

418.

Library of Parliament  
as 92

# THE FARMER'S ADVOCATE

AND HOME MAGAZINE

PERSEVERE AND SUCCEED  
FOUNDED 1846

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

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875.

VOL. XXIX.

LONDON, ONT., AND WINNIPEG, MAN., OCTOBER 15, 1894.

No. 368.



"TOUCHSTONE," A FAMOUS ENGLISH THOROUGHBRED HORSE,  
OWNED BY THE MARQUIS OF WESTMINSTER.

## EDITORIAL.

Mr. L. G. Jarvis has been appointed in charge of the new poultry department at the Ontario Agricultural College.

Secretary J. W. Wheaton, of the Western Ontario Dairymen's Association, announces that the annual convention will be held at Stratford on January 15th, 16th and 17th.

Joseph E. Stubbs, LL. D., President of the State University of Nevada, has been made also Director of the Nevada Agricultural Experiment Station, vice Stephen A. Jones, resigned.

Major H. E. Alvord has accepted the presidency of the Oklahoma Agricultural and Mechanical College, Stillwater, Oklahoma. He has also been offered the presidency of his Alma Mater, Norwich University, Vermont.

Mr. E. G. Lodeman, instructor in horticulture at Cornell University, has sailed for Europe, to study the diseases of grapes in France and Italy, and the methods of treating these diseases there, by spraying and otherwise. He will spend the summer among the European vineyards.

Prof. Collier, in Geneva (N. Y.) Experiment Station report:—"In no other way can the corn crop be so economically harvested, and both grain and stalks be so well prepared, almost regardless of the vicissitudes of weather, as in placing it, when at its maximum food value, promptly in silo, where, until consumed, it requires no further care and expense."

The Ontario Good Roads Association, of which Mr. Andrew Pattullo, of Woodstock, is President, are arranging to hold the annual convention in Toronto some time in February next. Through the Provincial Department of Agriculture, 20,000 bulletins were distributed during the past season. The work of educating the public on the subject of improved highways will be energetically pushed during the coming season.

Do not feed the cows, that are giving milk, straw and allow idle horses to eat all the hay. It is also poor economy to feed young cattle and horses hay at the beginning of winter and have to feed dry straw during the warm spring months. Fresh straw is relished in the early winter, while nothing but shear hunger will induce stock to eat it in the spring season. When one has a supply of both clover and timothy hay, the former will do much better service to all kinds of stock in the spring months.

A plow that will not scour is often the cause of many bad thoughts, and sometimes bad words. This can easily be avoided, if the mold-board is a good one and properly taken care of. A plow should never be left in the furrow over night, as when the team is stopped, but hauled back, rubbed clean with a wisp of grass, and turned mold-board down, so that rain or dew cannot lodge upon it. As soon as ploughing is over, it should be placed under cover, and all the bright parts given a coating of grease or oil, to prevent rusting, when it will remain bright and ready for work for an indefinite time. All repairs should be made before forgotten, thus saving time when the implement is needed.

By this time all the food for the coming winter is housed or put in safe keeping, except, possibly, some of the roots, which will be in by the end of this month. When this is all done, a farmer generally feels satisfied that his stock will fare well till grass comes next spring. That will be quite right in many cases, but there is sometimes danger of a shortage, caused, perhaps, by waste in feeding, or the waste may come from cold and draughty stabling, which will demand a more liberal supply of food to keep the stock from failing. There is an easy and practicable way out of this difficulty. Tanned felting or building paper can be bought very cheaply, and the amount of tacks and lath to fasten it to a wall will not cost much. Two men, in two rainy days, can line up a large building. The effect will far exceed your expectations. Some old stables get a supply of sawdust between the siding and lining; but this is a troublesome method, and has the effect of harboring mice and rats. Tar paper will last for years, and its tarry odor is wholesome. The writer recommends it from his own experience with an old clap-board stable five years ago.

## Our Illustration.

We take pleasure in bringing before the attention of our readers, as a first page illustration in this issue, an excellent portrait of the famous old-time English Thoroughbred horse, "Touchstone," bred by the Marquis of Westminster, in 1831. He was a brown horse by Camel, out of Banter by Master Henry, her dam Boadicia by Alexander, out of Brunette by Amaranthus—Mayfly, by Match'em—Ancaster Starling. Not only was he a handsome horse of typical conformation, very "breedy" in appearance, but a race-horse as well. The records of his day give the following list of his winnings on the turf for five years, the Cups and Plates being given by their value in specie:—In 1833, £50; in 1834, £2,675; in 1835, £1,200; in 1836, £1,040; in 1837, £450. Total, £5,475.

Between 1838 and 1843 he stood at Moor Park and Eaton, his service fee being 40 guineas per mare.

The following were some of the principal winners got by Touchstone:—Auckland, Ameer, Audry, Blue Bonnet (winner of the St. Ledger), Cotherstone (winner of the Derby), Celia, Dil-bar, Fanny Eden, Gaiety, Jack, Lady Adela, Orlando, Phryne, and Rosalind.

His stock first came out in 1841, as two-year-olds, when they won amongst them, in public money, £300; in 1842, £9,530, and in 1843, £20,454.

Our portrait is reproduced from an old steel engraving.

## Wheat as a Stock Food.

In another column we give space to a letter from a reader, "F. J. S.," on the above topic. There has never been any doubt as to the value of wheat as animal food; but not until within the last two years would the price of that cereal induce even the consideration of putting the feeding of it into practice. There have always been, however, here and there an exhibitor of pure-bred stock desirous of obtaining the greatest possible growth at a given age who never thought of leaving wheat out of the ration. Considerable quantities of wheat have been fed by men whom we deem prudent, to all kinds of stock, but especially to horses and sheep. Such a practice would not have been indulged in for any length of time had it not been paying, but it did pay, and some of the persons who know its value to-day are not lamenting the low price of wheat (from a selfish standpoint). We mention this to show that its value for the purpose of inducing early maturity was recognized long ago by live stock men of high standing.

The present market value of wheat, as compared with other cereals, has caused very many to place that grain on their bill of fare, and, according to the results of experiments conducted at almost every experiment station on the continent, and also by private individuals, confirms the old idea that wheat, as a stock food, has a value more than its market price at the present time. Corn is and has been the great pork and beef producing food of the West, and as far east as it could be obtained at a reasonable figure; but while corn will produce about fourteen pounds of pork for one bushel fed, wheat has shown its ability to increase a growing pig's carcass about seventeen pounds for the same quantity fed. For mature stock in the process of finishing for the block, corn is said to make a better showing, but, where there is a demand for bone and muscle as well as fat, wheat takes the lead in increasing live weight. The great objection to pure corn feeding is that it increases the fat at a much more rapid ratio, as compared with flesh and frame, than the best interest of development will warrant; hence the proneness of corn-fed animals to disease and sterility. Wheat has no such bad effect, as the very elements necessary to build up muscle, etc., predominate sufficiently to cause the most vigorous development. The following table shows the digestive component in 100 pounds of the grains with which Canadian and United States feeders are most familiar, with their nutritive ratio:—

NAME.	Protein			Nutritive
	Lbs.	Lbs.	Lbs.	
Wheat.....	9.3	55.8	1.8	136.1
Corn.....	7.1	62.7	1.2	130.1
Oats.....	9.1	44.7	1.1	133.9
Peas.....	18.	36.	9.	133.2
Barley.....	8.	58.9	1.7	137.9
Corn Ensilage.....	1.0	10.19	.51	111.4

According to numerous experiments, a ration with a nutritive ratio of about 1.7 gives the best results in dairying; therefore, dairy stock feeding on ensilage can have as a grain ration a mixture of wheat and oats to good advantage, as the nutritive ratio will then be about perfect.

In a carefully prepared bulletin on "Wheat as a food for growing and fattening animals," by the U. S. Department of Agriculture, the following statement is given regarding its analysis:—

"Wheat contains practically the same amount of protein or muscle-forming element as oats, and both wheat and oats contain 30 per cent. more protein than corn. On the other hand, wheat only has about one-half as much fatty matter as corn or oats. In carbo-hydrates the position is about half-way between corn and oats. Protein—that is, the albuminoid constituents of grain—goes to build up the albuminoid tissue of the animal body, of which the muscles are the most prominent part; but it may also be changed into fat. The fat in the animal body comes, therefore, both from the fat and protein of the food which is eaten. The carbo-hydrates sustain the heat of the body, and must be present in sufficient quantity, or the more valuable fat which has already been assimilated will be used for this purpose. Young growing animals require more protein than older ones, and also more than fattening animals, in order to supply material for building up the muscles, tendons and other albuminoid structures."

It is the tendency of the age to demand pork and beef considerably before the mature stage has been reached; therefore, the wisdom of using wheat in the production of pork and beef. In the grain ration for milk cows, wheat has been found to form a valuable adjunct, as the composition of the valuable part of milk is largely fat and albuminoid in its nature.

While corn is receiving our attention as compared with wheat, we do not wish to leave our Ontario coarse grains out of consideration. Barley, at 35 cents and less, can well be fed in addition to other grain, but the present price of 40 odd cents per bushel, puts it out of reach as compared with wheat at present quotations. In certain cases, peas, too, could well be sold to buy wheat for feeding at the present market values, though the time and labor involved would need to be carefully reckoned. Oats have always a place on every stock farm, but with the present price of wheat, a combination of the two should be used in preference to either of them alone.

For horse feeding, wheat has a high value, as has been found by the experience of many in the last six months. Some claim to have had good results from feeding it whole and dry, while others advise boiling or soaking it, to get all there is in it. There is one thing certain, that when the excrement shows perfect grains, the mill-stones or a few hours in water would greatly improve its condition for feeding. We notice "F. J. S.," in his article on "75 cents for wheat," advocates grinding it fine for horses. While that may be done with advantage when fed mixed with moistened cut feed, or boiled or pulped roots, we think it would be a much better plan to have it rolled along with oats or alone, as in such a case it may be fed to good advantage with any other food, and if fed alone no evil result could follow, except given in too large quantities. When finely ground, horses object to its sticky nature, as it forms a pasty mess in the mouth, and is also inhaled, causing the animal to blow and cough a great deal of it out of the manger, and over everyone who comes near; while rolled wheat is relished by all stock, and even should some of it pass the mouth unchewed, it is in good form to be acted upon by the juices of the stomach and intestines to be perfectly digested.

For hog feeding, grinding or rolling seems to be very satisfactory to those who have given them a trial. To those who prefer feeding grain dry, we would say, get it rolled, as then it will be relished, and the waste caused by blowing it about will be very little. Our preference is for a few hours' soaking.

For cattle feeding, very fine grinding is not so advantageous. Our best feeders seldom feed one sort of grain alone, or without being mixed with coarse fodder. There is a great deal in furnishing animals with a palatable ration, and this is most readily secured with a mixture. For slopping milch cows, finely ground wheat gives good satisfaction. To its use with ensilage we have already referred.

For sheep feeding, wheat should be coarsely ground or rolled, and mixed with whole oats. A Western sheep raiser who recently called on us, stated that his plan was to allow his fattening lambs or sheep to help themselves to whole wheat or wheat screenings, from a trough arranged to just allow a very slow stream to fall before the sheep as they partook of it. This gentleman is perfectly satisfied with his plan. Another instance is given by a Shropshire breeder, of our own Province, whose lamb discovered a leak from the granary, where he made regular quiet visits, and ate the slow stream of wheat as it fell. The result was one of the most thrifty and rapid-growing lambs he ever owned.

There are precautions to be observed when one is commencing to feed wheat. It is a well-known fact that when full-fed horses are changed from old to new oats, they are liable to attacks of indigestion, colic, and founder. Such a radical change, as from oats to wheat, requires more caution than a casual observer would imagine. For this reason, wheat should at first be fed in small quantities. A

Wheat as a  
is," by the  
following

amount of  
s, and both  
ore protein  
y has about  
or oats. In  
alf-way be-  
t, the albu-  
uild up the  
which the  
but it may  
the animal  
at and pro-  
o-hydrates  
be present  
aluable fat  
be used for  
quire more  
han fatten-  
for building  
albuminoid

nd pork and  
ge has been  
ng wheat in  
the grain  
nd to form a  
the valuable  
inoid in its

ion as com-  
o leave our  
on. Barley,  
addition to  
0 odd cents  
mpared with  
ertain cases,  
eat for feed-  
gh the time  
be carefully  
every stock  
heat, a com-  
eference to

gh value, as  
many in the  
e had good  
while others  
here is in it.  
he excrement

a few hours  
condition for  
ng it fine for  
h advantage  
eed, or boiled  
much better  
or alone, as  
d advantage  
o evil result  
ge quantities.  
to its sticky  
e mouth, and  
to blow and  
nger, and over  
lled wheat is  
d some of it  
good form to  
mach and in-

ng seems to  
e given them  
rain dry,  
n it will be  
wing it about  
is for a few

ing is not so  
lom feed one  
y mixed with  
in furnishing  
this is most  
For slopping  
es good satis-  
have already

d be coarsely  
hole oats. A  
called on us,  
his fattening  
whole wheat  
ranged to just  
e the sheep as  
n is perfectly  
fance is given  
own Province,  
n the granary,  
nd at the slow  
lt was one of  
lambs he ever

rved when one  
a well-known  
changed from  
ttacks of indi-  
radical change,  
e caution than  
or this reason,  
quantities. A

good way is to commence by adding a little wheat to the oat ration, which should be decreased accordingly. The ratio of wheat to oats can be gradually raised until the desired proportions are arrived at, which should take from two to three weeks. The same sort of precaution should be taken with all other kinds of stock, but especially with sheep.

While we bring before the public the above facts regarding the value of wheat as a stock food, we do not claim that wheat should have a large place in the acreage of our Ontario farms simply for stock feeding purposes, but while we have access to 50 cent wheat we are foolish to omit it from the ration. While wheat growing has many good features which have been referred to by "F. J. S." there are prospects of a considerable reduction in the acreage sown on this continent. If, through the adoption of improved methods, the average yield of what is sown be increased (as it can be), this reduction may resolve itself into a boon. While the future must be looked to carefully, the present is what concerns our readers most seriously. Large quantities of wheat are being fed now, but with Mr. Van Horne's famous "\$2 a bushel for wheat" prophecy in mind, it is idle to speculate regarding the effects of wheat feeding upon the world's market prices.

We will be pleased to receive from our readers the results accurately stated of their experience in feeding wheat.

Prince Edward Island Letter.

BY WALTER SIMPSON.

On account of the dryness of the latter part of the season, cereal crops, with the exception of wheat, have not been good. Up to the middle of June the rainfall was abundant, and consequently we had a good crop of hay and good pasturage. Oats promised well till about the first of July, when the aphid struck them all at once, and reduced the yield in some sections to less than half the usual average. Root crops promised well, especially turnips, which, taken with our excellent hay crop, will result in the feeding of a large number of beef cattle. Potatoes in some sections were killed with frost early in September. But along the shores by the salt water, frost did no damage, and the yield will be good.

STOCK

has done well. The cattle got a good start on the pastures in June, and during the drouth later on pastures were very generally supplemented by green feed, corn and vetches. The horn-fly has been against them. They have appeared here this summer for the first time.

DAIRYING

has been a success this season. We now have sixteen co-operative companies engaged in dairying, two of which are butter factories. The others are manufacturing the best quality of cheese. Some of our factories are paying for milk according to its value as ascertained by the Babcock test, and the practice is giving good satisfaction. All the other factories will soon follow suit. Several of our cheese factories will be run as butter factories this winter. In some places the patrons of two factories will unite for this purpose, in order to make available a larger supply of milk, and thereby cheapen the production of butter. Dairying is, we believe, destined to be the leading industry of this Island in the near future. Our people are getting enthusiastic over it. The industry on the co-operative basis was started here some three years ago, and has already grown to its present proportions, through the indefatigable exertions of Canada's popular Dairy Commissioner, J. W. Robertson, and his able assistant, T. J. Dillon, Dairy Supt. for this Island. Next year will witness the building and equipment of a large number of new factories. The patrons of the factories that I conversed with at our Exhibition are more than pleased with the result of this season's work.

EXHIBITIONS.

The Provincial Exhibition was held during the last week of September, and lasted four days. Judged by the number and quality of exhibits, it was an improvement on previous ones. The attendance was slim on the opening and closing days; but the other two days, on which there was horse-racing, though the admission fee was double, the grounds were crowded, which, in my opinion, goes to show that racing occupies too prominent a place at all our exhibitions, and hinders them from being the educators they ought to be, and were intended to be, by drawing off the attention of visitors from exhibits that are of infinitely more importance. This is a crying evil, and ought to be remedied. We would like the old reliable FARMER'S ADVOCATE help along with the reform.

In horses, good classes were shown in all the leading breeds, except the Thoroughbred and Coaching horses, which were conspicuous by their absence, though a prize of \$100 was offered for a Thoroughbred of a certain size and weight. There are no horses of the two latter classes in the country. The Standard-bred has taken their places, but fails to fill it satisfactorily. Good specimens of Clydesdales, Shires, Percherons and Standard-bred trotters, both imported and home bred, were on the ground. The mongrel horse is at a heavy discount just now, and is fast disappearing from our shows.

A glance at the cattle stalls shows the trend of things toward dairying. The massive Shorthorns of former years have given place, to a great extent, to the Ayrshire, Jersey, Guernsey and Holstein and their grades. Excellent herds of all the leading breeds were shown. The first prize herd of Ayrshires, owned by Wm. Millar, of Marshfield, was headed by the excellent young bull Pure Gold 6244: sired by Golden Guinea 4054, and was bred by R. Robertson, of Howick, Que. This bull took second prize in his class at the World's Fair, which makes him somewhat of a celebrity here. He is an animal of excellent form and finish, as is also the cow Milk Maid 2nd, bred by James McCormack & Son, Rockton, Ont., and the heifer Rosie 2004, bred also by McCormack. Mr. Millar has started well, and no doubt will work up. Other Ayrshire breeders show excellent individual specimens.

