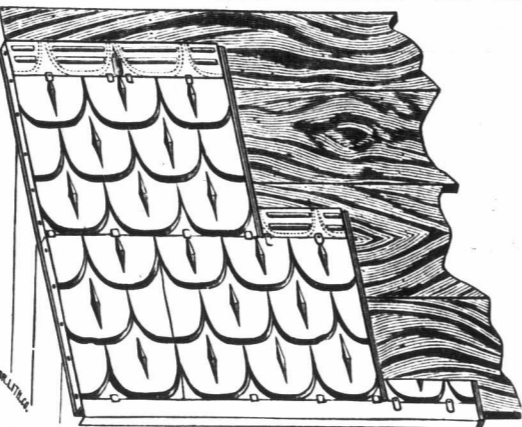
The COLUMBIA The Farmers' and Threshers' Sawmill.



A - CHEAP - SAWMILL - FOR - CUSTOM - WORK CAN BE RUN BY 6 TO 12 HOGSHEADS WATER, WIND OR STEAM. Capacity, 1500 to 2000 Feet Per Day.

SO SIMPLE ANY MECHANIC CAN SET UP AND OPERATE. JUST THE THING FOR BACK SETTLEMENTS, OR FARMERS' OWN USE. PRICE, WITH SIX SAWS, \$400 f. o. b., WITH PLAN TO ERECT. 321-1-y-0

THE PEDLAR - SHINGLE PATENT STEEL SHINGLE WILL LAST A LIFETIME.



FIRE PROOF, LIGHTNING PROOF, WATER PROOF. NEARLY AS CHEAP AS WOODEN SHINGLES. Send for Illustrated Catalogue. Reliable Agents wanted in every vicinity. ADDRESS— 322-1-y-0

THE PEDLAR METAL ROOFING CO., OSHAWA, ONT.

MICA ROOFING



Use Mica Roofing on all your buildings. It is cheaper than Shingles. Water Proof and Fire Proof. RAPIDLY TAKING THE PLACE OF SHINGLES. Is put up in rolls of 108 square feet each, 36 feet long by 3 feet wide, and cost 2 1/2 per square foot, thus affording a light, durable and inexpensive roofing suitable for buildings of every description, and can be laid by ordinary workmen. One man will lay 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 Mica Roofing to sell again. Orders and correspondence answered promptly.

HAMILTON MICA ROOFING CO., Office—124 James Street North, HAMILTON, ONT. 321-1-y-om

ADVERTISE IN THE FARMER'S ADVOCATE.

SWINE BREEDERS' ASSOCIATION.

This Association embraces all kinds of swine, and the 1st Volume of the Swine Breeders' Record has been printed by the Agriculture & Arts Association, and 170 numbers were sent out to members of this Association. Berkshires—We recorded 613 of these during the year. It is a very favorite breed. Yorkshires—We recorded 545 of these fine animals also during the year. They are great favorites also. Suffolks—Only 29 of these were recorded during the year. Poland Chinas—411 of these have been recorded, but, as was the case last year, most of them are ancestors in the States and have been recorded free. Chester Whites—275 were placed on record, several of them being franked. Tamworths—We have recorded 39 of these. A very good showing for the first year. The Second Volume of the Swine Record is in the hands of the printers, containing some of the pedigrees of all the breeds above, and will be sent to the members for 1893.

PRIZE FARMS.

In 1892, Group No. 5, consisting of the counties of Leeds and Grenville (2), Glengary, Grenville South, Lanark (2), Dundas, Carleton, Prescott, Renfrew (2), Russell and Stormont were visited by John I. Hobson, Mosboro'; R. Vance, Ida; W. J. McNaughton, Lancaster; and F. W. Hodson, London, as judges, and their valuable reports will be found in our report to the Minister of Agriculture for 1892. Our Council at the last meeting thought fit to top off this branch of its services, and unless it be brought up again at this meeting, no farms will be visited this year, and the interesting reports on the qualities of these farms will be missed in our next report. The expenses of the four judges were \$392.

ONTARIO VETERINARY COLLEGE.

This Association granted veterinary diplomas to students that graduated from the Ontario Veterinary College, under the able Presidency of A. Smith, V. S. R. V. S., Ed. The diplomas cost \$90.

PLOUGHING MATCHES.

Four of these were held in the different sections of the provinces. Districts 1, 2 and 3, under the management of C. E. Edwards, M. P., D. McPherson and J. Legge, was held near the town of Merrickville, in the county of Lanark. Districts 4, 5 and 6, under the management of Jas. Haggarty, W. J. Westington and J. C. Small. The match was held near the village of Sterling, county of Hastings. Districts 7, 8 and 9, under the management of J. C. Rykert, N. Awrey, M.P.P., and W. Dawson. The match was held near Thorold, in the county of Welland. Districts 10, 12 and 13, under the management of Jas. Rowand, M.P., C. M. Simmons and A. Rawlings. Match was held near Mildmay, in the county of Bruce. All of these matches were successful, and cost the Association \$600.

WORLD'S COLUMBIAN EXPOSITION.