In Shorthorns, the most notable on the ground was Challenge, bred by J. & W. Watt, Salem, Ontario, and owned by the Government Stock Farm. He is a massive animal, especially heavy in the forequarters. He has not been a success on the Stock Farm, and the Local Government have been severely criticised for importing a ten-year-old bull that had been fed all his life for show purposes. That the criticism was just might be inferred from the fact that when the herd of 30 to 40 cows from the Stock Farm came onto the grounds there was with them 4 or 5 calves, all Ayrshires. Holsteins were present in numbers, but the Ayrshires, Jerseys and their grades, for the dairy, have more admirers. Herefords and Galloways are here in only small numbers, and are not particularly wanted just now.

The show of sheep was large, and comprised flocks of all the principal breeds, except Cheviots and Horned Dorsets.

The show of pigs was ahead of former years, and while all breeds have their admirers, the Large Improved Yorkshires seem to be coming to the front. Tamworths were shown for the first time this year.

The fruit classes were well filled and the quality excellent. The apple crop is good here. The show of grain and roots was excellent. In the wheat exhibit Campbell's White Chaff took a prominent place. It is becoming a very popular variety.

Cheeky and Dishonest.

The FARMER'S ADVOCATE has almost become case-hardened from seeing its pages pilfered and its productions appropriated hohus bolus without any credit being given. We long since ceased to notice a good deal of this petty larceny, in consideration of the good that might follow the further spread, even though very limited in extent, of such information, the circulation of these periodicals being usually small and spasmodic. There has come to our notice this month an instance too glaring and barefaced to be allowed to pass without censure—there are times when patience ceases to be a virtue. We refer to a cut in the St. Louis Journal of Agriculture of October 4th, under which appear the words "Group of Oxford-Down Sheep from the flock of T. B. Evans, Geneva, Ill., breeder and importer." The editorial article referring to the illustration is headed "Pure Oxford-Down Sheep," and claims that the illustration was "from life." Those who have on hand the FARMER'S ADVOCATE of July, 1893, will see the original from which the cut referred to has been reproduced. It is actually a faithful representation of a group of Shropshires, then owned by the Hon. John Dryden, M. P. P., Brooklin, Ontario, consisting of the ram, Prince of Wales, and seven of his get, that won the handsome silver cup offered by the English Shropshire Association, for competition at the Toronto Industrial Exhibition. In order to carry out the deception, a little of the wool was removed from the faces of the sheep in the illustration. Although the utter dishonesty of such an action is itself deserving of exposure, we consider the misrepresentation to the unsophisticated Missourians, by not only appropriating our Shropshire illustration, but labeling it "Oxford-Downs," a still more disreputable procedure on the part of any breeder or editor, and which should not help them in their future dealings with the public.

In a recent issue of Cosmos, M. Laverune makes some interesting statements concerning the use of bread. In early historic time, men were not familiar with the preparation of wheaten flour, which we call bread, and to-day there are whole populations entirely ignorant of its use. In the vast empire of China, for example, containing a quarter of the human race, bread, as we understand the term, is used in one Province only. The bread-eaters are still a minority in the world. No more than five hundred millions of persons habitually consume wheaten bread. Even in Europe, great numbers of the people who eat bread are reduced to use an inferior article made of coarse cereals and pulses, and indifferently prepared.

STOCK.

The Central Canada Fair at Ottawa.

The officers and directors of the Ottawa Fair are enterprising, active, energetic men, who leave nothing undone that is calculated to keep up the interest in the Fair, and to make it pleasant and satisfactory to exhibitors and visitors. They had fine weather, a large attendance, and a good show. In some classes of live stock the competition was greater than in Toronto, especially in Ayrshire cattle, which were the most striking feature of the show. All the classes of cattle were represented by good herds, but in some there was but little competition. The bulk of the stock in most classes, came from the West, but in Dairy stock, the East contributed by far the most of the prize animals and of the competition.

HORSES

were not shown in nearly as large numbers as at Toronto, but several of the Toronto winners were here and repeated their winnings. Messrs. Graham Bros., Claremont; Beith, Bowmanville, and Davies, of Toronto, showed some of the best Clydesdales, and won the bulk of the best prizes. Messrs. Graham won first honors again with Queen's Own, in the section for stallions, four years old and upwards. Mr. Ness, of Howick, won second with his imported Lawrence again, and Messrs. Beith took third with Sir Walter. These are a noble trio and well represent the breed. The sweepstakes prize for best stallion, any age, went to Queen's Own, and that for best mare, to Mr. Robt. Davies' Pride of Thorncliffe.

HACKNEYS

were shown by Messrs. Beith, and Graham Bros. The stylish chestnut stallion, Ottawa, shown by Messrs. Beith, was again placed first, with Graham Bros.' Kilwick Fireaway, second. High-class two-year-old stallions were shown by both firms mentioned, showing that the proper type can be bred and raised here as well as in the Old Country. Graham Bros. were first with three-year-old and two-year-old fillies, and Beith Bros., first and sweepstakes, with brood mare. The class of Canadian-bred Draught horses was well filled with good representatives, mostly shown by local men. In the Carriage class was a notable stallion, named Sunlight, shown by J. J. Anderson, Dominionville, a son of imported Shining Light, and out of a Clear Grit mare. This is a horse of faultless form, fine style and good action, a model carriage horse in every respect, and well entitled to the honors he received, first prize and sweepstakes. He was also successful in winning the diploma for best stallion, with three of his get.

CATTLE.

As before intimated, the Ayrshires were the strongest class at this show. Quebec and Eastern Ontario are becoming noted for dairying, and this may account in some measure for the lively interest taken in dairy cattle in these sections. The breeders of Ayrshires are entitled to much praise for the grand display they have made at the fairs, both in the West and the East. In addition to most of the herds shown at Toronto, there were two or three very strong herds from the East in competition at Ottawa. Notable among these were those of James Drummond & Sons and D. McLachlan, Montreal; Robertson & Ness, Howick, and Jas. Johnston, of Como. A good deal of interest and considerable criticism was brought out on account of the reversing of prizes given at Toronto; but where competition is so keen and so close, and while men differ in their tastes and judgment, it is not to be wondered at that some changes are made from one fair to another. Mr. Drummond was successful in scoring first and second with his cows, Viola 5th and Viola 3rd. The former is a model dairy cow in conformation, being wedge-shaped, large, deep, on short legs, with immense milk veins and a model shaped udder, going well forward and back, with large and well-placed teats. Her stable companion is much the same type, and is every inch a worker, judging from her appearance. In three-year-old cows, Mr. Steacy came to the front with his imp. White Rose of Alpicane, the silver medal heifer at Toronto, and the same exhibitor here scored a great victory in winning the sweepstakes for best female, any age, with his fine two-year-old heifer, May Queen of Craighead, imp. Strange to say, this fine heifer was not placed at Toronto, and here she comes to the top over better things than she met in the West. Mr. Steacy was also successful in winning the herd prize, and he displayed a good deal of courage in putting at the head of his herd his imp. two-year-old bull, which the same judges had placed third in the prize list, although he had the first prize bull, one of his own raising; but Mr. Steacy has faith in his imported bull, which is a good one, and, in his opinion, far superior to the one from the same herd which the judges placed above him. Young herds were a very fine display, and Mr. Robertson's uniform lot were awarded first prize in close competition. Mr. McLaughlan's three-year-old bull, Silver King, won first prize and sweepstakes. Mr. Joseph Yuill, Carleton Place, showed some very fine young things, as also did Messrs. Smith, of Fairfield Plains. The class throughout was one of the best we ever saw together, and is worthy of all commendation.

## HOLSTEINS

were out in strong force here, as they have been at all the leading fairs this year. Among the exhibitors were McDuffie & Butters, Stanstead, Que.; A. G. Rice, Currie's; Fletcher Bros., Oxford Mills, and Gilroy, Glen Buell. There was, perhaps, more than the usual amount of dissatisfaction with the judging in this class, but we have no doubt the judges acted conscientiously. The trouble is in the difficulty of getting men as judges who have had experience with the breed, and it shows the necessity of having expert judges who know the peculiarities of the breed they are called to pass upon. The prizes in the class of aged bulls were reversed from the Toronto awards, Mr. Rice's bull being here placed first, McDuffie & Butters' second, and Mr. Fletcher's third. The same experience came to exhibitors in the section for aged cows, where the sensational cow Eunice, owned by Mr. Rice, and which won first prize and sweepstakes at Toronto, was here shut off the prize list, to the amazement of all the exhibitors and many spectators. If a cow is to be judged by her capacity for work, and the indications of a great machine for converting food into milk, Eunice surely has these qualities in a high degree, and her record of actual work, as well as prize-winning, stands unsurpassed by many cows in America. McDuffie & Butters were fortunate in winning both first and second prizes in this section with imp. Trintje and Evertje, two very useful-looking cows, but the owners claim that their best cow was not placed. Mr. Fletcher got third prize on a very good cow. There was a very strong ring of three-year-old cows, and Mr. Gilroy secured first place with a business cow of rather small size, but with a nicely-balanced and well-shaped udder, with teats about perfectly placed. In the competition for the herd prize, Mr. Rice received at the hands of the judges some compensation for having degraded his dehorned cow, by giving him the first prize in a very keen contest, but they could not well do otherwise with a herd to which they had given three red tickets—first on bull, first on two-year-old heifer and yearling heifer—and the dehorned cow with her previous record made this herd a strong collection. But McDuffie & Butters had in the second prize herd a grand lot of matured cows, which had proved themselves producers and workers, and for uniformity of excellence was very hard to get over. This firm also won the diploma for best female with their fine cow, imp. Trintje.

## GUERNSEYS

were exhibited by Mr. J. N. Greenshields, Danville, Que., and W. H. & C. H. McNish, Lyn, and Isaac Holland, Culloden, who won second prize with his three-year-old bull, May Roseberry. Mr. Greenshields' bull here got back to his proper place, according to Manager Ormsby, who was very much exercised at the indignity practised upon his favorite imp. Adventurer, at Toronto, where he seemed to have been overlooked. This is certainly a very handsome bull, with a rich yellow skin, and every appearance of royal breeding, and was here awarded first prize in his class, and the sweepstakes as best bull, any age. This herd also secured first and second awards for cows, and the herd prize. McNish Bros. scored first for bull calf, for two-year-old heifer, yearling heifer and heifer calf.

## JERSEYS

were represented by only one herd, that of Mr. W. A. Reburn, of St. Anne's, Que., except two animals shown by J. E. Bennett, Carleton Place, who received second prize for his three-year-old bull, Brutus of Acklan, and third prize for yearling heifer, Maud of Acklan. Mr. Reburn showed a strong herd in fine condition. His cattle are large, strong and robust, and are richly bred, deep in Victor Hugo and St. Lambert blood, and many of them very closely in-and-in-bred, yet they have every appearance of having strong constitutions. A remarkable instance of success of close in-breeding, is that of the prize two-year-old heifer, Queen Vic of St. Annes 3rd, which counts in her pedigree no less than twelve crosses of Victor Hugo, and is the result of breeding together full brother and sister for four generations, yet she is large for her age, well developed in every respect, and has every appearance of a strong and vigorous constitution. The first prize cow, Jolie 4th of St. Annes, is a grand specimen of the breed, with good size, deep barrel, neat head and horns, great milk veins, and rich yellow skin. The younger things in the herd were well-grown, and show strong family character and much promise of usefulness. The judges of the beef breeds were Messrs. J. I. Hobson, Mossboro, and Robert Miller, Brougham. The breeds were all represented, but in some classes only one or two exhibitors were in the ring. Yet the quality in all classes was good.

## SHORTHORNS

were shown by W. C. Edwards & Co., of Rockland, and James Rennie, of Wick, whose white yearling bull, Valasco 22nd, won first prize in his class, and is a bull of great substance and fine quality. Mr. Edwards' herd, now under the care of Mr. Joe Barnett, late of the Agricultural College Farm, at Guelph, is made up of a very useful lot of thick-fleshed animals, headed by the imported three-year-old, red, Collynie-bred bull, Knight of St. John, a bull of fine character, with long, level quarters, and full twist, soft hair and good handling qualities. A very useful imported two-year-old bull, also bred

by Mr. Duthie, is Knight of Lancaster, which won first prize in his class. The massive and matronly five-year-old roan cow, Bessie of Rockland, is wearing well, and would hold her own in first-class company. The fine yearling heifer, Lady Fame, bred by Messrs. Watt, sired by Challenge, and shown by Mr. Edwards, at Chicago, last year, where she won second prize as a heifer calf, has gone on well, and is a long, level heifer, of fine quality, and good promise. Mr. Edwards' cattle were not in high condition, not having been prepared for exhibition, but they were in fine shape and looked like going on to better things, which we have no doubt they will.

## HEREFORDS

were represented by the two strong herds which met at Toronto—those of F. A. Fleming, Weston, and H. D. Smith, Compton, Que. The prizes were nearly equally divided, the Toronto awards being reversed in one or two cases. Mr. Fleming's sweepstakes bull, Commodore, and Mr. Smith's first prize cow, Lady Tushingham 3rd, are grand specimens of the breed, and the younger animals in both herds are well up to the standard of first-class. Mr. Fleming captured first and second on aged bulls; second for two-year-old bull; first and second for yearling bull; second for bull calf; for cow, third prize: two-year-old heifer, second prize; yearling heifer, first and third; heifer calf, second and third; herd, first prize; gold medal and diploma for best bull any age. Mr. Smith won first prize for two-year-old bull; bull calf, first; cow, first and second; two-year-old heifer, first; yearling heifer, second; heifer calf, first; herd, second.

## GALLOWAYS

Galloways were shown by Jas. Neilson and C. H. McNish, both of Lyn, Ont., and the prizes were nearly equally divided between them, Mr. Neilson capturing the herd prize.

## POLLED-ANGUS

Dr. Craik, of Montreal, had a walk-over in this class with his fine herd, which met such strong competition at Toronto and gained a large share of the premiums.

## DEVONS

were shown by Messrs. Rudd, of Eden Mills, Ont., and the prizes were distributed much the same as at Toronto.

## GRADE CATTLE

The managers of the Ottawa Fair have set a good example by making two classes for grade cattle—one for beef cattle and the other for dairy grades. This we deem a great improvement, as they are entirely distinct classes of cattle, and cannot be judged together with any degree of satisfaction, either to the judges on the exhibitors. In the class for beefing grades, some grand cows and heifers were shown by James Rennie, of Wick. These animals would stand well in comparison with most of the pure-bred Shorthorns shown at the leading fairs, and are a splendid illustration of the potency of pure-bred bulls in grading up the cattle of the country. J. J. Clarke, Ottawa, also showed some very useful animals in this class. The dairy grades made a very interesting class. They were mainly Ayrshire grades, and some of the cows shown had every appearance of being pure-bred. Mr. Clarke, of Ottawa, showed a cow in this class that was, perhaps, as good a type of a dairy cow as anything in the show of any breed. A three-year-old cow, shown by J. R. Campbell, Vernon, was also a very fine model of a dairy cow.

## SHEEP

The different breeds of sheep were well represented by selections from the well-known flocks of the following breeders:—Cotswolds, S. Coxworth, Claremont; Leicesters, John Kelly, Shakespeare; Lincolns, Gibson & Walker, Ilderton; Shropshires, R. Davies, Toronto, and J. N. Greenshields, Danville, Que.; Oxfords, W. B. Cockburn, Aberfoyle; Dorset Horns, J. A. McGillivray, Uxbridge; Merinos, Smith Bros., Fairfield Plains. It is needless to say that the quality in every class was of a high average, and the only thing required to make the show more interesting was more competition.

## SWINE

There was a large display of hogs, and a good share of competition in nearly all the classes. Mr. J. C. Snell acted as single judge in all classes. Berkshires were shown by George Green, Fairview; S. Coxworth, Claremont, and J. E. Gilroy, Glen Buell. The best prizes were divided between the first-named exhibitors. Mr. Green secured the herd prize. Mr. Coxworth won first prize with his aged boar, Highclere Prince. Both these gentlemen showed splendid specimens of the breed. Yorkshires were shown by Joseph Featherston, M. P.; J. N. Greenshields, Q. C.; McNish Bros., Lyn, and others. There were a number of very fine sows shown. The boars were not as good as the sows. It has been remarked that there is a lack of uniformity of type in this class as shown at the fairs, which it should be the aim of breeders to correct. Judges find it difficult to make awards satisfactorily, to themselves or exhibitors, where there is such diversity of type and style. Mr. Featherston had the Suffolk class to himself, with the exception of one boar. Poland-Chinas were represented by animals of very high merit, from the herds of Messrs. Smith, of Fairfield Plains, and Jones Bros., of Mount Elgin. Some very fine Chester Whites and Tamworths were shown by Wm. Butler & Son, Dereham Centre.

## Chatty Stock Letter from the States.

FROM OUR CHICAGO CORRESPONDENT.

Best corn-fed beef steers, \$6.15; best Montana grassers, \$4.90; best heavy hogs, \$5.50; best light hogs, \$5.25; best sheep, \$3.75, with muttons good enough to export at \$3.25; best lambs, \$1.25. These prices are lower all along the line than two weeks ago, especially on hogs, which declined \$1.25 per 100 lbs., much to the surprise even of the packers, who were exerting every possible influence to break the market. The tendency in the hog market lately has been to narrow the range of prices between good and common stock. Buyers say that with the improvement of the average quality of the hogs they can get satisfactory droves of medium priced hogs without competing so strongly for the few fairly heavy hogs offered.

There is usually a powerful effort made by the packers to lower prices for hogs just before the opening of the winter packing season—now Oct. 1—but this year, when the conditions seemed most against them, they made a more successful raid on prices than for many years, considering the suddenness and extent of the decline. The stocks of provisions were very light, and the home and foreign demand was good, but prices for provisions on the Board of Trade were manipulated, and the price of hogs was forced down in accordance. One of the strongest arguments the packers have used was the depression in cotton values in the South. They claim that this has practically cut off for this year what has been a very large demand for bacon and salt and smoked meats.