At the March meeting of 1892 a committee from this Association waited on the Hon. John Dryden, Minister of Agriculture, and recommended the Government through him to appoint a Provincial Commissioner, naming Mr. Awrey, our President, as a likely person for that office, together with an Advisory Board to confer with him, to act in conjunction with the Dominion Commissioner, to select exhibits of all kinds from Ontario. Soon after that the Government, with the full concurrence of the appointment, granted a Special Commissioner, appointing Mr. Awrey the Commissioner for Ontario, also giving him an Advisory Board, on which two members of our Council and myself, as secretary, have seats. Schedules were immediately sent out amongst breeders of live stock, and were loyally responded to by nearly all of our best stock breeders and importers, and Ontario promises to come well to the front next fall. Of entries for horses we have received 10 of Thoroughbreds, 42 Standardbred, 38 Carriage, 96 Clydes, 5 Shires, 20 Hackneys, 6 Suffolk Punch and 10 ponies—total, 237. From these seventy-five were conditionally passed by the Inspectors at the fall shows, but several have to be seen this spring.

Cattle entries—72 Shorthorns, 21 Herefords, 14 Polled Angus, 26 Galloways, 8 Devons, 32 Jerseys, 19 Holsteins, 60 Ayrshires, 3 Guernseys, and 4 fat cattle—total, 259. Of these 175 were conditionally passed at the fall show.

Sheep entries—112 Cotswold, 65 Leicesters, 50 Lincolns, 94 Southdowns, 78 Shropshires, 8 Hampshire-Downs, 24 Merinos, 51 Dorset Horned and 43 fat sheep—total, 523. Of these 350 have been approved of.

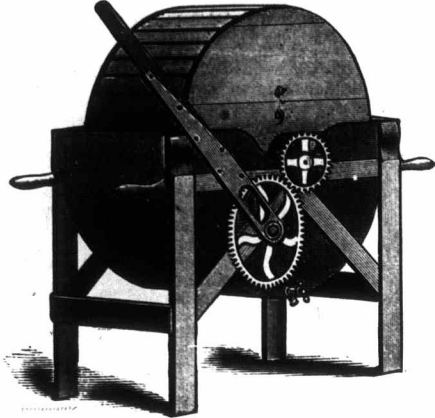
Swine entries—41 Berkshires, 10 Poland Chinas, 18 Chester Whites, 31 Improved Yorkshires, 18 Suffolks, 24 Tamworths and 10 Essex—total, 152. Of these 150 have been approved of conditionally.

In this issue Mr. S. B. Gorwill, Ballymote, advertises Shorthorn bulls. They are sired by the imp. Nonpariel bull Roan Prince, and their dams are from the Buchan-Tassie family as bred at Kinellar.

We take pleasure in calling attention of any of our readers who are interested in poultry to the new advt. of L. W. Edsall, Selkirk, Ont. We can assure purchasers of a satisfactory deal, as Mr. Edsall will furnish birds equal to what he represents.

A. C. Hallman & Co. report their stock doing well and in nice condition for spring trade. Demand strong for choice stock and good breeding. We report the following sales just recently made: To S. M. Billings, Leskard, a handsome two-year-old heifer, full of promise; with her went a well-bred bull, grandson of old Netherland Prince, and dam Mina Reuter 3rd, a nice Anglie cow. A very choice two-year-old heifer went to Thos. Wilson, Pine River, Ont.; she is got by our silver medal bull, and out of our famous show cow Dreamy Eyes; she is a prize for anybody. To Jas. Irvin, Pine River, Ont., went the rich-bred bull Netherland Pilot, a very handsome two-year-old bull of dairy quality; sire silver medal bull, and dam Paleanthus (imp.), with a two-year-old record of 13,100 lbs. milk in one year; with him went Beula, a nice Artis heifer, two years old; dam Bullie 2nd, a well-bred cow of Netherland blood; Beula's heifer calf, got by the medal bull, also went with this lot. We have a very choice lot of youngsters on hand. A few very choice young bulls yet, ready for service. Send for our new catalogue.

No Wear on the Clothes. A Little Boy can Operate it with One Hand.

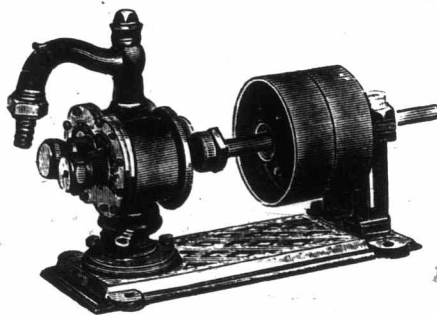


**The Manitoba Washer.**

A representative of the ADVOCATE recently witnessed the washing of a lot of exceedingly dirty overalls belonging to railway employees, and takes pleasure in saying that the Manitoba Washer, made by Mr. Thomas McCrossan, of Winnipeg, is a most useful invention, and did its work in a complete manner. It has several important features which commend it to those desiring the comfort of such a useful article. It is capable of thoroughly washing a good many articles at once, and is easily operated, which, with the short time required to do a large washing, makes it a great time and labor-saver. Below we give a sample of the many letters received from those who have used it:—

PORTAGE LA PRAIRIE, Aug. 9th, 1892.  
 Dear Sir,—We have been using one of your Washing Machines now for more than six months. It gives us good satisfaction and is a great saving of both time and labor. We would not be without it for any consideration we know of, so long as we have any washing to do.  
 Yours, very truly, A. W. ROSS,  
 Chairman Portage la Prairie District Methodist Conference.

**THOS. McCROSSAN, Proprietor,**  
 556 Main Street, Winnipeg. 42-y-om



**ROTARY POWER PUMP, MOUNTED ON IRON FRAME.**

The above Pump represents our ROTARY POWER PUMP arranged with Tight and Loose Pulleys, Steel Shafts and Bobbed Bearings, etc. This Pump is cheap and well adapted for Creameries and Butter Factories, or establishments requiring a constant small stream of water, for supplying it quickly, or washing out vats, or pumping milk, as this can be done by using two stop cocks. We furnish a handle to fasten on end of shaft to fill boiler by hand extra. This pump will throw water from end of nozzle from 30 to 80 or 100 feet. PRICE UPON APPLICATION. National Pump Works, 637 Craig St., J. A. McMartin, Montreal. 331-a-om

**WHITE CHAMPION OATS,**

The earliest in cultivation, at 75c. per bushel; 10-bushel lots, 60c. Bags extra. Young stock also for sale.

**R. H. HARDING,**  
 Mapleview Farm, - THORNDALE, ONTARIO,  
 Importer and Breeder of Chester White Swine and Dorset Horned Sheep. 331-1-y-om

**WILLIAM EWING & CO.**  
 SEED MERCHANTS,  
 142 McGill Street, - MONTREAL.

Superior Farm Seeds,  
 VEGETABLE  
 AND  
**Flower Seeds.**

Ensilage Corn of all the best varieties. Imported Horse Beans and Giant Russian Sunflower for the Robertson Ensilage Combination. 331-b-om  
 Catalogues mailed free on application.

**\$6.50 will pay for the LEWIS COMBINATION PUMP. THE WONDER**  
 Made of polished brass. Makes three complete machines—Spray Pump, Veterinary Syringe and Potato Bug Exterminator. Express paid to any express office in Canada. Send your address and get book of 128 pages on Spraying and other valuable matter.  
 331-a-o W. H. VAN TASSEL, Belleville, Ont.

**: \$200 :**  
**In Prizes to the Farmers.**  
**NO ENTRY FEE.**

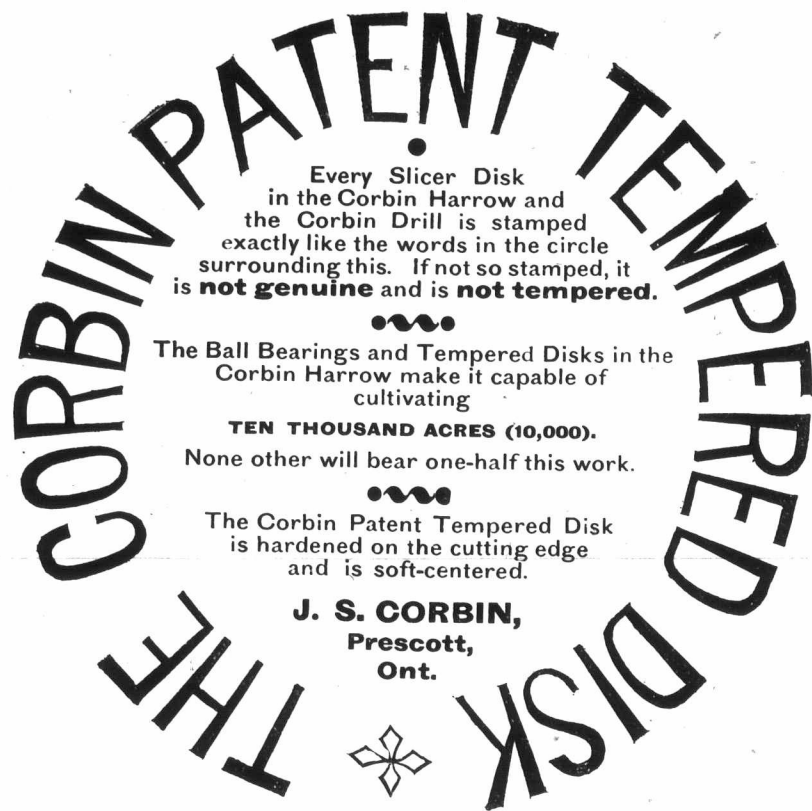
For the best and second best acre of potatoes grown this season with the aid of our Fertilizers, in each of the provinces of Quebec and Ontario, we offer \$75.00 and \$25.00 respectively as prizes. For particulars get one of our circulars from local agent, or by addressing us.

**THE NICHOLS CHEMICAL CO.,**  
 331-d-o Capelton, P. Q.

**\$2,700.—A SPLENDID FARM OF 240 ACRES,**

two miles from Stonewall Station. The improvements are, a frame dwelling house (which has never been occupied), prettily situated near a grove of poplar. The size of the house is 18x24, with lean to addition 12x18; good stout foundation and cellar; a good artesian well—excellent water; frame stable. Fifty acres fenced and about thirty acres cultivated ready for seeding. TERMS: \$700 cash, balance on time, with interest at 7 per cent.

Apply to **A. J. BANNERMAN, Agent,**  
 435 Main Street, Winnipeg.  
 314-1-y-om



Every Slicer Disk in the Corbin Harrow and the Corbin Drill is stamped exactly like the words in the circle surrounding this. If not so stamped, it is **not genuine** and is **not tempered**.

The Ball Bearings and Tempered Disks in the Corbin Harrow make it capable of cultivating

**TEN THOUSAND ACRES (10,000).**

None other will bear one-half this work.

The Corbin Patent Tempered Disk is hardened on the cutting edge and is soft-centered.