Wheat is not the only depressed staple of this country. Cotton is also at hitherto unheard-of low prices. Cash cottons recently sold at \$5.80, the lowest price ever made. The cotton quotation, like the wheat, is about one-half of what used to be considered an average price. However, there is an ever-present law of compensation at work, and the cheap cotton is making cheap feed in the South, and the chances are that farmers who are fixed for taking advantage of it, will make money on converting cotton-seed meal and hulls into beef.

The reports of a large number of Western correspondents on wheat feeding show that farmers, to a large extent, have tested the value of wheat (when ground) as food for all classes of stock, and are using it freely and deriving benefits from its use that are surprising. Many of the correspondents who have made scientific tests state that one bushel of wheat, when ground and properly fed, is equal to one and a-half bushels of corn, and, as this is a year when it will be used to a large extent, it is apt to revolutionize the stock-feeding business.

The number of very young Western pigs being forced on the market is still very large. Correspondents generally report large numbers of young hogs, with small supplies of fat, heavy porkers.

Chicago received 31,334 sheep in one day recently, and 27,000 on another day within a week. The free wool business seems to be turning the heads of sheep owners, and they are scrambling to "clean out."

## Fall Care of Sheep.

It is not uncommon, and especially now that the sheep trade is quiet, to turn the ram among the ewes and trust to luck. In many cases the results of such a course may be all right, but not always. There is a risk of being minus a crop of lambs the following spring. A much better plan is to house the ram each night, so that a feed of grain may be given him, and when turned out in the morning he should be carefully observed by the shepherd for ten or fifteen minutes. This may seem, to a great many, too troublesome, and to such we suggest an easier plan, that will at least prevent a total failure. The ram should in all cases have his breast painted, and for this purpose red ochre mixed with lard answers well. If painted once in three or four days, the served ewes can be detected. As soon as the flock have all been served, a fresh ram should be turned in, having his breast painted blue. It will soon be seen whether the first used ram was to be depended on or not. There are almost always a few ewes in a flock that will not breed from one ram, but will in the case of another. Such ewes will be saved a barren year by the plan outlined. All the ewes that retain the red color, and received no other, will be known to lamb earlier than the others, and in keeping track of pedigrees the sire of every lamb is known. If a third ram is to be used, the color of the paint on his breast may be black or some other dark shade.

When the pasture fails in the autumn, a few acres of rape makes a splendid substitute, but when this is not to be had, a daily grain ration should be given, composed of oats and bran, or oats and wheat, and a small feed of clover hay in the morning. Ewes treated in this manner will go into winter quarters in splendid form to suit their pregnant condition, and, if allowed plenty of outdoor exercise, liberal but plain food, a dry shelter, free from draughts, will bring forth a high percentage of vigorous youngsters.

The matter of parasites is a consideration one cannot afford to ignore. Flocks that have not had a thorough dipping during the spring or summer season will be almost certain to contain in their fleeces a lot of ticks, and in some cases, little lice. There are several well-known preparations, either of which should be used before the cold weather comes on, but even after that time it may better be done than left till spring.

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.

- 1. 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. 2. 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. 3. Advertising Rates - Single insertion, 30 cents per line. Contract rates furnished on application. 4. 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. 5. The Law is, that all subscribers to newspapers are held responsible until all arrears are paid, and their paper ordered to be discontinued. 6. 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. 7. 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. 8. 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. 9. The Date on your Label shows to what time your subscription is paid. 10. Subscribers failing to receive their paper promptly and regularly will confer a favor by reporting the fact at once. 11. 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. 12. Replies to circulars and letters of enquiry sent from this office will not be paid for as provided above. 13. No anonymous communications or enquiries will receive attention. 14. Letters intended for publication should be written on one side of the paper only. 15. 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: - 405-Illustration. 406-Editorial Notes; Our Illustration; Wheat as a Stock Food. 407-Prince Edward Island Letter; Cheeky and Dishonest. STOCK: - 407-The Central Canada Fair at Ottawa. 408-Chatty Stock Letter from the States; Fall Care of Sheep. 409-Contributors and Enquirers-A Request; The Western Fair. 410-Annual Sale at the O. A. C. 411-Feeding for Fat and Lean Pork; Easter Veals; Our Scottish Letter. 412-Feeding Young Pigs; A Parting Shot. FARM: - 412-75c. for Wheat; Wheat for Hogs and Steers; The Coding Moth. DAIRY: - 413-The Sour Whey Question; The Toronto Cheese Awards. 414-Some Suggestions for Winter Creameries. QUESTIONS AND ANSWERS: - 414-Veterinary; Miscellaneous. APIARY: - 414-Preparing for Winter. POULTRY: - 415-Poultry on the Farm; Water Trough for Poultry-house; Something About Ducks; Eggs in a Tree. VETERINARY: - 416-Domestic Veterinary Treatment of the Animals of the Farm. MISCELLANEOUS: - 416 and 417-Western Fair Prize List. 418-Ottawa Exhibition Prize List; Does Mulching Retard the Maturity of Fruits? FAMILY CIRCLE: - 419. MINNIE MAY: - 420. QUIET HOUR: - 421. STOCK GOSSIP: - 422, 423, 424, 425. NOTICES: - 423 and 424. ADVERTISEMENTS: - 422 to 428.

Contributors and Enquirers - A Request.

Persons sending enquiries for our "QUESTIONS AND ANSWERS DEPARTMENT," or letters or articles for publication, will oblige us by always giving their Post Office, and Province or State, together with name plainly written, in order that no mistakes may arise. In several letters we have lately received this has been overlooked.

Perhaps some people think I am a fertilizer crank. I have written much on the subject. How could I do otherwise when good superphosphates have doubled my potato yield, as this year; more than doubled my wheat yield, as this year and often before. - W. I. Chamberlain.

The Western Fair.

The result of this year's Western Fair clearly shows that London continues to hold, as it undoubtedly will in the future, an enviable position as an agricultural exhibition centre, notably for live stock, poultry, dairy, and other farm products, agricultural machinery, etc. Like the Toronto Industrial, it seems to have weathered the "dull times" remarkably well, gate receipts being very little under 1893. We were pleased to observe that some reforms advised a year ago in the ADVOCATE, regarding ground management, were carried out, the "side-show element" being less conspicuous. We trust the directorate will see their way clear to further improvements in the arrangement of live stock buildings and grounds, and in providing a suitable seated pavilion, so that the judging of cattle, etc., may be viewed with something like the comfort enjoyed by the spectators of the speed and attraction ring. This would be a step towards making the Fair more of an educator along live stock lines, and be appreciated as a great boon.

Our review of the animals shown at London is of necessity brief. Most of those exhibited were shown at Toronto, and as we reported very fully each department at the last named Exhibition, it would be wearisome to our readers to reiterate what we said in our last issue. We therefore have only mentioned at length in this report such exhibits as were not shown in Toronto.

HORSES.

CLYDESDALES.

The Clyde exhibit was the lightest for a long time at London, there being too few in most of the sections to use up the prizes offered. In the aged imported section were just three forward. E. W. & G. Charlton's Wigton Lad, the first prize and sweepstakes winner, is a well-known show horse. He is a solid, well-finished fellow, that carries himself at the end of ten years like one not much past the colt stage. R. Shaw-Wood's Shamrock came second. He, too, has a splendid body, but failed to show the springy action of Wigton Lad. Mr. John Henderson, Milburn, came in third, with a useful horse, of good quality and action, but considered a little too rangy to beat the aforementioned. The younger stallion sections gave the judge a light task, as there was no competition in any of them, there being but one colt for each section. First prize, three-year-old, Alex. Holmes, Beachville; two-year-old, S. J. Prouse, Ingersoll; yearling, John Oliver, Duncrief. They were all good colts that would have kept their places in good company. In mare sections, Geo. Duffield received first for brood mare, and also for two-year-old filly. They are of that smooth, solid type, with good quality of limbs, which seldom, if ever, go wrong. Messrs. Charlton's second prize brood mare, first prize three-year-old filly, and foal of 1891, are a nice Clyde lot of horses. S. J. Prouse's third prize brood mare, first prize yearling mare, and second and third prize foals, are a creditable lot, safe enough to hold on to till the lively demand for heavy horses, which is sure to come before long, will make them a valuable property.

In the Canadian-bred Draught class, the entries were few. In mature stallions, three were shown. Vance & Eby's Golden Crown would have done credit to any imported horse ring, as he is a monster of splendid conformation. His body of 2,200 lbs. is without the sign of roughness, and his short, strong back, deep, sloping shoulder, giving him a splendid lengthy underline, is well carried upon a set of good wearing legs and feet. The remaining two possess good quality of legs, but were not in that heavy show condition to crowd Golden Crown for the first place. They were shown by Geo. Taylor, Kippen, and George Carrie, Ballymote. In three-year-olds, Dr. Harold's Samson was shown alone; he is a worthy son of Ringleader, having plenty of size and quality, which should give him confidence in entering any draught stallion showing. G. Taylor's yearling stallion had no competition; he, too, possesses nice quality and action. Mr. Taylor also showed a nice lot of mares, for which he obtained second on brood mare, first and sweepstakes on three-year-old filly, second on foal of 1891. Geo. Spearin, St. Mary's, had out the first prize brood mare and foal; they are both meritorious Clydes. The foal is almost a model. Hyder & Parkin, of Oxford Centre, had out a nice exhibit of Clydes and general purpose stock, for which they received a good share of awards, which the prize list shows. J. S. Robinson, of St. Mary's, exhibited a pair of fillies two and three years old, which will make a team hard to beat when mature. They were not in more than nice growing condition, but even then carried broad, useful, Clyde bodies, on legs of hard, flat, well-feathered type.

ROADSTERS.

In the class for Roadsters the entry was, as usual, large, but not a few were little better than weeds. There were, however, some good ones. In the four-year-old and over stallion section were seven contestants. The first and sweepstakes prizes were awarded to a London horse, Five Points, owned by T. D. Hodgins. He is a good-looking bay with lots of strength, and can do a mile in 2.18. John McIntyre's second prize horse is quite speedy, and looks like a safe horse to breed roadsters from. H. Cargill & Son's General Jackson, that won the red ticket in Toronto, received the third award here. It was evident that the General had not been handled much in harness this summer, which fact caused him to step down from his Toronto standing, where he was shown on the line. His graceful

appearance was as outstanding at the Western as at the Industrial. Cargill & Son's Toletto, the second winner in Standard-bred three-year-olds at Toronto, was alone in the Roadster three-year-old stallion section here. The younger stallion sections contained a small number of promising colts. The filly exhibit indicated a nice lot of future mares. There was much unevenness in most of the sections, but quality was outstanding in enough to use up the awards offered. In matched pairs, perhaps the less said the better; however, they were not all weeds, as H. Cargill & Son's first prize Toronto winners were among them, and took an easy first. A fairly well matched pair of grays, with good action, received the second award. In the single roadsters, ten were shown, about four of which were tolerably good ones. Several in the section were pacers, which did not assist them in getting a place.

CARRIAGE HORSES.

In the aged stallion class, like at the Industrial, a German Coach horse, Graf. Bremer, the property of Jas. McCartney, Thamesford, carried off the first and sweepstakes awards. He is a handsome horse of great substance, without coarseness. Docility and intelligence are outstanding features. His splendid trappy action should make him a very safe horse to use, to get the popular horse of the day. Improved Mambrino Hatcher, shown by D. Carroll, Baling, the second prize horse, is a good, useful sort of animal; he is a beautiful black, weighs about 1,400 lbs., and stands 16 1/2 hands high. He has stylish and rapid action, plenty of bone, and has proved himself a getter of good stock. C. D. Smith's brown horse, the third premium winner, is a strong, useful animal, but lacks that breedy appearance of his more successful competitors. The younger stallion sections had out a few nice colts, competition being strongest in the two-year-olds. In all the filly and mare sections were good ones, and was as free from weeds as we have ever seen at the Western. R. M. Wilson, Delhi, showed a splendid pair of carriage mares. They are handsome, well matched, good movers, and large enough. Mr. A. Beck came in for best team between 15 1/2 and 16 hands. He also made a fine display with his saddle horses and hunters, while his pair of cobs and four-in-hand were much admired whenever brought out.

THOROUGHBREDS.

Very few representatives of the old English race-horse were out this year. In the mature stallion ring were three splendid animals shown. Fred. Row's Norwegian, described in our Industrial Fair report, won first prize here, with J. B. Martin's Renelagh, and A. & P. Holmes' Pallarist, in the second and third places, respectively. There was a dearth of younger stallions, as a solitary yearling comprised the lot. He was shown by W. A. Sage, Nilestown, and is a breedy colt of great promise. Mr. Sage also showed a two-year-old filly, and C. P. Geary, St. Thomas, a brood mare with foal at foot. Mr. A. Beck also showed a nice two-year-old filly, for which he received second prize.

CATTLE

were a strong division. Many of the Toronto prize-winners were here.

SHORTHORNS.

The exhibitors in this class were James Crerar & Son, Shakespeare; Messrs. Smith, Exeter; John Morgan & Son, Kerwood; Chas. M. Simmons, Ivan; Messrs. Watt Bros., Salem; W. G. Saunders, St. Thomas; H. Cargill & Son, Cargill; R. & S. Nicholson, Sylvan; James Rennie, and others. Those who did not show at Toronto were John Morgan & Sons, who were out with nine very nice animals. W. G. Saunders, who showed two, a red bull calf, which he sold to J. McCallum, Iona, for \$75, and the aged bull, Elgin Chief, bred by A. Johnston, got by Indian Chief. This bull won third here, and fifth at Chicago last year.

HEREFORDS.

H. D. Smith, Compton, P. Q., and F. A. Fleming, Weston, showed the same animals here as in Toronto. There were no other exhibitors.

GALLOWAYS

were likewise represented by two herds shown in Toronto, viz., David McCrae's and R. Shaw's.

THE POLLED-ANGUS

class was also filled by animals shown at Toronto. The owners were R. Craik, M. D., Montreal; Hillhurst Farm, Compton, P. Q., and Walter Hall, Washington, Ont.

DAIRY BREEDS.

AYRSHIRES.

The Ayrshire exhibit was large, and contained a lot of grand cattle. Mr. Steacy, Lyn, and Mr. Cockburn, Aberystole, brought their herds here from Toronto, and again made splendid records in the winnings. As they have already been described, it is not necessary to notice them further. Kains Bros., Bryon, were out again this year with their well-known useful herd. Their aged bull, Castle Douglas, retains his fresh appearance, and captured the first prize again this year. Their fourteen head are in splendid breeding and milking fix, but not fitted for the show ring. Mr. Walter Nicol, Platts-ville, had out seven nice cattle, headed by St. Nicholas, a splendid two-year-old, upon which the second prize was awarded. The females are a nice lot, that received a number of awards. Mr. M. Ballantyne, St. Marys, was present with a useful

herd, but, as they are kept to make money from at home, they had not the show-ring appearance of the herds that visited Toronto and other shows. The young stock of this herd are particularly praiseworthy, which is evidenced by the fact that in the heifer calf section the first and third awards found a lodging. The judges also considered that the herd of four calves shown by this exhibitor were superior to all shown against them. A nice herd, shown by W. M. & J. C. Smith, Fairfield Plains, made good records in the contests. The second prize aged bull, yearling bull, aged cow and first prize yearling heifer, received their awards in right good company.

#### JERSEYS.

The little cream skins were out in good numbers. Wherever Jerseys exist, there are always people to admire them. They seem to have wended their way into the confidence of almost everybody that likes a handsome little butter producer. Mr. J. H. Smith & Son, of Highfield, who exhibited quite successfully in Toronto, made a good record here. Mr. O'Brien, London West, is becoming known as a breeder of the right strain of Jerseys. His herd of nine is headed by Earl of Orgrove, the 2-year-old first prize winner. He is a capital animal, with every indication of ability to sire the valuable rich and deep milking sort. The females of the herd received a good share of awards, which they well deserved. Mrs. E. Lawrence was among the exhibitors, with three very nice females. They are kept to make money from, and are doing it so well that Mrs. Lawrence claims that there are no others like the Jerseys. Some of the prizes came her way, as well as prizes for their product in the butter exhibit. Richard Edmonds, London West, exhibited seven head of well-bred Jerseys. His two cows, Lady Bronze and Lady Fawn of Hyde Park, are nieces of Ida Marigold, the cow that made the highest record in the Columbian Dairy Test. Laidlaw & Humpidge, of Wilton Grove and London, respectively, made a nice exhibit of their twelve head of St. Lamberts and St. Hilliards. Their yearling bull, Prince Frank, winner of first prize and diploma, is a little model of splendid breeding. The bull calves and females are a nice lot. They received a good share of first prizes. Mr. Isaac Holland, Culloden, exhibited an aged and a yearling Guernsey bull among the Jerseys. The former, May Roseberry, was good enough to lead so far at the Industrial as to capture first and sweepstake prizes in his own breed, but in London he had to be satisfied with second place, which perhaps is an honor to him in such good company as was shown in the mature bull section. Mr. Richard Gibson, Delaware, had out a nice display of Jerseys of the proper type and breeding. Representatives of this herd have appeared in the Western show rings in previous years, and have always carried off some of the best premiums.

#### IN THE HOLSTEIN-FRIESIAN

class were the splendid herds of McDuffie & Butters, G. W. Clemons, and A. & G. Rice, all of whom exhibited with good success in Toronto. These herds have been carefully described in our Industrial report.

#### SHEEP.

The exhibit was very good, exceeding that of any former year.

#### SHROPSHIRE

were numerous and well brought out, and stood in about the same position in relation to other breeds as in Toronto. Many of the fine flocks shown in Toronto were here. Beside these, A. & A. McPherson, Forest, was out with fifteen thin sheep, a draft from a flock of eighty, all of which are descended from importations made by John Duncan. R. Gibson, Delaware, showed fourteen—a good lot, containing some very useful specimens. The lambs were particularly good. This flock seemed to be very attractive to buyers. John Duncan's flock numbered twenty—all in thin flesh. W. E. Wright, Glanworth, made a noteworthy exhibit. The lambs were large and good, as were the yearlings and aged sheep. Though not fat, this flock was brought out in a very creditable manner. James Cooper & Son, Kippen, Ont., exhibited twenty-three very good specimens—large, well-wooled and of good quality. They were a most desirable flock of well-bred sheep. The other exhibitors were T. D. Hodgins, W. H. Beattie, John Campbell and Messrs. Hanmer & Son, Mount Vernon. The last three were prominent exhibitors in this class at Toronto.