**J. S. CORBIN,**  
 Prescott, Ont.



331-d-om

**WHAT**

**EVERYBODY**

**SAYS**

**MUST**

**BE**

**TRUE!**

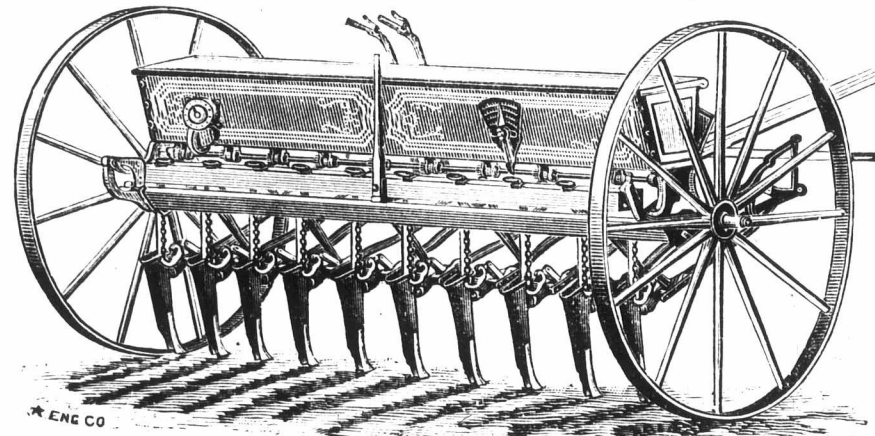
--- ASK ---  
**YOUR FRIENDS**  
 WHAT THEY THINK ABOUT THE  
**THOMAS ORGANS**

There is nothing we are so proud of as the kind words that are said in our favor by those who have given them a trial.

**THOMAS ORGAN COMPANY,**  
 Woodstock, Ont., Canada.  
 329-1-1f-om

**HOOSIER - STEEL - FRAME - GRAIN - DRILL**

There are more Hoosier Drills of our manufacture in use in Canada than of all other kinds combined.



**GUARANTEED THE BEST DRILL MADE**

Perfect and instantaneous regulation of depth of Hoos in all kinds of soil. THE ONLY PERFECT FORCE FEED in use. The thorough equipment of our factory with the latest improved labor-saving machinery and a largely increased output enables us to offer the Hoosier Drill and all other implements of our manufacture at prices lower than ever before. For catalogue, prices and terms, see our local agents throughout the country, or send to our office.

**NOXON BROS. MANUFACTURING CO'Y (Ltd.),**  
 Ingersoll, - - - Ontario. 329-1-b-o

**CO-OPERATION IS PROVING ::  
 :: A SUCCESS.**

We expect every Farmer to write for our list of Prices and co-operate with us—  
 —WE ARE THE ONLY—

**Farmers' Co-Operative Store**  
**IN CANADA,**

and as a proof of our success we now **Pay Freight on all Orders of \$10 and over,** as far East as KINGSTON, West as SARNIA, and North as BRACEBRIDGE; outside of which limit we allow a discount of 3% in lieu of Freight.

Our Trade is Increasing very rapidly. We have just opened a large consignment of

**BOOTS AND SHOES**

for Our Spring and Summer Trade, and they are excellent value.

--- OUR ---  
**HARNESS ---**

Deserves your attention, and our **GROCERY DEPARTMENT IS FIRST-CLASS.**

Purchase your Supplies direct from your own house.

**GRANGE WHOLESALE SUPPLY CO., LTD.,**

R. Y. MANNING, 35 Colborne St.,  
 327-1-f-om Manager. Toronto.

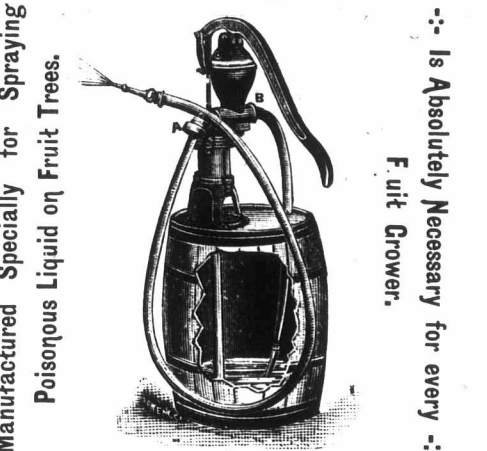
**PILES Radically Cured.**

W. E. BESSEY, M.D., C.M.,  
 200 JARVIS STREET, TORONTO.  
 SPECIALTY.—Orificial Surgery, Piles & Rectal Diseases, Stomach and Intestinal Disorders, Chronic and Nervous Diseases, Genito-Urinary Affections, and Diseases of Women. Private Hospital, with trained nurses. 329-y-om

**GROUND OYSTER SHELL & BONE MEAL**

For Poultry.  
 For Sale in quantities to suit purchasers.  
**JAS. DUNLOP,**  
 329-f-om HAMILTON, ONT.

Our Perfection Spraying Outfit is just what you are looking for.

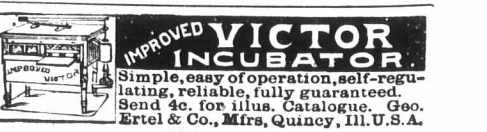


Manufactured Specially for Spraying Poisonous Liquid on Fruit Trees.  
 The only effective means of destroying the Aphis Cankerworm, Apple Curculio and other insects that are so injurious to Orchards and Gardens. We manufacture the Most Complete line of PUMPS and WINDMILLS, both for pumping water and driving machinery, of any firm in Canada. It will pay you to send for large illustrated catalogue before purchasing elsewhere. **ONTARIO PUMP CO., Ltd. (In Liq.),** Mention this paper. (329-1-f-om) Toronto, Ont.

**: PAINT :**

your house with **UNICORN**  
**READY MIXED PAINT.**  
 None better in the world. Every tin guaranteed pure. Tell your dealer you must have them.  
 MANUFACTURED ONLY BY

**A. RAMSAY & SON, - MONTREAL.**  
 Established 1842.  
 Leads, Colors, Varnishes, etc. 331-y-om



**IMPROVED VICTOR INCUBATOR**  
 Simple, easy of operation, self-regulating, reliable, fully guaranteed. Send 4c. for illus. Catalogue. Geo. Eitel & Co., Mfrs., Quincy, Ill., U.S.A.  
 330-c-om

# MANITOBA The Great Grain and Cattle Province HAS WITHIN ITS BORDERS HOMES FOR ALL!

Manitoba is making rapid progress, as shown by the fact that in four years the area under crop has more than doubled.

In 1887 there was under crop 663,764 acres.  
In 1891 there was under crop 1,349,781 acres.  
Increase, - - - 686,017 acres.

These figures are more eloquent than words, and indicate clearly the wonderful development taking place. NOT A BOOM, but certain and healthy growth.

## HORSES, CATTLE AND SHEEP

Thrive wonderfully on the nutritious grasses of the prairie, and MIXED FARMING is now engaged in all over the Province. There are still

**FREE HOMESTEADS** in some parts of Manitoba.

**OHBAF RAILROAD LANDS**—\$3.00 to \$10.00 per acre. Ten years to pay for them.

**IMPROVED FARMS** for sale or leasing, from private individuals and corporations, at low prices, and on easy terms

**NOW IS THE TIME** to obtain a home in this wonderfully fertile province. Population is moving in rapidly, and land is annually increasing in value. In all parts of Manitoba there are now

**GOOD MARKETS, RAILROADS, CHURCHES and SCHOOLS,**

AND MOST OF THE COMFORTS OF AN OLD SETTLED COUNTRY.

**EXCURSIONS WILL BE RUN TO MANITOBA FEB. 28, MARCH 7, 14, 21, 28, AND APRIL 4, 11, 18, 25.**

For the latest information, new books, maps, etc. (all free), write to

Or to

**THE MANITOBA IMMIGRATION AGENCY,**  
No. 30 York Street, TORONTO.

**HON. THOS. GREENWAY,**  
Minister of Agriculture and Immigration,  
WINNIPEG, MANITOBA.



LARGEST AND BEST EQUIPPED BUSINESS COLLEGES IN CANADA.

**Toronto & Stratford.**

Special Courses for FARMERS' SONS. A BUSINESS EDUCATION is a SAFE INVESTMENT.

319-1-y-o

Students may enter at any time. Satisfaction guaranteed. Write for catalogues and mention this paper.

**SHAW & ELLIOTT, Principals.**

## TO FARMERS! Valuable Manitoba Farm TO RENT OR FOR SALE

A splendid, well improved farm, comprising 1600 acres, on the Assiniboine River, about twenty miles from Winnipeg, and two and one-half miles from White Plains station, would be rented for a fixed sum or on shares, either with or without the stock and machinery necessary to work it.

1400 acres fenced, about 350 acres cultivated, 200 acres of timber, good house, ample stabling for 150 head of cattle and forty horses; also other buildings.

From its superior situation, quality of land, valuable buildings and proximity to Winnipeg, this makes one of the best farms in Manitoba. The place is at present in good running order, and is well stocked with horses, cattle, pigs, etc.

Immediate possession can be given. If desired the farm would be sold on easy terms. For full information apply to

**OSLER, HAMMOND & NANTON, Winnipeg, Man.**

### FARMERS!

If you want the best value for your money. If you want an article that will never disappoint you. If you want thoroughly good and healthy Baking Powder, into which no injurious ingredient is ever permitted to enter.



REMEMBER THAT McLAREN'S COOK'S FRIEND IS THE ONLY GENUINE. The Best Grocers Sell It.

THE HOLSTEIN-FRIESIAN REGISTER OFFICIAL PAPER OF THE BREED. SENT FREE ONE YEAR. Write for Sample Copy.

### FOR SPRING PLANTING TREES

A large and complete collection of Fruit and Ornamental Vines, Small Fruits, etc. Please us with your order, we will please you. Send for our new Illustrated Price Catalogue, free to all.

**A. G. HULL & SON,**  
328-2-d-o Central Nurseries, St. Catharines, Ont.

**If You Think**  
any kind of a crop will do, then any kind of seeds will do; but for the best results you should plant **FERRY'S SEEDS.**

Always the best, they are recognized as the standard everywhere. **Ferry's Seed Annual** is the most important book of the kind published. It is invaluable to the planter. We send it free.

**D. M. FERRY & CO.**  
WINDSOR, Ont.

### FRUIT AND ORNAMENTAL TREES!

Grape Vines and Berry Plants. Planters will find it to their interest to patronize a Canadian Nursery. Varieties are offered most suitable to our climate; useless sorts discarded. My stock is graded with scrupulous exactness, and is true to name. Everything new and old in the nursery line deemed worthy of distribution. Having seventy-five acres in fruit here I can, and will give freely, good advice to customers. Send now for a free and useful catalogue and price list to **Heldreigh Farms Nursery, E. D. SMITH, Prop., 325-h-o** Winona, Ont.