#### COTSWOLDS.

Messrs. J. G. Snell & Bro., Edmonton, who were prominent exhibitors at Toronto, were here with their fine flocks. Besides these, Wm. Jackson & Son, Pond Mills, exhibited four. Hardy Shore, Glanworth, eighteen typical Cotswolds. In wool, size, quality and breeding, this was a good lot. Geo. Weekes, Glanworth, Ont., showed six good specimens.

#### THE LEICESTER

breeders made a large exhibit. The flocks of John Kelly, Jas. Smith, J. Laidlaw, Nichol Bros. and C. Rowlings were well represented.

#### THE LINCOLNS

were a very strong class. Messrs. Gibson & Walker and Wm. Oliver were both here with their Toronto flocks. Edward Humphrey, Thamesford, also exhibited seventeen good sheep in this class. Capt. Chas. Robinson, Alderton, Ont., sent a draft from his fine flock.

#### OXFORDS

were not as strong a class as at Toronto. W. B. Cockburn and Peter Arkell each made a fine display. A. Elliot, Pond Mills, brought out six in thin condition.

#### SOUTHDOWNS

were not numerous, but what they lacked in number was made up in quality. T. C. Douglas was the only exhibitor in this class.

#### OTHER BREEDS.

Suffolks were represented by W. B. Cockburn's flock. John Kelly was the only exhibitor of Hampshires. Messrs. Smith, Fairfield Plains, alone showed Merinos. Messrs. John A. McMillivray, Uxbridge; R. A. Harding, Thorndale, and Shaw-Wood, London, exhibited Dorset Horns.

#### SWINE.

Like the sheep, swine were a numerous and good division.

#### SUFFOLKS.

Jos. Featherston, M. P., and R. Dorsey were the principal exhibitors.

#### BERKSHIRES

were a numerous and good class. Geo. Green, Fairview, made a splendid exhibit; in fact, his herd was the chief feature in this class. D. A. Graham, Parkhill, was out with twelve, all bred by himself. A desirable lot they were in every particular. John Ackland and H. J. Davis were also exhibitors.

#### YORKSHIRES

were numerous and of good quality, though, as a class, were not as even as those shown in Toronto. J. E. Brethour made a fine exhibit. Jos. Featherston, M. P., was also in the front. Wm. Goodyer, Woodstock, was out with twenty-two—a well-bred, useful lot of pigs, but not in high flesh. H. J. Davis was also an exhibitor.

#### CHESTER WHITES

were represented by many of the same animals shown in Toronto. R. H. Harding, Messrs. Butler & Son and H. George & Sons were the principal exhibitors.

#### JERSEY REDS.

The animals shown in this class were virtually the same as were shown in Toronto. Tape Bros., Butler & Son and H. George & Sons were exhibitors.

#### POLAND-CHINAS.

In this class the fine animals shown in Toronto by W. & H. Jones, W. & F. Row and W. M. & J. C. Smith were here, and formed a most notable exhibit. The superior quality of these herds was even more noticeable than at Toronto.

#### TAMWORTHS

were out in full force, and various and amusing were the remarks we heard concerning them. H. George & Sons were again exhibitors. W. H. Odell, Belmont, showed thirteen, none of which were in high flesh, but were a nice smooth lot. W. & F. Row, of Calvert, exhibited fine specimens, which were also shown in Toronto.

#### CHEESE AND BUTTER.

Two hundred and fifty-five cheese were on exhibition in the Dairy Building. These were all from Western Ontario, with the exception of seven from Nova Scotia and seven from Prince Edward Island. The cheese, as a rule, were neat and tidy in appearance. A few lots, however, presented an unsightly appearance, and did not reflect very much credit upon the cheesemaker. The quality was not quite equal to last year's exhibit. The August cheese especially were lacking in flavor, due nearly altogether to the unusually dry season, which rendered it very difficult for makers to get a supply of pure flavored milk. The sweepstakes prize was given to a July cheese. The June and July cheese scored more for flavor than the August goods. The total money prizes for cheese amounted to \$420. This was made up partly by a number of special prizes as follows: \$100 from the Western Dairy-men's Association; \$150 from the Chartered Banks of London; \$35 from D. H. Gowing, and \$35 from D. H. Burrell & Co., Little Falls, N. Y. The judging was done by score cards, similar to those used at Chicago. The highest number of points made by any exhibit was 96, and the lowest 76, the majority of the exhibits scoring between 90 and 94 points. A score card, with a record of the points made by his cheese, was mailed to each exhibitor after the Fair. Mr. A. F. MacLaren, of Stratford, was sole judge of cheese.

There were thirty different exhibits of butter—fourteen from the creameries, and the balance farmers' or dairy butter. The display of creamery butter was not as large as last year. The quality on the whole was good. The objectionable features were to be found in the color and salting chiefly, a number being too light in color and having too much salt. A few lots were scored down one or two points because of bad packing and the use of the old "cotton cloth." The total score made by the creamery butter ranged between 98 and 94 points. There was a much larger supply of farmers' butter than last year. Its quality showed that many of our farmers are adopting new and improved methods in making and handling butter. The same faults might be said of the farmers as of the creamery butter, only they were more noticeable in the former. A few exhibits also "scored" down considerably in flavor. The highest score was 96, and the lowest 85 points.

Score cards were also used for judging the butter, with the following divisions: Flavor, 45; grain, 25; color, 15; salting, 10; packing, 5—making a total possible score of 100 points. Mr. W. P. Hibbard, Stratford, was judge.

Special prizes towards the butter sections were contributed as follows: \$100 by the Ontario Creameries' Association; \$35, known as the "Alexandra" Separator prize, by R. A. Lister & Co., Dursley, England; and prizes to the value of \$23.25 by J. S. Pearce & Co., London.

Much credit is due Mr. J. S. Pearce, the director in charge of the Dairy Department, for his very capable management of this branch. The large number of special prizes towards the dairy sections are due nearly altogether to his efforts.

The exhibits of dairy supplies and machinery were very creditable.

The prize lists for cheese and butter will be found in another column. No prizes were given for dairy supplies and machinery exhibits.

A large number of cheesemakers say that the number of cheese required to make an exhibit in the different sections is too large. In sections one and two, four cheese are required to fill an entry. This means extra freight charges upon the exhibitor. Many makers who do not exhibit now, say they would do so if the number were less. It would be well for the Fair managers to consider this another year, as we believe they would get a much larger number of exhibits, and be able to make as good a display as under the present regulations.

#### Annual Sale at the O. A. C.

The sixteenth annual sale of pure-bred stock was held at the Ontario Agricultural College, Guelph, October 3rd. The quality of the cattle and swine, with few exceptions, was good; nearly all of these were in fine condition and well prepared for sale. In a word, it was the best managed and best conducted sale we have ever attended at the College Farm. Mr. Wm. Rennie is to be congratulated. J. D. Heffernan was the auctioneer, and performed his part in an able, gentlemanly and business-like manner. His style was refreshing; he used no foolish jokes, so common with auctioneers, but proceeded with the business on hand without any nonsense. His manner inspired confidence.

The first animal offered was Lady Sybil, a Hereford heifer, calved February 24, 1894. She was of good quality. James Auld, Eden Mills, bought her for \$30.00. Next came Geranium, another Hereford heifer, calved December 13, 1893. This, also, was a good one. The buyer was Alfred Stone, Guelph. Price, \$57.00. A Galloway heifer calf, of splendid quality, was sold to David McCrae for \$20.00. She was calved February 23rd. Blooming Rose 2nd, an Angus heifer, calved March 14th, was bought by Hugh McDougal for \$43.00. Alfred Hales, a butcher, bought the imported Sussex cow, Bonnet 10th, for \$50.00, and a Sussex bull, calved October 22, 1893, for \$25.00. An Ayrshire heifer calf, with an appendix pedigree, was bought by John Crosby for \$22.00. This was a nice, vigorous calf, about four months old.

The pigs offered were a grand lot, fit to grace any show-yard in the land. Twenty-seven Yorkshires of various ages were sold, and made an average of nearly \$17.00. The average age was about seven months. Sixteen Berkshires were sold at an average of nearly \$12.00. The average age was six months. Three Tamworths, farrowed August 29th, were sold, realizing \$26.50. Four Poland-Chinas came next—two boars and two sows. The sows brought \$29.00; the boars, \$26.50. The pigs had been carefully selected, all poor specimens having been sent to the feeding pens, and will at a later date be converted into pork.

The prices realized for the sheep were low, except in the case of the Shropshire females; these averaged \$22.50 each.

#### Elevator Capacity of Western Canada.

A table showing the storage capacity of the elevators on the various lines of railway in Western Canada, which has been compiled by the Winnipeg Grain Exchange, shows the following totals:—

	BUSH.
C. P. R. Main line.....	7,415,700
C. P. R. Deloraine branch.....	1,166,000
C. P. R. Glenboro' branch.....	631,000
C. P. R. Emerson branch.....	147,000
C. P. R. Souris branch.....	642,000
C. P. R. Stonewall branch.....	31,000
C. P. R. Other branches.....	26,400
Grand Total C. P. R.....	10,059,100
G. N. W. C. R.....	84,000
N. P. R.....	561,500
M. & N. W. R.....	651,000

Grand Total..... 11,355,600

In 1891 the grand total was 7,628,000 bushels, and in 1892 was 10,366,800 bushels.

The daily total capacity of flour mills is 8,270 barrels, and of meal mills 190 barrels per day.

**Feeding for Fat and Lean Pork.**

The great bulk of the sharp discussion that has been going on for a considerable time in the FARMER'S ADVOCATE between pork producers and packers has been that of breed against breed, as to which yields the greatest amount of lean to fat meat proportionately. We cannot, however, afford to ignore the effect of feeding when we have the same end in view. Experiments conducted at the Wisconsin Experiment Station show clearly that the sort of food fed to hogs materially effects the proportions of fat to lean meat in the dressed carcass.

Three lots of pigs, of three each, 100 days old at the beginning of the experiment, were fed from Dec. 15 to March 22 (98 days) on the following rations:—Lot I. Two-thirds shorts, one-third cornmeal. Lot II. Cornmeal only. Lot III. One-third cornmeal, two-thirds sweet skim-milk. The following table gives the main results of the feeding:—

	Food required for 100 lbs. gain.			Weight beginning	Gain	Food required for 100 lbs. gain.		
	Cornmeal	Shorts	Skim-milk			Cornmeal	Shorts	Skim-milk
Lot I. Shorts	Lbs. 272.7	Lbs. 545.3	Lbs. 145	162	168	337	Lbs. 821	
" II. Cornmeal	942		146	202	466			
" III. Skim-milk	638		1,962.3	142	239	266		

Herewith are given photo reproductions taken from report V. of the above mentioned experiment stations, showing cross-sections of carcass of a pig from each lot, the cut being made between fifth and sixth ribs. Not only are the relative proportion of fat to lean, and the size of the muscles shown, but the lighter and darker shades of the lean meat

**Hogs That Are Hogs.**

It has been frequently stated that the use of a *nom de plume* when writing to the press is a proof that the writer is either overwhelmed with modesty, or that he has no faith in his arguments or assertions, or that he has more than one object in view in writing; and further, that the contents of such a letter as that written by "Invicta" are of little value without the name of the writer, since readers of it are unable to form an idea of the knowledge and *bona fides* of the anonymous writer. All this may be true or not, but I do not, as a rule, trouble myself with the literary productions of those who make strong assertions, and then have not the moral courage to stand godfather for their adopted ones.

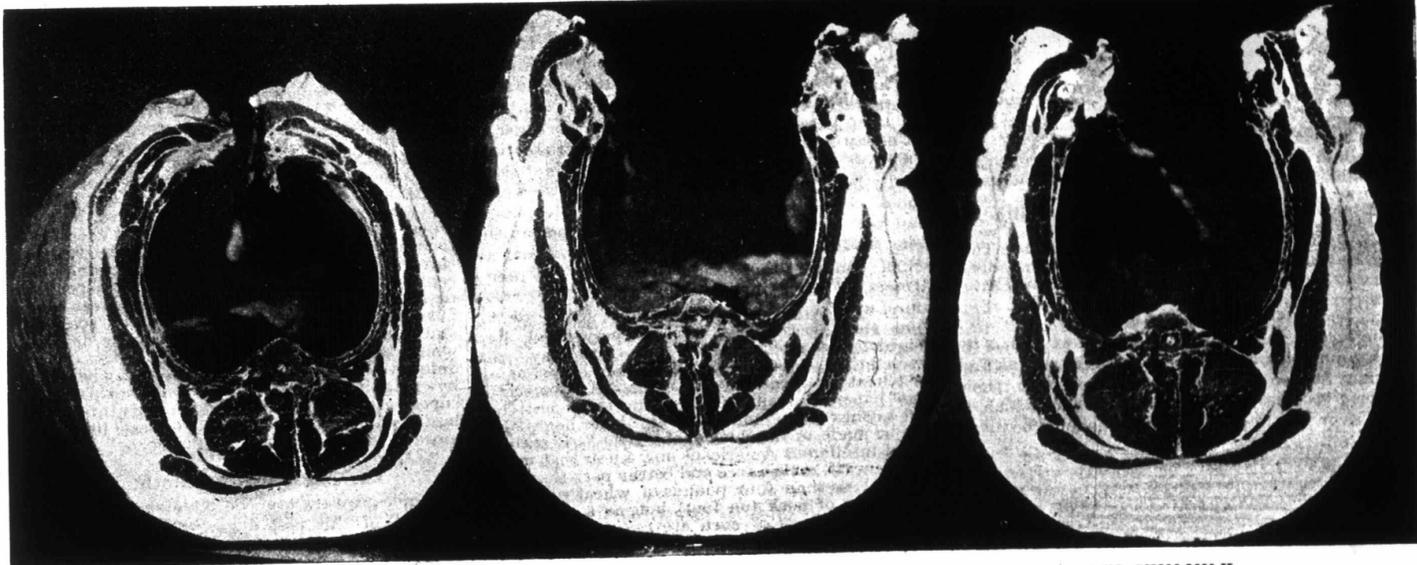
"Invicta" is very irate with Mr. J. W. Flavelle for daring to suggest that an improvement might be made in the bacon pigs from Manitoba, and fairly mad with that gentleman for pointing out the manner in which the bacon pigs in other districts have been vastly improved. "Invicta" proceeds to make assumptions which Mr. Flavelle's letter clearly proves to have no foundation in fact, and the latter further gives some facts which, if "Invicta" studies with an open mind, may, perhaps, prove of benefit to him.

Might I ask "Invicta" to give us, for the benefit of your readers, the extent of his experience with the Yorkshire grades, and under what conditions he acquired that vast experience which warrants that rather strong assertion of his, that "every other breed's grades are more profitable." This detailed information which we pray "Invicta" to give us, is the more necessary since his opinion is one not generally held by breeders and feeders of pigs in almost every other part of the world, than in the limited area of the Province of Manitoba. If desired, I can give a list of some thirty-six colonies

**Our Scottish Letter.**

The first fortnight of September has been a remarkably fine time. Harvesting operations are very general, and there has been an almost complete cessation of rain, with continuous sunshine, and much grain has been safely housed without receiving any wet. This is rather an unusual experience in this part of the world. Sometimes "the rain, it raineth every day," and when we have such a spell of sunshine we begin to marvel at our good luck. Barley will not be a good sample, as the previous wet weather had spoiled it; and wheat has during the week, from September 18, been selling at a lower average than has been reached in this country for over 200 years. Previous to the days of foreign competition, 1894 would have been regarded as a season in which farmers could have secured substantial profits; now, however, all this is changed, and whether the season be good or bad makes very little difference, as the foreign imports equalize the values. Generally the aspect of affairs for purely cropping farmers is not reassuring, but to those engaged in stock-raising some prospect of earning a little money is presented.

September is a favorite month with stock-breeders who are having public sales, and this season the sales which have been held are unusually interesting. The great rival breeds—the Shorthorn and the Aberdeen-Angus—have been somewhat numerously represented in the sale rings, and prices for the latter have, in one or two instances, been phenomenal, while even the cheapest lots have sold at values which leave some profit, or at least no loss. Looking at the sales which are past, one is disposed to regard the representatives of the blackskins as making the better show. Amongst them there were fewer weedy cattle, and prices did not in any case go so low as they did in the case of some



Cross-sections over the heart, showing amount and distribution of fat and muscles in hogs fed on different diets for ninety-eight days.

are easily noted. The muscles of the hog fed on shorts appear dark, indicating the deep red color of the lean meat, while that of the corn-fed animals appeared very light colored and bloodless. The milk-fed hogs gave an intermediate colored meat.

Milk and shorts each increased the weight of liver and kidneys over that produced by feeding cornmeal. Regarding the strength of bone, there was a decided difference resulting from the different foods. Where the most milk was fed, the bones were the strongest. Shorts made a strong bone, but not quite equal to that produced by milk. The actual difference of bone between the corn and milk-fed hogs was one-sixth. If the bones of the corn-fed hogs are less strong than they should be by one-sixth, and these hogs are used as breeding stock, what fatal changes may be produced in a few short generations.

**Easter Veals.**

A trifle over five months and Easter will be here, with a demand for choice meat. Fairly well bred calves of any of the beef breeds, if real fat, at five or six months old will bring almost as much in the city markets as an ordinary steer at one and a-half years. Now is the time to commence getting them ready. In fitting veals, it will pay to allow them new milk for three or four weeks. Skimmed milk can then take its place, with the addition of linseed meal porridge, fed sparingly at first, and increased as the calves become accustomed to it. As soon as they learn to eat, pulped roots and ground wheat and oats, mixed with oil cake and fed twice daily, all they will eat up cleanly, will hurry calves along at a rapid rate. Sweet clover hay should be before them almost constantly, but should be changed in twice daily. Calves should be kept separately in box stalls at least five or six feet square, and always dry, sweet, and well bedded. By keeping them separate, they can be fed one another, and each one will always get his share of the food given.

or countries to which I have shipped my Improved Yorkshires during the last thirty years, and it is a most curious fact that in those countries which have imported the greatest number and for the longest period, there the Improved Yorkshire is most in demand at the present time. It is not that the Improved Yorkshire has fulfilled its mission in countries of one particular climate, but I have shipped them to the East and West Indies, to Siberia, to nearly all parts of Africa, to South America, to every country in Europe, save Greece, to New Zealand and Australia, and the demand for them not only continues, but is gradually increasing.

Of what avail, then, is it for "Invicta" to record his very small experiences, and that one experiment which is recorded in the D. G. Experimental Farm Report for 1883, and which can be of little value—even if all the circumstances under which it was carried out were, as I have no doubt they were, duly considered—since both are directly opposed to every-day facts.

If "Invicta" will comply with my modest request and sign his name to his letter, then your readers and I will have much pleasure in giving his opinions and statements that consideration which they will then deserve. SANDERS SPENCER.

Holywell Manor, England.

It is reported that the Illinois Milk-Condensing Company of Elgin, Ill., has recently contracted with the dairymen of that section for their milk supply for the coming six months. They pay twelve cents a gallon for the months of October, November and December, and eleven cents for January, February and March. At the condensing factory it is said 250,000 quarts per day were contracted for, and at the bottling factory 80,000 quarts. At Carpentersville and Algonquin the company pays the same price. The former place uses about 250,000 quarts daily.

of the Shorthorns. The sales of the latter have been confined to one or two select herds, and apart from Lord Polwarth's, which were really a very nice lot, the red, white and roan seem to have been rather over-bred. The purchase of cattle on pedigree alone is a bad business at any time, and breeding them on pedigree alone is equally unsatisfactory. No one needs to keep a clearer head than the breeder of fine stock. It is very easy to become bigoted on one strain of blood, and the moment that happens, the fate of a herd is sealed. At the local shows this season around Underley, where the celebrated Bates herd of the late Earl of Bective long found a home, not a single pedigreed Shorthorn of that race was to be seen. As general purpose cattle they are useless, and farmers who have to cater for a dairy market have no desire to have anything whatever to do with them. The last fortnight has seen some "weedy" cattle on the Booth side of the house brought under the hammer, and there are also weeds among the Aberdeen Shorthorns. The truth is, this is the great general purpose breed of the world—taken all in all, the best breed in the world; owes very little of its pre-eminence to the foolish patrons who have treated it as though it were a fancy article and not a useful all-round bred race of horses, the best and the worst of its kind are to be found in the Shorthorn breed. The best beef cattle in the world, and the best milking cows in the world, are more likely to be found in the Shorthorn ranks than elsewhere [NOTE.—This is a general proposition, it would convey the impression that special purpose breeding and development rest upon a fallacy. But the practical experience of thousands of American dairymen, and the results of the great World's Fair milking trials, do not bear it out. There is no question whatever that either the beef or milk function of cattle may be abnormally developed at the expense of the

15, 1894

butter, grain, 25; a total Hibbard,

ons were Cream- Alexandra" Dursley, 5 by J. S.

director his very the large sections

achinery will be given for

that the exhibit in ions one an entry. in the exhibit now, less. It consider ould get a e able to e present

stock was e, Guelph, and swine, ll of these d for sale.

best con- ne College ratulated. performed siness-like e used no s, but pro- hout any ce.

oil, a Here- he was of ough her r Hereford also, was a e, Guelph. of splendid 20.00. She ose 2nd, an ough by a butcher.

te 10th, for er 22, 1893, n appendix \$22.00. This nths old.

o grace any Yorkshires average of out seven an average six months. y, were sold, ame next— ight \$29.00; n carefully sent to the e converted

low, except ales; these

**Canada.**

of the ele- in Western e Winnipeg totals:—

BUSH.
7,415,700
1,166,000
631,000
147,000
642,000
31,000
26,400

10,059,100
84,000
561,500
651,000

11,355,600 bushels, and

mills is 8,270 per day.

other, but that each will simultaneously reach its highest degree of perfection is neither in accord with theory or practice.—Ed.), and the worse cattle one cares to look at are also Shorthorns. It is a mad world, but there are some things about which wisdom never will be learned.

The results of the sales may be summarized in this way: The highest average and the highest individual prices were made for Aberdeen-Angus cattle, and not in Scotland, but in the north of England, was the best sale held. At Bradley Hall, near to Newcastle-on-Tyne, the herd of Mr. Owen C. Wallis was dispersed. Seventy-four averaged £51 19s. 9d. each, and one yearling heifer was sold for £210. Eight yearling heifers drew an average of £77 6s. 1d., and an equal number of two-year-old heifers, £73 17s. 10d. A heifer calf was bought by an English gentleman at £60 18s., and ten of them drew £32 13s. 1d. At Auchorachan, in Glenlivet, during the first week of the month, a splendid sale of Aberdeen-Angus cattle was held, and the fine average of £38 14s. 6d., for forty-two head, has to be recorded. The top price was £301 10s., paid by an Irish gentleman, for Boaz of Balairdalloch, the first prize yearling bull of the breed at the late H. & A. S. Show, at Aberdeen. At Lord Polwarth's draft sale, held at Mertoun, on the day after the above, the first prize yearling Shorthorn bull at the same show, named Imperial Gold, was sold at £86 2s., for exportation to Buenos Ayres. At Alloa, near to Stirling, the well-known Booth herd of Shorthorns owned by Messrs. A. & A. Mitchell was dispersed, with the result that forty-eight cattle drew £32 3s. 4d. apiece. A bird's-eye view of the fortnight's sales may be obtained from the following table:

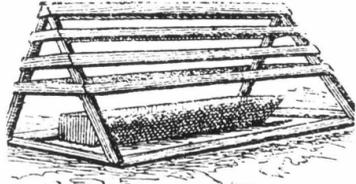
SALE.	NOS.	BREED.	AVERAGE.
			£ s. d.
Bradley Hall,	74	A. A.	51 19 9
Auchorachan,	42	A. A.	38 14 6
Alloa,	48	Shorthorn,	32 3 4
Mertoun,	46	Shorthorn,	26 9 6
Tochneal,	35	A. A.	22 9 1
Morlich,	12	A. A.	22 1 0
Byres,	58	A. A.	18 13 6
Kingcausie,	72	Shorthorn,	18 4 5
Dringhouses,	47	Shorthorn,	18 1 11
Rosehaugh,	42	A. A.	17 1 0
Collithie,	51	A. A.	16 18 5

It would be easy to analyze the above table, and one could write on the lessons from it at great length, but, *cui bono*, the figures speak for themselves, and all that we need add is that Bradley Hall, Alloa, Byres, Kingcausie and Collithie were dispersions, the others were only draft sales. This has to be borne in mind when looking at the figures.

SCOTLAND YET.

#### Feeding Young Pigs.

The accompanying illustration shows a plan by which young pigs, as soon as they begin to drink and eat, may do so without interference from their mother. It consists of an open frame which is placed over the trough. This frame should be made



of hardwood, and securely fastened to the floor or ground. An opening from six inches to nine inches should be left all around at the bottom. The trough should be secured exactly in the centre of the frame, so as the sow cannot reach it and turn it over. The length of the frame and trough will depend upon the size of the litter being weaned.

#### A Parting Shot.

Editor FARMER'S ADVOCATE:

Mr. Flavelle, in his counter-blast in your last issue, ignores my assertion that the Yorkshire is a dear pig to feed. Instead, he goes on to tell us what the Danes receive for their cured meats, etc. I believe the Yorkshire meat is as good as the Poland-China, but I would rather keep the latter. I usually sell my pigs half fat—the buyers want them that way; and if I wanted to get Yorkshires even "half fat," they would require more food than the Poland-Chinas, Chester Whites, or the Berkshires, and I can get any of these breeds long and lean enough by suitable feeding and selection. The editor hits the *crux* of the difficulty by saying the "individual characteristics" of animals must be considered. Give me an extra cent a pound for Yorkshires, live weight, and I'll keep them; but as long as other breeds pay me better, I mean to keep them—that is all.

INVICTA.

While whitewash on the walls of the hen-house inside gives light and renders the house cheerful, it is cheap enough to use on the outside as well. If those who do not care to use paint will use whitewash on the outside, they will be surprised at the neat appearance it will impart to the hen-house and fences. It may be washed off some by the rain, but that should be no obstacle to its use, as it is easily and quickly applied.

## FARM.

### 75c. for Wheat.

BY F. J. S.

A considerable portion of the Province of Ontario is well adapted for the growing of wheat. In such sections farmers properly desire to continue its growth, if such can be done with profit. Apart from the grain, the quantity of good straw and chaff is a strong incentive to its growth, the latter being an especially fine adjunct to a winter's bill of fare. Not only so, but wheat (we speak of fall wheat) is a decided advantage in a rotation, is an evener of labor and one of our best crops for holding in check weed growth, and eventually a helpful adjunct to the manure pile. But the present price for wheat does not warrant its growth if the grain is to be sold.

But there are other uses for wheat. We notice in a late Toronto Globe that "really choice cattle for shipping are hard to get," and also read "common veals, \$1.50 to \$2.50; choice veals, \$5 to \$6; common hogs, slow sale; prime animals, \$5 per cwt. on foot." On reading this, we remember that wheat is worth fifty cents per bushel. Therefore, it would seem that some farmers choose two losses, cheap grain and cheap stock, when it is possible to combine the two and have at least one good profit.

#### THE RESULTS OF EXPERIMENT

with wheat as food for stock are worth some consideration. The Central Experimental Farm offers valuable data on this line. Corn ensilage and frozen wheat pitted against three other excellent rations in the production of beef gave not only a greater increase, but a much cheaper, the cost of feeding per day being least with the wheat, and the daily increase much the greatest, cost of ration considered. The quality of the frozen wheat beef was pronounced "particularly excellent." In short, wheat is a cheap and effectual food for beef production. We grant that every experiment might not show equally favorable results for wheat, but we would remember that Ontario farmers grow better wheat than was used in this case. Experiments at the same station, on the feeding of frozen wheat to swine, confirm the results obtained by many farmers. Frozen wheat (ground and soaked twelve hours) was worth 73 cents per bushel fed to swine, when they were worth 5 cents per pound, live weight. We met a farmer the other day who averred that he had made a dollar per bushel of all his wheat by feeding it to swine. An American farm paper is responsible for the statement that "At 5 cents per pound (live weight) for hogs, \$1.00 may be made of one bushel of wheat." Certain it is that intelligent Americans now know that wheat and corn will make more and better pork than corn alone. Less than four pounds of wheat will make one pound of pork (on foot), but, as a rule, more than four pounds of corn are required to do the same thing.

O. E. F. experiments with wheat as a food for milk cows, while in one case did not show particularly good results, in the other gave fairly good returns for wheat fed. As wheat is now ten cents lower per bushel, the present profits on feeding this cereal would be to that extent increased. However, we think that the above experiment would have been more valuable if some other grain or grains had been fed in conjunction, as wheat is decidedly too carbonaceous a fodder ever to fill requirements for milk cow rations. In connection with oats, wheat has never failed to give good satisfaction as a grain ration for milk cows, and with butter at 25 to 30 cents, as at present, wheat may be sold for at least 75 cents.

As a food for horses, the value of wheat is well known. It is more especially valuable for heavy horses and horses at slow work, and may profitably take the place of one-quarter of the oats—weight for weight.

As a food for poultry, wheat cannot be over-estimated, and many farmers might very profitably sell a goodly portion of their crop in this way. In the face of the present price of wheat, and of agricultural stringency, it is really astonishing that poultry raising does not more rapidly grow.

#### HOW TO FEED WHEAT.

Feed wheat ground fine to horses and milk cows. To swine, coarsely ground wheat will give better results, and feed it dry in winter and soaked in summer (twelve to twenty-four hours). For poultry, whole wheat is preferred. For fattening sheep, coarsely ground wheat is, perhaps, best, mixed with ground oats or other grain.

Do not feed wheat alone, if you wish to get its full food value. It is a carbonaceous fodder, and, with few exceptions, such fodder always give better results when fed with some albuminoid and fat-giving foods. Oats, bran, oil-cake and like foods are suitable adjuncts to rations of wheat.

For butter and cheese, mutton, veal, pork and poultry, if fed to the proper class of stock, wheat is proven, both by experimental stations and the individual farmer's practice and experience, to be worth at least 75 cents per bushel.

### Wheat for Hogs and Steers.

The following testimony, regarding the feeding of wheat to steers and hogs, is furnished the Kansas State Board of Agriculture by Mr. G. W. Clawson, of Ellsworth Co.:

"In November, 1893, I put on a full feed of wheat about eight hundred head of Pan Handle Texas steers and fed them for a period of four months. These steers were from ranges where they were unused to grain of any kind. They were fed a mixture consisting of about 60 per cent. corn and 40 per cent. wheat, chopped or ground coarsely on a horse-power grinder. I have had, for the last eight years, experience covering the same months each year in feeding about the same number and quality of Western steers. During the prior feeding seasons I fed entirely corn, usually shelled. My experience in feeding the mixed food was highly satisfactory, both as to the quickness of time in which I could get the animals to rightly take hold of the food and also as to the results obtained, and I have no hesitancy in saying that steers fed on a mixture of wheat and corn, in about the above proportions, will gain pounds a great deal faster than on corn alone. During the season I fed 9,000 bushels of wheat of my own raising in this country. About half of this was fed to cattle, as stated; the remainder was ground coarsely and fed direct to hogs in the nature of slop. Careful experiments showed that a bushel of dry corn put on fourteen pounds of pork, and a bushel of wheat ground and fed as slop made seventeen pounds. I am this year feeding on the same farm, 16,000 bushels of wheat; 4,000 bushels of this was of my own raising and 12,000 bushels were purchased locally at prices ranging from twenty-eight to thirty-seven cents per bushel, or at an average price of thirty-five cents.

"I had on the Kansas City market a short time since a carload of pigs fattened entirely on wheat, which brought \$6.10 per hundred, and averaged 249 pounds. These pigs never knew the taste of corn. I have, at this time, more than 1,600 head of hogs of my own raising—fattening hogs, pigs of all ages and descriptions, stock hogs and breeding hogs—and during the last ten months I have fed no corn whatever, nor do I expect to as long as I can buy wheat at or about the same price as corn. All ages and stages of hogs appear to thrive better on wheat than on corn. Mine have been entirely free from disease. Where a bushel of wheat, costing thirty-five cents, puts on seventeen pounds of six-cent pork, there can be no question of the profitability of wheat feeding. For feeding wheat to hogs, I advise grinding the grain coarsely, soaking it, and using as a slop. I have fed some dry, whole wheat to hogs, but feel confident that, owing to defective mastication, better results can be obtained by grinding and soaking. I consider wheat superior to corn as a food for hogs, and that a bushel of wheat will put on at least 10 per cent. more in weight than a bushel of corn."

### The Codling Moth.

Apple-growers are complaining bitterly of the increase of this pest during the past few years. This year they were particularly bad, even in orchards that have been thoroughly sprayed. Says the Irish "Farmer's Gazette":—"One of the best means of eradicating this pest is to gather up all the fallen apples daily, and either use or destroy them in some way, so as to destroy the insects they contain. But unless the apples are picked up promptly, the insects will have crawled out and hidden themselves." Another method of exterminating is given in the same journal: to place hay bands, or wrap old rags round the stems of the trees. By-and-bye the insects will crawl up the trunk and creep for shelter under the covers, where they may be easily destroyed.

We may say that the above remedies are along the right track, and effective so far as they go, but we noticed a much better appliance at the Industrial and Western Fairs this year, in the form of an inverted funnel, and known as the McGill "Tree Protector." It consists in a composition collar, which is placed round the trunk of the tree and stuffed at the upper extremity with a piece of tow rope, into which the worms readily crawl for protection. The results of using the appliance were shown by samples of the tow rope which had been removed after a few weeks' service. Several of them contained numerous cocoons of the codling moth and other insects seeking shelter.

Its effect on orchards using them cannot help but be good next year, as the contrivance hinders the ascent of all insects that crawl up the trunk into the tree to deposit their eggs.

In Farmers' Bulletin No. 172 of the United States Department of Agriculture, Dr. Erwin F. Smith says: "At present peach yellows seem nearest allied to that phenomenon in plants known as variegation. It is now recognized that variegation in many plants is a disease manifesting itself in stunted growth, imperfect assimilation, hastened development, and feeble vitality. Moreover, in a number of variegated plants, *e. g.*, jasmines and abutilons, this condition is transmissible to healthy stocks by budding or grafting, in the same way as peach yellows. The difference in these cases seems to be one of degree rather than kind."

DAIRY.

The Sour Whey Question.

BY J. W. WHEATON, SECRETARY D. A. W. O.

The answers so far received to the circular sent to factorymen by the Western Dairyman's Association indicate that about seventy-five per cent. of the factories in Western Ontario return the sour whey to the patrons in the milk cans. A good many of the factories in those districts where the practice is not general have not yet reported. The returns from these places will lower the percentage somewhat. This practice is in many ways a hindrance to the making of very fine cheese. It seems a difficult evil to regulate. In many places the patrons cling to one system or the other, merely as a matter of habit. Where, for a number of years, the patrons have been accustomed to have the sour whey returned, they would refuse to patronize the factory if any other plan were adopted, and they are just as strong the other way in many places where, for a number of years, the whey has been fed or sold at the factory.

Where the hog industry is carried on to any great extent the patron of the factory feels that it would be impossible to manage the business successfully without having the whey at home to feed his hogs. This is one of the strong arguments advanced in favor of returning the whey, and is often made by patrons without fully considering whether they would not have better results by disposing of the whey at the factory and do away with the risk of having the milk affected by the sour whey flavor.

The returns from the places where the whey is sold at the factories show that the prices realized range from \$1.00 to \$1.65 per ton of cheese. At these figures it is evident that the majority of patrons would realize more by disposing of their share of the whey than in feeding it at home. Where a farmer keeps a large number of cows and gets home sufficient whey to use to advantage, he may be able to get better results by having the whey returned. But, as is generally the case where the share of whey is very small, it would be much more profitable to sell or use the whey at the factory. Very often the small patron lives in the hope that the milk-drawer will, in some peculiar way, give the pump handle a few extra strokes when apportioning his share, and he would thus be able to get more whey back than the milk he sends.