**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. Cochrane, Compton, P. Q., or this office. 317-1-y-o **JOHN SMITH, Brampton.**

**Sweepstakes at Chicago, 1891.**  
131 birds scoring 90 to 96, B. and Wh. P. Rocks, Wh. and S. Wyandottes, Wh. and Br. Leg-horns, and Bronze Turkeys. 500 selected birds, pairs, trios and pens, mated for best results. 300 Toms and Hens bred by 44 and 47 lb. Toms. 25 years a breeder. Valuable illustrations, circular, free. **F. M. MURGER, DeKalb, Ill.** Editor of the "Poultry Chum," 25 cts. per year. 327-1-y-om

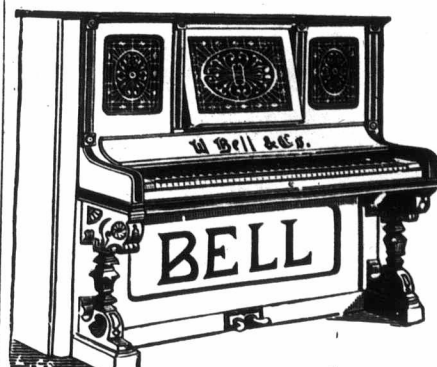
**THE ROYAL NEW MODEL INCUBATOR.**  
An Incubator for the Fancier, for the Farmer, for the Amateur. Practical, perfect in construction, easily operated, self-regulating. Send for circular and testimonials. Address **J. S. SMITH, 329-1-d-om Chilliwack, B.C.**

**PATENTS** procured in all countries. Expert in patent cases. Correspondence solicited. 25 years' experience. **W. BRUCE, 17 1/2 King St., East, 328-g-om** Hamilton, Ontario.

**KEITH'S Gardener's Assistant and Illustrated Catalogue** of Garden, Agricultural and Flower Seeds now ready and will be mailed free on application. I call special attention to my stock of **CHOICE Saskatchewan Red Fyfe Wheat** PRICE, \$1.25 PER 60 LBS.

And also to my supply of **Manitoba Oil Cake**, which is the richest oil cake to be had on the market. Prices on application. Clover and Timothy, Orchard, Blue and Red Top Grasses, Flax Seed, Ground Flax, Tares, Seed Wheat, Oats, Barley, etc., etc. **GEORGE KEITH, Seed Merchant, 124 King St. East, Toronto. 327-1-d-o**

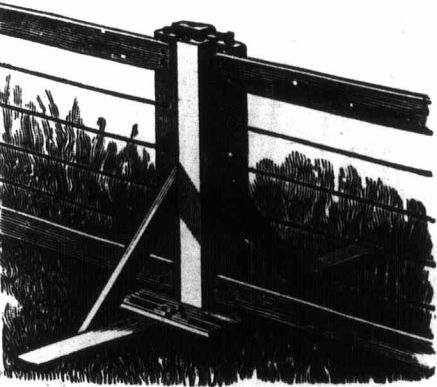
**ADVERTISE IN THE ADVOCATE.**



**PIANOS, REED ORGANS & CHURCH PIPE ORGANS**  
THE STANDARD INSTRUMENTS OF THE WORLD.  
Send for Catalogue.  
**BELL ORGAN AND PIANO CO.,**  
Guelph, Ont. 321-1-y-0

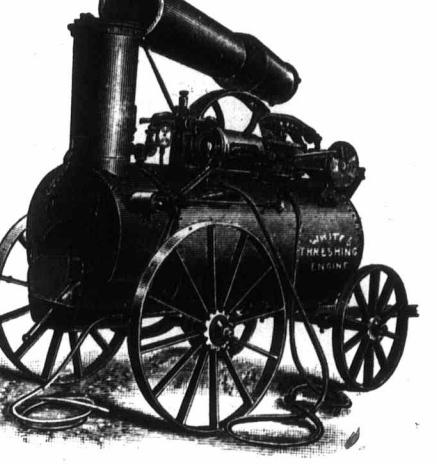
## Raglan Cycles

THE MACHINES OF THE SEASON.  
Light, Strong, Fast & Neat.  
CANADIAN REPRESENTATIVE:  
**GEORGE F. BOSTWICK,**  
24 WEST FRONT STREET,  
TORONTO 319-tf-o ONTARIO.  
**C. E. HARRIS' PORTABLE FENCE.**



Economy is wealth. Use the only complete and perfect Portable Attached Fence on the market. No post holes to dig. No heaving by frost. No repairing every spring. Can be opened and used as a gate anywhere. Cheap, efficient and gives every satisfaction for general use, gardens, stacks, yards and fields. The easiest and safest fence to operate that has ever been introduced. Will pay for itself in two seasons. A few good live agents wanted. Full instructions with every Right sold. **C. E. HARRIS, Brandon, Man., Patentee and Proprietor. 314-1-y-0**

## GEORGE WHITE & SONS,



Satisfy Yourself as to this Engine's Efficiency before purchasing. 330-a-o

**THE GARDEN OF MANITOBA.**  
I am making a specialty of selling large Grain Farms at prices from \$3.00 to \$20.00 per acre. District: Carman, Roland and Miami, rising towns attracting great attention. Lots of wood, water and good railway competition in districts rapidly settling. Easy terms and special bargains for cash. Speculators' land sold on commission. Correspondence solicited. **D. HONEYWELL, box 32, Carman, Man. 34-1-y-om**

**FARMS FOR SALE**  
A new "Farm Advertiser" sent free, giving full particulars of many grain, stock and fruit farms in twenty counties, and showing photographs of farms and farm buildings. Many bargains. Address: **J. J. DAILY, Guelph, Ont. 322-1-f-o**

## ROAD CARTS

**\$16**

We offer for only \$16 cash one of the best Road Carts in Canada. The tires and axles are solid steel. The wheels are A 1, and so also is all the woodwork. They are painted in a first-class workmanlike manner, and are ready to hitch to. There is no horse motion and no side motion to these carts. Every cart we send out is a balanced cart. Our terms are cash with the order, and we put these carts free on board the cars at Hamilton, Ont. If you are a cash buyer you ought to have our price list. It contains prices of harness, buggies, scales, seeds, churns, creamers, butter workers, square butter prints, fence wire, binding twine, guns, farmers' tools of all kinds, etc. We want you to send us your name and post office address, and we will be pleased to mail you one of these free illustrated forty-page price lists.



Enclose us only \$4 and we will ship you a Washing Machine similar to the illustration, and for \$3 more we will include the very best Royal Canadian Wringer.

**STANLEY MILLS & CO'Y,**

WHOLESALE MERCHANTS,  
HAMILTON, 329-a-om ONTARIO.

## Best White Oat

IN THE WORLD.

JOHN SHARPE & SON'S  
**ROYAL DONCASTER**

This magnificent White Oat was introduced by Messrs. John Sharpe & Son in 1892, and has given the greatest satisfaction at home and abroad. It surpasses all others for earliness, while its productiveness may be realized from the fact that on several farms last season it yielded 12 to 14 quarters (96 to 112 bushels) per acre. The straw is frequently 6 feet to 6 feet 4 inches in height; of splendid quality; large, close panicle, completely clothed with grain of the finest quality, and very hardy. It has a wonderfully thin skin, and is consequently much appreciated by breeders of pure-bred stock.

From Wm. Saunders, Department of Agriculture, Ottawa (to whom we shipped a quantity last season) — "I find Royal Doncaster Oat is much thinner in the skin than any of the others we have been growing. From its appearance and character it will be a valuable addition to the varieties we have now in this country."

PRICE, 8s. PER BUSHEL, FREE AT LONDON OR LIVERPOOL.

### FARM CATALOGUES ON APPLICATION

Apply to  
**JOHN SHARPE & SON,**  
Bardney,  
Or  
**Mr. J. H. MILLARD,**  
Manager Town Hall Chambers,  
READING, ENGLAND.  
327-1-d-om

### WANDERER : CYCLES

the wheels for  
Canadians.  
Light, Strong, un-  
breakable. Un-  
excelled for easy-  
running qualities.  
Manufactured by  
the Wanderer  
Cycle Company,  
22 and 24 Lombard St., Toronto. Send for Cata-  
logue. 328-1-om



## MANITOBA FARMS.

### TWO CHOICE FARMS FOR SALE.

320 Acres of the very best land, with house and other improvements, 4 1/2 miles from Summerberry, on the main line of the C. P. R. Also 120 Acres about one mile and a-half from Silver Plains Station, on the N. P. R., about 30 miles from Winnipeg.

Apply to  
**JOHN WELD,**  
London, Ont.

## Allan Line

ROYAL MAIL STEAMSHIPS

THE QUICKEST ROUTE TO THE OLD COUNTRY. The name of this line is a guarantee of safety, speed and comfort. Every steamer of this popular company is of the highest class, and every passenger advertises the line.

### RATES OF PASSAGE—Montreal and Quebec Mail Service—Cabin, to Londonderry or Liverpool:

By SS. Parisian. \$60, \$70 and \$90 Single. \$110, \$130 and \$150 Return. Sing. Ret. \$125 for three persons (Rooms) \$100 \$125 Extra Class Cabins for two persons (Rooms) \$100 \$125

By SS. Sardinian or Circassian. \$50, \$60 and \$80 Single. \$80, \$100 and \$115 Return.

By SS. Mongolian or Numidian. Cabin \$45 and \$50 Single. \$85 and \$100 Return. (According to accommodation.) Children 2 to 12 years, half fare; under 2 years, free. Second Cabin, \$30. Return, \$60. Steerage, 20. " 40.

For full information as to rates of passage, etc., apply to  
**H. BOWELLER, Toronto.**  
Or  
**ROBT. KERR, Winnipeg.**  
H. & A. ALLAN, Montreal.

Graduated Prices. Pure Spring Water.

## Leland House

W. D. DOUGLAS & Co., Proprietors.

The popular hotel of the Northwest. Corner City Hall Square, Main and Albert Sts. City Hall Square, WINNIPEG, MAN. Extensive repairs are being made. 315-1-y-om

### The High Speed Family Knitter

Will knit a stocking heel and toe in ten minutes. Will knit everything required in the household from homespun or factory. Coarse or fine yarns. The most practical knitter on the market. A child can operate it. Strong, Durable, Simple, Rapid. Satisfaction guaranteed or no pay. Agents wanted. For particulars and sample work, address,  
**Cardon & Gearhart, Dundas, Ont., Canada.**  
Please mention name of paper. 321-1-y-om

### NEW GREAT FODDER PLANT,

### IMPROVED LATHYRUS OR FLAT PEA.

Price of seed reduced to 10s. 6d. a pound. Cash with order. Twelve pounds sow one acre. Land for May sowing should be prepared as if for lucerne cultivation.  
**F. E. Clotten,**  
316-1-y-om 258 High Holborn, London, Eng.

## KARN PIANOS.

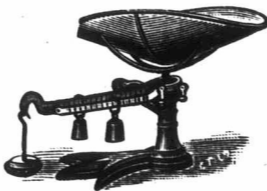


Warranted for 7 Years. Strictly First-Class. UNEQUALLED IN TONE, TOUCH, WORKMANSHIP AND DURABILITY. USED IN TORONTO CONSERVATORY OF MUSIC. CANNOT BE EXCELLED. SUPERIOR TO ALL OTHER CANADIAN PIANOS.