A few years ago one of our largest and best factories sold the whey at the factory under contract for five years at \$5.00 per ton of cheese. During this period the patrons had their cheese manufactured and milk drawn at the very low rate of 75 cents per 100 lbs. The cheesemaker received 78 cents per 100 lbs. for making, and it was a wonder to other factorymen how the whole thing could be done for 75 cents. It is explained by the fact that the proceeds of the whey more than paid for drawing the milk. In actual figures, the patrons of this factory, by selling the whey, received 3 1/2 cents per 100 lbs. more for their milk. By allowing 75 lbs. of whey to 100 lbs. of milk, they actually received five cents per 100 lbs. for their whey by selling it at the factory. True, this is a somewhat high figure, but take the average price at which whey is sold at the factories and it will give the patron an actual value of about three cents per 100 lbs. for whey.

The actual value put upon perfectly sweet whey, by making a chemical analysis of it, is from five to eight cents per 100 lbs. The souring of the whey is due to the sugar of milk being changed into lactic acid. This sugar of milk gives whey its chief feeding value. There is about 4.5 per cent. of it in milk, and the bulk of this goes into the whey in the process of cheesemaking. The souring of the whey does not affect the quality of the food very much, but it materially lessens the quantity. At many of the factories where the whey is returned in the cans, and where the whey tanks are not kept in a pure condition, the whey will sour and become filled with foul odors very quickly. Under such conditions, when the patron receives his share of whey, it is perfectly sour and rank, and is not worth much more for feeding purposes than the same amount of water.

As stated above, whey is of more value as a food when it is fed sweet; therefore it will be an advantage to feed it at the factory, before it becomes sour. A good plan is to have a yard at some distance from the factory and allow each patron to put in hogs according to the quantity of milk he sends. This has given very good satisfaction in some places. A better plan, perhaps, would be to appoint some capable man to look after the business, and provide him with capital to purchase hogs and feed them near the factory. When the season is over and these hogs are sold, divide the net proceeds among the patrons. One of our northern factories adopted this system a few years ago with very good results. As high as five and six cents per 100 lbs. for whey has been realized in this way.

Even if there is not so much profit to be derived from disposing of the whey at the factory, it would be of advantage in doing away with the great risk of having milk contaminated by putting it into cans in which the sour whey has been carried.

It is quite evident that a large number of our factories cannot be induced to make any change in the system, as their patrons will not supply milk on any other condition. Where this is the case the practice should be handled in the best possible way. See that the tanks are thoroughly cleaned out once or twice a week. If this is done and every patron,

as soon as the whey is returned from the factory, would have it dumped out and the can thoroughly washed, scalded and placed where it will get a liberal supply of sunlight, the bad results connected with the practice would be overcome to a very large extent.

Of late years at some of our factories an injector is used for elevating the whey. During this elevation the whey is heated to a high temperature, which has the effect of keeping it sweet longer. Another plan is to have a steam pipe connected with the whey tank, and after the whey is run off, turn on steam and heat it up to about 150 degrees. Both of these plans are very good and will tend to preserve the whey in a sweeter condition and make it of more value. The principal evils in the practice arise from the neglect of patrons. The neglect of half a dozen patrons at any factory to empty the whey and thoroughly clean the cans as soon as the milk-drawer returns from the factory, would be sufficient to affect the product of the whole factory. This sour whey has frequently been seen in the cans on the milk-stands at six p.m., having remained there since morning. Under such conditions, it is practically impossible, even if the can is thoroughly washed and scalded, to have it in a fit condition to receive the evening's milk.

One of the arguments often advanced against disposing of the whey at the factory is that the cans will be harder to clean, by the milk drying and sticking to the sides of the cans, than if the sour whey were carried home. This can be overcome quite easily by having the milk-drawer put in a gallon or two of water before leaving the factory. It is also claimed that this sour whey makes the cans easier to clean by loosening whatever milk may have adhered to the sides of the can. The little good that this may do is more than counteracted by the bad effect the acid of the whey will have in injuring the tin on the can.

The Toronto Cheese Awards.

Editor of the FARMER'S ADVOCATE:

I have long favored judging cheese without any score of points being adopted; but when that is required, it seems to me proper to fix on a standard of quality upon as definite a basis as possible, taking (as a maximum of perfection) the number ten as highest for each point of quality, because a small number is more easily applied in making the decisions upon the degrees of merit in each point of quality. Judges do not determine the relative value of the points of quality, but they compare the degrees of merit in each competing exhibit, and make the score in accordance with the result. This can be done with greater accuracy and less trouble by placing score labels on each exhibit, as soon as passed upon. By this the judge can easily recompare and revise the scores of the highest in his final examinations, and be absolutely certain of the correctness of his awards. Permit me now to make a few remarks in answer to the strictures of the critic in the FARMER'S ADVOCATE. When your critic avers that "taste is included in flavor," and that texture comprises richness, firmness, soundness and keeping qualities, he discloses the fact that he has not fully considered what he states, else he lacks the perspicacity to comprehend it; because the three first points of quality in cheese: taste, flavor and richness, are each distinct qualities, and perceptible by taste, smell and palate; whilst texture is solely determined by sight. Further, his statement that prizes were awarded to softer specimens than the typical Canadian product, is simply fiction. I venture to assert that not one award was made to an exhibit which did not possess sufficient firmness and solidity, though many stiff exhibits, with weak, neutral or off flavor, were passed over. Unless the critic is afflicted with chronic big-head-ism, examination of the prize cheese could not fail to convince him. He ventures on supposition that I, being accustomed to American cheese, etc., leaned toward soft made cheese. I have long been conversant with the leading varieties of cheese made in England, Scotland and Canada, and although Canadians have been much improved since I first officiated as a judge of their product, twenty years ago, yet there is much to be done before the Canadian cheese can be reckoned as the type *par excellence* of fine Cheddar cheese: not until the Industrial directors, at Toronto, lead the way and succeed in making their cheese show an educational institute, by giving object lessons at their annual meetings, in cutting up the prize cheese in every class, to teach exhibitors and makers what their finest cheese really are, and in having an expert judge in their presence compare the prize cheese with the medium and inferior grades, and point out the merits of the one and the defects of the other, explaining to exhibitors the causes which operate to produce the defects and the means requisite for correcting them, etc., etc. It was too much to say that I had never seen a finer exhibition of cheese. Among the exhibits there were many specimens of poor quality, both of the soft, and stiff, hard types; and when these disappear from the show boards, and all are fine (as the exhibits of cattle and sheep already are), then the mission of exhibitions will be attained (yet still must be maintained) and the present typical few will have elevated the many up to the level of those who now stand on the top shelf. There is certainly a way to do this, and I hope that the will will pervade the Industrial directorate to follow up, with spirit, their already splendid achievements.

Rome, N. Y., Oct., 9th. ROBERT McADAM.

[NOTE.—No doubt, as a dealer, Mr. McAdam has handled a great quantity of States cheese, but, on the admission of Americans themselves, it is, in several particulars, inferior to the Canadian product. The wonderful sweep made by Canadian cheddars at the World's Fair, and their growing popularity in England, shows that, though perfection may not yet have been attained, we are on the right track, and, as already intimated, we do not propose to be switched off by the setting up of any lower standards. The spirit of Mr. McAdam's letter, and a discourteous expression or two, disclose a weakness in his reply to the fair but perfectly frank strictures which, after careful examination and mature consideration, we felt in duty bound to publish regarding the Toronto Industrial cheese awards. We entertain the same opinion still, and find no fault with Mr. McAdam for adhering to what he believes was a correct judgment on his part. We find that our view has the hearty concurrence of the best cheese experts of Canada, who examined the winning exhibits. It is not in the interest of Canadian dairying that a premium should be put upon the making of cheese which are not best suited to our foreign trade, on which the whole industry rests. With regard to the divisions on the score card used, our view was based upon knowledge of the methods adopted by our best Canadian judges in examining cheese. As regards flavor and taste, there are not seven out of ten of our expert cheese buyers who, in examining cheese in a factory, will ever *taste* it. True, there is a distinction between the two, but in ninety-nine cases out of a hundred, if the flavor of a cheese is all right, there will be nothing objectionable about the taste; while, on the other hand, if there is anything wrong with the taste, it is always shown in the flavor as well. For these reasons, we think the two should be included under that of flavor, and that it is not necessary to have the two divisions. As regards the four points of quality we placed under texture, we admit that there is a slight distinction between them, but submit that it is wholly unnecessary to make so many divisions, and that a fully satisfactory test of a cheese can be made under the one heading. It seems very difficult to us, however, to draw a distinction between soundness and firmness, in judging cheese. If cheese is firm, it ought to be sound, and *vice versa*. It does appear as if Mr. McAdam, in order to carry out his theory of ten points of quality with a maximum of ten to each one, has had to create imaginary divisions so as to make up the number. We entirely disagree with him when he states that texture is alone determined by sight. We speak of "silky" or "rough" texture in cheese. Now, it is impossible to tell whether a cheese possesses either of these qualities by sight alone. It can only be told by taking a piece of cheese and squeezing or rubbing it between the fingers. Mr. McAdam states that the three first points of quality in cheese are "taste, flavor and richness," but he fails to recognize this in his score card. According to the score card, they are all first points of quality. Style and neatness (to our minds, fifth points of quality) are given a maximum of ten, the same as taste, flavor and richness, which he states are the first points of quality. We quite agree with Mr. McAdam's remarks, that the use of a score card is the proper method of judging cheese, but it is upon the kind of score card used that we differ. The one used by him is, to our minds, "complicated" and "cumbersome," and we think that a simpler one, similar to that used at the World's Fair, would enable any judge to pass a correct judgment.

We would heartily endorse what he says in regard to giving object lesson by cutting up prize cheese and explaining the different points in quality to exhibitors and others. This is something that the managers of our leading dairy exhibitions should consider and endeavor to make practical.]

A writer in Hoard's Dairyman thus eases himself on the tuberculosis question:—"Isn't it time to stop boasting of our 19th Century civilization and progress? It's an age of lunatics. Speculators and capitalists have gone mad for money, workmen on strikes, and the swish of the old cow's tail in fly time sings to the ear of the patient milker nothing but tuberculosis. What utter foolishness! If we were to try and stamp tuberculosis out of the human race in the same manner the cow people are doing, who would be left? Well, just enough to start a Noah in the task of re-peopleing the earth. A doctor, who had seen many a corpse dissected, told me that it was hard to find one without traces of tuberculosis, and yet very few had died of it, or even been seriously injured thereby. Why not use common sense. Kill the seriously affected animals. Stop in-and-in-breeding. Give more pure, fresh air; keep cleaner. Don't force things quite so hard and fast in breeding and feeding; and then let in plenty of God's great microbe killer, the sunlight. Four-fifths of the consumptives could be cured if they and their fool friends had a little sense, and would use it; but they haven't, and no more has the cow and her fool friends."

## Some Suggestions for Winter Creameries.

BY J. A. RUDDICK, OF THE DAIRY COMMISSIONER'S STAFF.

The indications are that there will be quite a large number of the cheese factories in Ontario and Quebec converted into creameries for the coming winter, and it is possible that some of our experience during the last three seasons may be of service to those who will have charge of fitting up these factories for the manufacture of butter.

When the buttermaking is to be carried on in the ordinary cheesemaking room, it is usually found most convenient to have the receiving vat placed on the floor, the same as for cheesemaking, and therefore on the same level as the separator. In fact, it is not often practical to have the vat elevated high enough to allow the milk to flow direct to the separator, and, such being the case, some means must be employed for raising it to the proper height.

Three different plans have been tried, viz.: pumping, dipping, and the ejector or steam jet pump. In all cases a small, intermediate vat of say 10 or 15 gals. capacity is used, and this is placed high enough so that the feed for the separator is taken from it.

I like the ejector plan best. A pump is very hard to keep clean; there is too much labor involved in dipping the milk, and, besides, the feed is apt to be irregular, owing to the variable height of milk in the intermediate vat. A No. 2 X. L. Ejector, made by the Penberthy Injector Company, of Windsor, Ont., will raise sufficient milk to supply any of the large-sized separators, and by placing a globe-valve in the suction pipe, just below the ejector, it can be regulated so as to give a uniform and steady supply. While lifting the milk it will also raise the temperature 20 to 30 degrees, and I consider this latter feature a big advantage, as it does away with the necessity for using a heater or keeping a large body of milk heated to a high temperature in the vat all the time the separating is going on. It is not a good plan to do all the heating in the receiving vat when there is any quantity of milk, for it is apt to get a little old or stale, and the flavor and keeping quality of the butter injured accordingly. When the ejector is used it is not necessary to heat the milk in the vat higher than 60 or 65 degrees and it will take no harm at that temperature. The style of ejector named is so constructed as to be easily disconnected, the inside parts drop out, and the whole thing can be thoroughly cleaned.

On account of the dampness which is apt to prevail in these winter creameries, I would advise the use of iron pulleys rather than wooden ones made of pieces glued together. The moisture causes the glue to soften and the pulley comes apart. For the same reason it is also better to use rubber belting than leather, for dampness is hard on leather belts. Rubber is the cheaper of the two, but care must be taken that the edges do not rub against anything, for it will wear quickly in that case.

All unnecessary escape of steam should be avoided, for a very small leak, if continual, will create a lot of moisture in a room.

Of course, if the room is warm enough and properly ventilated, there will be no trouble with excessive dampness.

## QUESTIONS AND ANSWERS.

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

## Veterinary.

## LAMED FROM BRUISED FROG.

H. DOAK:—"I have an entire horse that has been lame since last winter in one forefoot. About a month ago it gathered and discharged considerable matter, and seemed to improve, but now it is as bad as ever. When he stands he keeps the foot projected on the ground ahead of him. If he bruised the frog of foot would it make him lame?"

[From the length of time that your horse has been lame, I am inclined to think that you have a bruised heel or festering corn, which has undermined the sole and made its way out through the soft tissues of the frog. Get a shoeing-smith to pare the sole and frog down to the sensitive structures, then dress with some oxide of zinc ointment. This will soften the horn and allow any matter that has accumulated between the sole and frog of foot free exit. Report direct if the treatment is successful.]

DR. WM. MOLE, M. R. C. V. S., Toronto, Ont.]

## RICKETS IN YOUNG PIG.

ARTHUR SIMPSON:—"I have a pig six months old which has been ailing two weeks. I notice that the nose, throat, gums, are swollen, and very tender, so that he cannot eat hard food; he is also lame in all his legs, fore one's the most; he breathes hard with the mouth open; in fairly good condition; eats soft food very well, but not a great amount. Please inform me through your valuable paper the trouble, cause and remedy?"

[I am inclined to think from your description that your pig is suffering from "Rickets," due to an insufficient quantity of lime salts in the bone. The

bones generally are softened; the ends of the long bones are enlarged, giving rise to the lameness; as a result of these alterations, the bones become deformed and their growth arrested. It is due to improper feeding, to the use of food devoid of calcareous matter (or earthy material), such as Indian corn, etc. Treatment: Give a mild aperient, say half-an-ounce of powdered jalap, placed in his food; then place a quantity of bone dust, ashes or crushed egg shells within reach. For diet, plenty of milk mixed with oatmeal, shorts, and pea meal. A small piece of unslaked lime placed in the trough once a day will be advantageous.

DR. WM. MOLE, M. R. C. V. S.]

## Miscellaneous.

## SQUEALING HOGS.

SWINEHERD:—"I have been feeding a lot of hogs that appear to do a remarkable amount of squealing at meal time, and have been told that this is a sign that they are 'poor feeders.' Is that the case?"

[Our reader means by "poor feeders," that these pigs consume a great deal more food than some others to make a pound of gain. A good many have that impression regarding "squealers," but it is not necessarily correct. As practical and careful an investigator as Prof. Henry, of the Wisconsin Agricultural Experiment Station, who has gone very exhaustively into the subject of hog feeding, makes this statement in one of his official reports upon the very point raised by our correspondent: "We have found that our best gains came from hogs so anxious at meal times for their food, that they would show their greedy appetite by squealing." What have our readers found?]

## RYE FOR GREEN MANURING.

JETHRO JULL:—"1. Would you please inform your numerous readers if there is any difference between fall and spring rye, and if fall rye can be sowed to advantage in the spring with clover and leguminous crops for ploughing down; or would it be advisable to sow rye in the fall and sow vetches or clover on top of same in spring, harrowed in; or if rye better be sowed by itself, and at what time; for if sown in the fall vetches will not be sufficiently advanced by the time rye loses its succulent properties?"

"2. As we want to weed out our poor dairy cows, would you please inform me respecting a cheap Babcock Tester?"

[1. Wherever fall rye will grow well it is preferable to the spring sort for any purpose, as its longer season of growth induces a much better branched and deeper root than spring grain can obtain, which makes a stronger plant. It should have been sown before Oct. 1st, but will do fairly well sown as late as Oct. 15th in a favorable season. If sown thinly or winter killed to any extent, a light seeding of a leguminous crop, as vetches, should make a fine combination for ploughing under. Clover would not make growth enough to plough under along with rye. We recommend rye for ploughing under for no other reason than to improve the mechanical condition of the soil, and to smother out weeds, as it is not an atmospheric feeder, and, therefore, just returns to the soil what it has withdrawn. Rye can, however, be made use of by feeding off by sheep or cattle in the spring, and then the land may be seeded with peas or vetches, to be ploughed under or fed off. If the mechanical condition is to be improved, the crop should be ploughed under. There is no more essential difference between fall and spring rye than there is between fall and spring wheat.

"2. A good Babcock Tester for farm use can be obtained all complete, with half a gallon of acid, for about \$6.]

## APPLE FERTILIZATION.

JAMES HUMPHREY, Troy:—"Will an orchard of Northern Spy apples bear profitably alone, or is it necessary that the blossoms should be fertilized with other varieties?"