### KARN ORGAN

Still the Favorite. Send for Catalogues and Prices.  
**D. W. KARN & CO.,**  
MANUFACTURERS OF PIANOS AND ORGANS,  
321-y-om WOODSTOCK, ONT.

## SCALES



SPECIAL PRICES THIS MONTH!  
STOCK OR HAY SCALES  
PLATFORM SCALES.

**C. Wilson & Son,**  
119 Esplanade St., TORONTO, ONT.  
318-1f-o

## OLD STAMPS WANTED

All kinds of Canadian, Nova Scotia, New Brunswick, Prince Edward Island, British Columbia, Newfoundland and Un- age stamps 1869 are val- we desire to prompt cash. cent to \$10.00 are more ac- left on original Do not cut up your old stamps for a lot of stamps obtained in this manner. It will pay you. Send all you can find to us on approval, and we will remit highest price by return of mail. Com- and we will remit highest price by return of mail. Com- and we will remit highest price by return of mail. Com- and we will remit highest price by return of mail. Com-



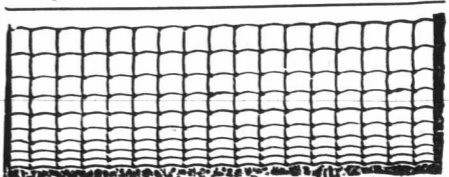
**L. M. STAEBLER,**  
185 1/2 Dundas Street, - - LONDON, CANADA.

## FREE

Information will be sent to those desirous of becoming acquainted with the advantages to be gained by locating on

## FARMS

In the neighborhood of Hamiota and Rapid City. A number of improved and unimproved farms for sale, and lots in the rising town of Hamiota. 318-1-y-om **MALCOLM TURRIFF, Rapid City.**



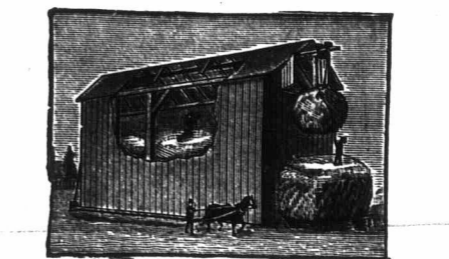
### GOOD HORSE SENSE

Teacheth that a smooth wire fence, with cross wires several feet apart, suits the animals. The festive pig grunteth his approval as he squeezeth through. Old Brindle croppeth the grass from the other side, and declareth that cross-ties every foot like that Page would be an outrage on the animal kingdom.

**PAGE WIRE FENCE CO. OF ONTARIO, LTD.,**  
WALKERVILLE, ONT. 325-y-om

### 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.  
331-c-om

### GRATEFUL-COMFORTING.

## Epps's Cocoa

BREAKFAST.

"By a thorough knowledge of the natural laws which govern the operations of digestion and nutrition, and by a careful application of the fine properties of well-selected Cocoa, Mr. Epps has provided our breakfast tables with a delicately flavored beverage which may save us many heavy doctors' bills. It is by the judicious use of such articles of diet that a constitution may be gradually built up until strong enough to resist every tendency to disease. Hundreds of subtle maladies are floating around us ready to attack wherever there is a weak point. We may escape many a fatal shaft by keeping ourselves well fortified with pure blood and a properly nourished frame."—Civil Service Gazette. Made simply with boiling water or milk. Sold only in packets by Grocers, labelled thus: **JAMES EPPS & CO.,** Homeopathic Chemists, 331-y London, England.

## 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,**  
Cor. Yonge and Colborne Sts., Toronto, Ont.  
307-1-3y-om

## Wanted

Every owner of a horse or cow wants to keep his animal in good health while in the stable on dry fodder. DICK'S BLOOD PURIFIER is now recognized as the best Condition Powder, it gives a good appetite and strengthens the digestion so that all the food is assimilated and forms flesh, thus saving more than it costs. It regulates the Bowels and Kidneys and turns a rough coat into a smooth and glossy one.

Sound Horses are always in demand and at this season when they are so liable to slips and strains DICK'S BLISTER will be found a stable necessity; it will remove a curb, spavin, splint or thoroughpin or any swelling. Dick's Liniment cures a strain or lameness and removes inflammation from cuts and bruises. For Sale by all Druggists. Dick's Blood Purifier 50c. Dick's Blister 50c. Dick's Liniment 25c. Dick's Ointment 25c.

## Fat Cattle

Send a postal card for full particulars, & a book of valuable household and farm recipes will be sent free.  
**DICK & CO.,** P. O. Box 482, MONTREAL.  
323-1-y-om

## ALEX. STEWART, MINNEDOSA, MANITOBA.

Agent for sale of C.P.R. and Canada Northwest Land Company's lands, and of thousands of acres of other lands in the neighborhood of above town and along the little Saskatchewan River, where there is abundance of hay and first-class water. No better part for mixed farming. Improved lands among the above. Enquiries promptly answered, and any information required will be cheerfully given.  
318-1-y-om

## 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 Blenches from Horses and Cattle. SUPERSEDES ALL CAUTERY OR FIRING. Impossible to produce scar 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., Cleveland O.

## HAZELTON FRUIT & POULTRY FARM

**PLYMOUTH ROCKS**  
Unsurpassed in America.  
Eggs, \$2.00; guaranteed.  
Elegant Illustrated Catalogue for '93 gives all particulars and information. Sent free.  
**C. W. Eckardt, Ridgeville, Ont.**  
U. S. BRANCH - Brookside Poultry Farm, Columbus, N. J. 327-y-om