[It is not advisable to plant an orchard of Northern Spy, or any other one variety, alone. There are a number of varieties of apples, of which the Northern Spy is one, that are more or less self-sterile; that is, their pollen does not properly fertilize their own blossoms, although it may be quite potent on the blossoms of some other variety. Recent experiments, carried on by the United States Department of Agriculture, have clearly shown this to be the case with many varieties of pears, and even those varieties which were self-fertile were found to bear larger fruit, and more of it, when their blossoms were fertilized with pollen from some other variety.

It has long been known that nature abhors self-fertilization, and that she resorts to various modifications of the flower to prevent it and secure cross-fertilization. In planting an orchard, then, we should avoid planting a large number of any one variety in a block, particularly such varieties as the Northern Spy, Gravenstein, Roxbury Russet, etc., which are known to be more or less self-sterile.

Where an orchard is already planted and this fact has been disregarded, the mistake may be rectified by grafting a few trees throughout the orchard with some other variety which blooms about the same time; and it may be well to add that a few hives of bees in the vicinity will greatly help in the distribution of pollen from one variety to another.

H. L. HUTT, B. S. A., Horticulturist, Ontario Agricultural College.]

## APIARY.

## Preparing for Winter.

W. D. DICKSON, Little Rideau:—"1. Why did my bees not work in the sections this last summer? I bought them from a prominent Ontario beekeeper, so I presume the quality was all right. Neither original or the swarm made a drop of honey in the sections. What shall I do next year?"

"2. My box has a bottom nailed fast to the body of the hive. How shall I do when the time comes to pack away for winter? I intend to put them in an outhouse, where it is cold, but no snow can reach them. This is my first season with bees. How shall I do so as to place the entrance clear, and how much of an entrance shall I leave for the bees to come out of? Shall I pack the sawdust clear over top as well as sides, or shall I leave some kind of a ventilator through lid of hive? I intend to place them (the hives) side by side in a long box and completely surround them in sawdust, of course leaving the entrance clear.

"3. When shall I remove the bees from their summer stands?"

[1st. I take it the reason your bees did not work in sections was because the yield of honey was not large enough to force them to do so. Hundreds of colonies have done the same as yours, and many that did store in the sections have to be fed this fall to give them stores enough for winter. I don't think there was any fault in the bees.

2nd. Your hives are in right trim to pack for winter with the bottoms nailed on. If there are no cleats fastened on to the under part of bottom, I would lay a piece of stick, about one inch thick, at either end of the bottom board to raise it up some from the bottom of the box in which it is packed, thus making it impossible for any dampness that might pass through the bottom of the case to come in contact with the hive. In placing the hive in the case, shove it far enough to front of case so the projection of bottom board touches the front of case. Now cut a hole, six inches long by one inch in depth, in the front of case and have the bottom of the hole come on a level with the upper surface of bottom board; this is for the bees to fly in and out of. Next, take two small pieces of wood, one by one and a-half inches, and long enough to reach from the case to the hive front. Take another piece as wide as the former pieces are long and eight inches long; nail the two shorter pieces on the ends of the long piece; slip this bridge down in front of the hive, between the hive and front of case. This, you will see, forms a perfect entrance for the bees and protects the entrance of the hive from becoming choked with the packing. After having seen that the quilt is all right and covers the hives completely, you are then ready for the packing. I never had very good success packing with sawdust alone, and I would advise you not to use it thus; it packs too closely and is one of the worst packings to draw and hold dampness. If I were obliged to use sawdust I would mix it with plain shavings, say half and half; the shavings keep it from packing so closely and allow the moisture from the bees to pass off more readily. The best packing is forest leaves. If you can get hold of plenty of these, use them in preference to sawdust. Pack all around the sides of hive, and over the top, leaving off the cover of hive, but see that the cover of case is in good order. Let me protest emphatically against putting bees in an outhouse. It is one of the worst places. Pack them in their cases and leave them right out in the open air where the sun can shine on them, and you will have better success. As an illustration, I will give you an experience of one of my neighbors last winter. He came into my shop during the fore part of the winter, and I asked him if he had his bees in good shape for winter? He said he had, as they were packed and put away in his driving-shed. Well, I said, Mr. H., you had better take my advice and put them outside. Well, he could not see but that they were better in there than out in the cold. However, he concluded he would risk two colonies outside, but the rest he kept in. Suffice it to say that the two he left out in the cold to die, were the only ones he had alive this spring. Almost any shed, unless it is made frost-proof, is colder than it is outside on sunshiny days, and I will show you how to prove it next winter. Take a hive and place it in a packing box and pack it the same as you would a colony of bees. Now, place it inside of a driving-shed, or any out-building; hang a thermometer in it. Do the same with another hive and leave it outside where the sun can shine on it. Take the readings of each thermometer once every day through the winter, and you will be surprised to see the difference of the readings of the two when added up in the spring.

3rd. I never like moving bees at any time of the year, unless I am wintering in the cellar; then I would put them in about the middle of November. But if I am going to pack them, I always leave them on their stands as in summer, and have a case for each hive, and pack them separately. Then, I have no bother moving hives and no bees getting lost in fall and spring, by changing the location of the hives, as is usually the case when hives are being moved to different places to be prepared for winter. But if you must move them, do it as late in the season as you can before snow comes.

JOHN MYERS.

POULTRY.

Poultry on the Farm.

BY MRS. IDA E. TILSON.

My mother tells how the fowls on her father's farm had no regular abiding place, but roosted under a wagon-shed, lived on corn, drank at the brook in summer, and went without water in winter. They usually stole their nests under sheds or in the pawpaw grove; consequently she was occasionally promised an egg to eat, if she would watch and hunt them. When biddies sat untimely, she threw them head over heels down hill to the shallow brook—certainly not pleasant for the hens. My father tells, likewise, of a neighbor's boy, in his youth, who confidentially said: "I am so glad the teacher is coming to board at our house, because when there is company I have a whole egg to eat." How the poultry industry has come forward since then! The annual egg product of the United States, according to official reports, advanced from fifty-five to ninety-eight million dollars' worth in the ten years preceding 1889, over three-quarters of a billion dozen eggs being produced in 1889. Except the bonanza farmers, one of whom laughingly told me he didn't want to talk about anything less than a hundred dollars, everybody wished to know more about poultry and do better. People begin to realize the value of having their next meal running around on its own legs, taking care of itself till wanted, as contrasted with a beef or swine carcass, part of which must be taken by the neighbors or pickled. The older a country and the more its economy of space, the more does poultry come forward to replace larger stock, till it is true that even the crowded City of Paris itself is a great poultry-raising centre.

The location of hen-houses was a popular subject at Institutes. One lady said her father dug down, on the level, to form a warm, cellar-like house, but the water had stood two feet deep in it, and a pet Cochin did drown. The experience with my own houses was such that I understood her case. My first one was built right on level, at edge of a barnyard. Though all above ground, it was troubled at certain times by water leaking in, till we banked pretty high—so high, indeed, as to rot the sills. Then, wisdom learned, my second house had its location graded up before the building was put there, and the latter is perfectly free from a damp bottom. I told the lady, if they had graded up a knoll high enough that the bottom of hole, dug into this knoll, could still have been above general surface of land, probably no trouble would have followed. Rainfall upon just a knoll is comparatively little and runs off quickly. Where, however, there is hard pan not far below the surface, I know of a fine dwelling house, on a previously improved lot, with cemented cellar which sometimes has water, that cannot sink through that hard pan down into the earth, collect and then filter even through its cement. I had supposed a "dug-out" in any side-hill would be a fine hen-house for the cold West, and was taken to see three successful places. They were in sandy, apparently unstratified knolls, one so small an elevation as to be just right height for the purpose. I noticed the top of each cave or "dug-out" was raised above remainder of its knoll, and graded, like a tent or hip-roof, to slope in all directions. One had close on each side of house, a wooden drain running from top to bottom of hill. Unfortunately, I could not see any of those excavations complained of, some of which were said to be in dry soils. One failure was in a level with the top of bank probably went off on a level with surrounding country. Such a location or a large hill would get full benefit of rainfall, and if there were impervious strata, the water would run along them and come out on the sides. I found every one who had tried taking for the hens a corner of his barn, commending that plan, as does Mr. Gilbert, Poultry Manager, Central Experimental Farm, Ottawa. If a shed, for a scratching place, is thrown out from barn, and is built quite high, in summer the movable roosts, which I always recommend, could be moved out there, and an airy roosting room thus secured, so near the cozy one of the winter that the biddies would not feel strange. The room proper, in barn, could then easily be both laying and sitting department. I found a man and his daughter very successful with poultry in one corner of a basement under barn, on a side hill with south exposure, where the hens worked in bedding and manure thrown out, and did well without a scratching shed. This beautiful barn had its basement made dry by tile drainage. As the hay was pushed down from above, only as needed, the hens did not soil it, though given free range of the whole basement stabling. If feared that they may soil hay, no communication between hen-house corner and remainder of barn need be had. A lady told me she got no eggs last winter, except from one pullet that insisted on living and laying in the shore-barn, and gave an egg nearly every day for weeks. "Move all the hens into your horse-barn," I said. "Oh, my husband will not let me," she said; "he is afraid his horses might get lice." "Do not have lice on your hens, then," I continued; "or, better yet, coax hard for other warm and separate poultry quarters." Though I did not find in Minn. the sassafras of Mich., the elder of Wis., or the per-simmon of Ill., all with aromas which will clear poultry houses of pests, yet cedar grows in some poultry houses of pests, yet cedar grows in some places, and onions, tansy and kerosene surely flourish everywhere. A few persons had not heard

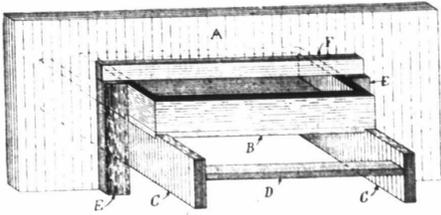
of pyrethrum or Persian chamomile, so good to apply on fowls themselves; hence, after inquiries as to whether it was a mixture or home grown, I learned to mention that it is of foreign growth, bought already prepared at drugstores. Our druggist tells me Dalmatian insect powder is the same thing.

This past dry season, I chopped many herbs, like catnip, horsemint and dandelion, and stirred them into puddings. Our melon rinds thrown near hen-house were eaten to the green, and the cores and parings of our pie apples, chopped up, disappeared entirely. Our spare cucumbers were also utilized; that is, large ones, such as persons would not eat.

Water Trough for Poultry-house.

BY A. T. GILBERT.

In designing a poultry-house, considerable thought should be given to the water supply, and its arrangement for the convenience of fowls, so that they may drink, regardless of the apartment they occupy. The accompanying illustration will



give the readers of the FARMER'S ADVOCATE, who contemplate building a poultry-house, an idea of how to construct and arrange the same so that the fowls may drink when inclosed in either roosting or feeding room.

In reference to the sketch submitted, A represents a part of partition of poultry-house which separates the sleeping apartment from feeding room; B is water trough, with galvanized sheet-iron lining. For 50 fowls, the trough should contain about 900 cubic inches of water; consequently, its inside measurement should be 3x10x30 inches. C are two pieces of board for the support of trough, and are notched out 1/4-inch, as shown, to keep the trough in a central position; their size should be 1x6x24 inches, and they should be securely nailed to E and partition A. D are perches for fowls to mount when they desire to drink, and are cut to proper lengths and nailed to C, as shown. E represents four pieces of 2x4-inch scantling, 18 inches long, and nailed properly to the partition, where shown; they are merely for the support of pieces C. F are pieces nailed to both sides of partition over trough, as shown, and should be cut 1x6x40 inches.

That which is represented on one side of the partition is an exact counterpart of what is on the other side.

The trough should be constructed out of good dry pine, and then taken to a local tinsmith and have him prepare a good water-tight lining, and then press it into position, nailing the same to top edges of trough with inch finishing nails. Those in my poultry-house are about the size of the above, and the smith's charges were 50 cents each.

The top of trough should be 18 inches from the floor, thus preventing the busy fowls, in their search for food, from scratching litter or dirt into it. Care should be taken to allow space enough for removing trough from its seat, so that it may be cleaned, as more or less dirt will accumulate in time.

Something About Ducks.

[Continued from page 392.]

The breeding ducks that are to be kept over require a comfortable shelter quite as much as other classes of fowls, and their houses should always be kept well supplied with clean bedding. Since the early market is best, it is imperative that the breeding ducks begin to lay early. To induce early laying, feed well. A well-fed, well-cared-for duck will begin laying early in February, or even in January, while one which is chiefly skin and feathers will not begin till late in March or in April. For winter feeding, ground grain is preferred to whole. Small potatoes boiled soft, mashed, and stirred thick with coarse meal, makes one of the best of feeds. Ducks require plenty of gravel in summer; in winter, pounded oyster shells are mixed with their soft food, and they eat it with avidity and it is good for them. The shells seem a most excellent substitute for gravel, if, indeed, they are not superior to it. It is hardly possible to give too much. For a green food cabbage is the best; they should have a feed of it at least once a week. Turnips, chopped moderately fine, are next in value, but do not equal cabbage. Green food, gravel or oyster shells, ground grain, and a comfortable house, are, then, the essentials to winter care of ducks. Their supper may consist of whole grain.

One drawback to profit in duck raising is the number of male fowls that must be kept over. One drake to three ducks being the usual rule. Breeding stock should not be allowed to get too old, as the old drakes are apt to get ugly. It is a wise precaution to keep them away from the ducklings.

The feathers of the duck are not as valuable as those of the goose, and since the forty-pound feather-bed has been superseded by the hair mattress, neither geese or duck feathers have been in great request. Most breeders now never pick their ducks, not believing the returns worth the trouble. Sometimes the down is taken from the breast, but it ought always to be left for winter protection.

Ducks thrive much better when kept in small flocks. If you have a hundred, they will do better if divided in two flocks of fifty each. They are less liable to disease, and there is not the crowding for food, in which some get too much and others go hungry. Avoid frightening them. They huddle in a heap when scared, piling on top of each other, and as they are heavy fowls, the result, though not at once apparent, is seen in lame legs and wings. Handle a duck gently, and never carry it by the legs with the head down, for they are easily injured, and a hurt fowl stops taking on flesh.

Use every means to keep them growing rapidly, for in rapid growth and an early sale lie the profits.

Ducks should never be killed till the crops are empty, which will be in eighteen or twenty hours after the last feed. The French method of killing by stabbing in the mouth is preferred by some; others cut the throat, instantly suspending the fowl with the head down to drain the blood. Dry picking is the only practice with ducks, and is the best method with all poultry designed for a city market.

With ducks, as with all other fowls to be raised for profit, it is best to start with a distinct breed and keep it pure. In-breeding must not be carried too far without the introduction of birds not akin to the flock. The Pekin, as I have before stated, is the best breed; it is hardy, a quick grower, and gives a large carcass.

But duck raising is no "snap." Like any other business, brains and hard work must be active partners. And before "going in for ducks," it is highly important to find out whether you will have a market at paying prices after your ducks are grown. Poultry literature is very seductive reading. Ten thousand ducklings, weighing five pounds each, and sold at twenty cents a pound, looks a mighty easy way to earn \$1,000. It is—on paper. I have had the curiosity to watch the market for this class of poultry for some weeks now, and am inclined to think that duck culture is being "boomed" just as present. No doubt prices are high in New York City early in April and May, when the poultry supply is somewhat limited and the spring chicken has not attained his pinfeathers, but thirty cents a pound—a figure often named in connection with the output of these big breeding establishments—is a price for a very short time only, and only obtainable by those near at hand, who can watch the market with both eyes. In Boston, in July, ducks were quoted at 14 cents retail; in Detroit, the same month, they were on a parity with chickens, at eight cents. Though there may be money in ducks at low prices, because of their quick maturity, good weight and comparative immunity from disease, it isn't "big money"—only moderate profits to the ordinary grower. He who goes into the business expecting more, and led thereto by the overdrawn accounts of the newspapers, is going to be badly disappointed, to the best of my belief.

Eggs in a Tree.

BY JOHN J. LENTON.

A hen may live in the tree tops, but what about eggs? One of the most difficult problems is that of keeping the flock in winter so as to afford all the conditions of spring, for upon this depends whether the hens will lay or not. There is a class of educated and intelligent poultrymen, who affirm that the roosting of hens in the tree-tops is not always an unwise system, and they even go so far as to state that they have known fowls that were left outside to be free from disease, when those that were given the most comfortable quarters were dying of roup. These facts, however, do not convince the progressive farmer that the open air is better than shelter, for, if the fowls can, by generations and decades of exposure, become inured to hardships, the same rule applies to the horse, cow, sheep and hog. That it has been the case with horses, and gradually degenerated them, may be shown by the Shetland ponies and the wild ponies on the islands along the South Atlantic coast; and it is also a fact that animals that have become capable of withstanding exposure have lost in fecundity and are becoming fewer.

With the domestic fowls, the exposed flock produces nothing in winter. Being long accustomed to applying all its energies to simply existing, the production of eggs by the hen that is exposed in winter is not expected. Only in spring, after the severity of winter has passed, is the hen expected to begin laying. If she then begins to lay and gives a good report of herself until late in the fall, she may prove profitable, because her ability to forage lessens her expenses.

It may be considered that one of the causes of disease in pure-bred flocks is the procuring of fowls from elsewhere. As farmers who allow their hens to remain outside seldom procure new blood, their flocks are more exempt from roup than those of the poultryman, who secures a choice hen wherever he finds her. Roup is contagious, and is more frequently the result of contact than exposure, yet it will occur in flocks that are unable to endure the hardships of tree-tops in winter. The largest profits, however, have been realized from flocks that have received the most care and attention.

Why did  
summer?  
keeper,  
Neither  
y in the

the body  
comes  
em in an  
an reach  
s. How  
ear, and  
the bees  
lear over  
ind of a  
to place  
box and  
f course

from their

not work  
was not  
ndreds of  
nd many  
fed this  
I don't

pack for  
there are  
bottom, I  
thick, at  
t up some  
ness packed,  
ness that  
se to come  
e hive in  
case so the  
e front of  
y one inch  
the bottom  
er surface

fly in and  
od, one by  
a to reach  
ke another  
long and  
eces on the  
e down in  
d front of  
t entrance  
of the hive  
ng. After  
and covers  
y for the  
ess packing  
advise you  
id is one of  
mpness. If  
mix it with  
e shavings  
allow the  
e readily.  
ou can get  
eference to  
f hive, and  
ood order.  
utting bees  
orst places.  
hem right  
n shine on  
ess. As an  
ce of one of  
to my shop  
I asked him  
winter? He  
out away in  
y, you had  
side. Well,  
ter in there  
concluded he  
the rest he  
he left out  
he had alive  
it is made  
on sunshiny  
rove it next  
packing box  
ony of bees.  
or any out-  
Do the same  
e where the  
ngs of each  
the winter,  
ifference of  
the spring.  
y time of the  
ellar; then I  
f November.  
always leave  
I have a case  
ly. Then, I  
bees getting  
e location of  
en hives are  
prepared for  
o it as late in  
es.

HN MYERS.

HN MYERS.

HN MYERS.

HN MYERS.

HN MYERS.

## VETERINARY.

## Domestic Veterinary Treatment of the Animals of the Farm.

BY DR. WM. MOLE, M. R. C. V. S.

Having described the four stomachs of the cow, it only remains to mention the names of the small and large intestines. The small intestines are the duodenum, the jejunum and the ileum; the large are divided into the caecum, the colon and the rectum. This division is purely artificial, and for our purpose a better definition is the fixed and free portion of the bowels. From recent experiments and recorded observations, it has been proved beyond all doubt that feeding cattle twice a day is the best method, and, when we look at the anatomical construction of the animal, it is only to be expected that this method would be the most expedient. The cow's stomach, being constructed on an entirely different plan from that of the horse, requires a different method of treatment as to its supply of food; it receives very little preparation previous to being conveyed into the rumen, and when this chamber is filled, as it ought to be in artificial feeding, and is so in natural, the animal generally lies down on its broad sternum, or chest bone, and starts ruminating as before described. To answer an enquiry as to why the calf's fourth stomach is so largely developed, we must make a little digression from the order of description and give the explanation.

Almost all diseases of the calf originate in the digestive system, or rather the fourth stomach, which is the only one required whilst the young animal feeds on milk derived from its mother. Perhaps there are few diseases the cause of which is so little understood by the farmer, and for which there are so many absurd nostrums employed as the disease known as "White Scour in Calves." It is almost entirely confined to sucklings, and one of the principal reasons why calf food, calf meal, and other artificial foods have met with so much favor amongst dairymen. This disease usually occurs in rearing calves taken from their natural food, "calves reared by hand, or at the pail," as it is termed, or, rather, prevented from obtaining the rich first milk from the newly-calved cow; this milk contains a natural creamy, oily substance called beatings, which acts as a natural purge to the young animal. Hence, constipation is first of all set up, followed by an acid secretion from the lining membrane of the intestines, which coagulates the milk and separates it into its component parts, the curd or cheesy part remaining as a foreign agent in the intestines, and the fluid or whey part coming away in the form of white semi-fluid feces. So that the principal function of the fourth stomach of the calf is for the purpose of secreting an acid material termed "rennet," this effecting a change in the milk necessary to digestion in the formation of chyle, which can be absorbed by the lymphatics slowly. The milk, instead of being changed gradually and formed into very fine curds or flakes, is coagulated quickly, and large indigestible curds are formed. This produces almost all the diseases of calves, and when the disorder has arrived at a certain stage, and the muscles of the neck and thigh are affected with spasms, and give rise to the description known as cords, white scour, known amongst veterinary surgeons as gastro enteritis of calves.

However desirable it is to cure the above-mentioned complaint, to prevent it is of still more importance, and obviously points to the fact, "do not deprive the calf of the first milk from a newly-calved cow," if you do, expect to be troubled with this complaint and death of all your calves. One of the best domestic remedies is lime water, which may be given at the rate of about two wineglassfuls per day, or, say, a tablespoonful at each feeding; this will correct the acidity, as each successive supply of milk, even from a newly-calved cow, coagulates and acts as a fresh irritant.

Another plan which has been successful in our lands, is to substitute half the quantity of milk with linseed gruel, which, by acting as a gentle laxative, will prevent the accumulation of the coagulated milk. Should the scour become chronic, it generally ends in rapid emaciation and death. There are a few other remedies, but, as they come under the domain of the veterinary surgeon, cannot well be inserted here.

## CHOKING.

Impaction of the food or roots in the esophagus or gullet is an accident of very common occurrence on a dairy farm, and is most frequently seen when animals are fed on roots unpulped. Since the introduction of turnip cutters it is not so common as formerly. When once an animal has choked he is always liable to a return of the accident. Is frequently caused by fright, especially by dogs barking or from shouts and blows of the attendant. Potatoes seem more prone to lodge in the esophagus than any of the roots, and when the obstruction is low down we find that part above distended with softened food. The symptoms vary, and if the obstruction is in the lower portion of the chest, it is difficult to diagnose; but poking out of the head, coughing or blasting, with a discharge of viscid,ropy saliva from the mouth, will be generally present. Attempts at regurgitation; difficult, noisy breathing, sometimes attended with a moan; the breathing becomes more difficult as the tympany or swelling of the paunch increases. This symptom is always present and attended with immediate danger. Should there be any doubt, a drench of

water will cause the gullet to be distended. The diagnosis is complete, if on passing the probang an obstruction is encountered. Careful manipulation of the whole of the gullet, from the throat to the chest, should be made, and if it can be pressed upward and lodged in the pharynx itself, a small hand introduced into the mouth may extract it without much difficulty. The operation will be assisted by giving the animal a little linseed oil. If manipulation by the hand is unattended with success, and the symptoms denote danger, no time should be lost in passing the probang, which should be from six to seven feet long, and have a cup-shaped piece of metal at the end. The incautious use of whipstocks, rope, fork handles, etc., are always attended by danger. More than one case has come under our notice of injury from these instruments. We have seen a good domestic probang manufactured out of india rubber hose, filled with cane or rope, about one inch being the best size. The mouth is to be kept open by a gag of wood, and the head slightly raised and extended to prevent biting the probang. It should be well oiled or smeared with lard before being introduced. On passing it into the mouth by a little pressure, it will enter over the epiglottis into the esophagus where the obstruction is found, which is indicated by feeling the probang stop against some solid body. Equal and gently increasing pressure should be made, when, in the majority of cases, the root will give way before the probang enters the chest into the rumen. This may be known by the immediate relief given, and the exit of a great quantity of gas from the paunch. Should, however, it not give way at once, the pressure may be discontinued for a few seconds to allow of the muscular tissues to regain their tone, and again renewed, and so on, until success is attained.

A writer's lot is not an easy one, to describe all the peculiarities that may be met with in choking. Potatoes, apples, decayed vegetable matter, dry meal; in fact, almost anything that a cow will take, and she takes some very curious articles of attire: stockings, sheets and shirts, are sometimes missed from the hedges and clothes lines; also, other articles of underwear, etc. We might as well here say that, in severe cases, the owner should not trust to his own judgment, but employ a properly qualified man who has instruments especially constructed for these cases.

An enquiry often launched at a veterinary surgeon is: "My cow has lost her cud. What shall I do to make her find it?" I have tried a red herring, a pound of pork, an old slipper, a dog's tail, an otter's foot. I have given her slippery elm and cornmeal, and now I don't know what to do. In fact, nothing is too absurd, or outrageous, to make a cow find her cud. Only those who have been in close connection with farmers, know of the many absurd nostrums that have been tried. Our only regret at the present moment is that we have kept no record. An ounce of carpet tacks seems the only climax we can recall at present writing. A pearl night-shirt button, tied on a string, was one we well remember; and my pupil at the time suggested to the man that "a looking-glass and night-light would very likely find that cud." But to return to our subject. When a cow ceases to chew the cud, or ruminate, as we call it, it is a sure sign of disease, but rarely a disease in itself.

Most frequently symptomatic of impaction of the third stomach, or an accumulation of dry fibrous material between the leaves; the hard, dry, fibrous stalks of Indian corn that have lain in the fields all the fall, and fed unchopped, will often give rise to this state of affairs. This impaction of the omasum is known in different parts of the country by a variety of names: Maw-bound, fardel-bound, and bound in the fable crop; although many have long lost their application, for which we have much to be thankful.

Another form of the loss of cud is sometimes seen as a result of the animal having been paunched; that is, the animal's bowels are stabbed with a knife to let out the gas in hoven or blown from gorging clover. After this operation, when performed by unskilled hands, adhesion of the serous coats of the abdomen takes place, the consequence of inflammation, or, in other words, the stomach sticks to the sides, and rumination is in consequence more or less imperfect. This operation should always be entrusted to a veterinarian to insert the trocar and canula and so prevent this injury. It is imperative when adhesion has taken place, for only can this injury be remedied by an operation, and that under extreme precautions to prevent fatal results.

A little comedy was once enacted in our presence at a farm house, as follows:—

"Ho, Dick, go over to Mr. Bleendenfust and ask him to come over and see my cow. She has lost her cud."

Enter Mr. B. (picking up the end of cow tail): "Ah! Hum! Good job you sent for me. She's got wolf tail, lapping the horns. No wonder she's sick. She got 'oller 'orn. Fetch me a gimblet, quick. She must have room made to let the wolf blood out. I near forgot her tail. Lend me your knife (making an incision about three inches long). Now, then, rub plenty of salt in and bind it up. Yes; give her a pound of pork, and I guess she will be all right."

Two days elapse. Cow not doing well; does not return to her cud.

"What say; send for Doc. Bailing and he maybe will do something."

Doc. arrives, and sloughing of the tail has commenced a discharge of blood from nostrils; sympathetic fever sets in, and cow dies.

"Doc. did not do anything anyway; only charged me \$5.00."

What we say is: send for the surgeon at the earliest possible moment; let him earn his fee; take his advice; give the medicine according to directions, and all these cases make a good recovery when treated early.

Tympanitis, hoven or blown will also give rise to the symptoms, and may be described as indigestion and distension of the rumen with gaseous fluid. The cause seems to be due to the suspension of the natural function of digestion and peristaltic movements of stomach; consequent fermentation of the vegetable food. We meet with it more frequently in the spring months when first turned on to grass after stall-feeding during the winter. It is then described as blasting. A good domestic remedy is powdered mustard, which may be given in one ounce doses until relief is afforded; whilst it is always to be recommended to obtain for emergencies a couple of good drenches from the nearest practitioner, for the reason that farmers cannot combine successfully a purgative that is absolutely reliable. This may be obtained from the chemists as a kept-ready-prepared:—

Carminative Tincture..... 2 ozs.  
Aloes Compound Tincture..... 2 ozs.  
Ginger Tincture..... 2 ozs.  
Water..... 1 pint.  
To this add common salt..... 4 ozs.  
Water..... 1 pint.

To be given in a quart of gruel, mixed together, and repeated in one hour if relief is not afforded.

We once heard a tale told of a Western farmer who had insured his live stock against lightning, hurricanes, cyclones and windstorms. Losing a number of his cattle from blasting on new clover, made claim on the company for compensation, as he thought "a wind storm must have struck them." The insurance company replied they thought so too, but that they had a saving clause which provided against windstorms generated inside the animal's body. The vernacular we are unable to reproduce, but, "gol darn such a windstorm company," etc., etc., only faintly expressed the farmer's disgust.

## MISCELLANEOUS.

## Western Fair Prize List.

## HORSES.

BLOOD HORSES (REGISTERED)—Stallion, 4 years old and upwards—1 Fred Row, Belmont; 2 J B Martin; 3 T D Hodgins, London. Stallion, 3 years old—No exhibit. Stallion, yearling—1 W A Sage, Niletown. Stallion, any age—1 Fred Row. Mare, any age—1 C P Geary, St Thomas. Brood Mare, with foal by side, or evidence she had a foal in 1891—1 W A Sage. Filly, 2 years old—1 W A Sage; 2 A Beck, London. Foal of 1891—1 W A Sage.

SADDLE HORSES AND HUNTERS—Saddle Horses, Gelding or Mare, 1, 2 and 3 A Beck. Saddle Horses, Ladies, ridden by lady—1, 2 and 3 A Beck. Hunter (heavy weight), up to 15 stone, to be shown over jumps on Wednesday afternoon in front of grand stand—1, 2 and 3 A Beck. Hunter (light weight), up to 11 stone, to be shown over jumps on Thursday afternoon in front of grand stand—1, 2 and 3 A Beck.

COB HORSES—Pair of Cobs in harness, Geldings or Mares, under 15 hands and not less than 11 hands, must be stoutly built and have style and good action—1 A Beck.

COACH HORSES—Stallion, any age—1 Dow & Porter, St Marys.

CARRIAGE HORSES—Stallion, 4 years old and upwards—1 Jas McCartney, Thamesford; 2 David Carroll, Ealing; 3 E W Smith, Fairfield Plains. Stallion, 3 years old—1 A McKillop & Sons, West Lorne. Stallion, 2 years old—1 J R Johnson, Springfield; 2 R H Smith, Ettrick; 3 Chas Scott, White Oak. Stallion, yearling—1 J R Johnson; 2 R M Wilson, Delhi. Stallion, of any age, diploma—1 Jas McCartney, Brood Mare, with foal by side, or evidence she had a foal in 1891—1 G W Kennedy, Iderton; 2 John Haskett, Birr; 3 R W Wilson, W Kennedy, Filly, 3 years old—1 Fred Row; 2 Chas Guest, Bally. Gelding or Filly, 3 years old—1 Fred Row; 2 years old—1 Geo W Kennedy, Iderton; 2 J Haskett; 3 G E Nixon, Arva. Gelding or Filly, 1 year old—1 C D Smith, Fairfield Centre; 2 G W Kennedy; 3 T Hardy Shore, Glanworth. Foal of 1891—1 T Hardy Shore; 2 G W Kennedy; 3 R M Wilson. Pair of Matched Carriage Horses (Geldings or Mares), in harness, 16 hands and over—1 R M Wilson; 2 K Stewart, Embro; 3 Chas Ferguson, London. Pair of Matched Carriage Horses (Geldings or Mares), 15 hands and under—1 A Beck; 2 H A Howell, M D, Jarvis; 3 Jno McFarlane, Littlewood. Single Carriage Horse (Gelding or Mare) in harness, 15 hands and over—1 L Meredith, London; 2 Geo Buttery & Son, Strathroy; 3 F J Scott. Mare, any age, diploma—1 R M Wilson.

ROADSTERS—Stallion, 4 years old and upwards—1 T D Hodgins; 2 John M McIntyre, Lucan; 3 H Cargill & Son, Stallion, 3 years old—1 H Cargill & Son. Stallion, 2 years old—1 Artemas O'Neil; 2 P M Mann & Sons, Aylmer West; 3 John German, Wellburn. Stallion, yearling—1 McKillop & Son, West Lorne; 2 D Dalton. Stallion, any age, diploma—1 T D Hodgins. Brood Mare, with foal by side, or evidence she had a foal in 1891—1 D Dalton; 2 J Scandrett, Masonville; 3 Artemas O'Neil. Gelding or Filly, 3 years old—1 H Cargill & Son; 2 W J Thompson & Son; 3 Donald Stewart, Ivan. Gelding or Filly, 2 years old—1 Ed W McClurg, Ivan; 2 Rosser & Patterson, Denfield; 3 D Dalton. Gelding or Filly, yearling—1 M J Campbell, Komoka; 2 D Dalton; 3 George E Nixon. Foal of 1891—1 D Dalton; 2 Artemas O'Neil; 3 John Sinclair, Coldstream. Pair of Roadsters (Geldings or Mares) in harness—1 H Cargill & Son; 2 W Bernard, London; 3 H Dreaney, London. Single Roadster (Gelding or Mare) in harness—1 H Cargill & Son; 2 D Stewart; 3 F C Perkins, London. Mare, any age, diploma—1 M J Campbell.

HEAVY DRAUGHT HORSES (REGISTERED)—IMPORTED CLYDESDALE AND SHIREBRED—Stallion, 4 years old and upwards—1 E W & G Charlton, Duncrief; 2 R Shaw, Ayr, London; 3 John Henderson, Milburn. Stallion, 3 years old—1 Alex Holmes, Beachville. Stallion, 2 years old—1 S J Prouse, Ingersoll. Stallion, yearling—1 John Oliver, Duncrief. Stallion, any age, diploma—1 E W & G Charlton, Duncrief. Mare, any age, diploma—1 S J Prouse. Brood Mare, with foal by side, or evidence she had a foal in 1891—1 Geo Dehfeld, Granton; 2 E W & G Charlton; 3 S J Prouse. Filly, 3 years old—1 E W & G Charlton. Filly, 2 years old—1 Geo Dehfeld. Filly, yearling—1 S J Prouse. Foal of 1891—1 E W & G Charlton; 2 and 3 S J Prouse. Team (Geldings or Mares), 15 hands and over—1 S J Prouse.







DEACON BATES' AWAKENING.

A STORY OF FARM LIFE. BY MRS. C. M. LIVINGSTON.

Mrs. Bradley had come up to Berkshire with her husband and many others to attend the annual convocation of their church.

Through the half-open blinds she recognized one of them as Deacon Bates, a sturdy farmer delegate, who had shown much good sense in the few words he had spoken upon one of the resolutions in the business meeting.

"Whether farming can be made to pay or not depends a good deal upon the sort of wife a man has," Deacon Bates was saying, and this was the sentence which arrested Mrs. Bradley's attention.

"If he has to run the farm and the house too, and depend upon hired help, he can't lay up anything. One of my neighbors is in that fix; his wife don't know how to work herself; she trusts everything to help, and she spends her time gadding about. Things go at sixes and sevens; their butter and poultry are the poorest in the country, myself," he went on, tipping back his chair against the house and clasping his hands over the back of his head; "she beats everything there is going for work. She tends to everything herself; is up at daylight, and sometimes before, and her butter is tip-top; we get the biggest prices going. She's a splendid cook, too; I never need go away from home to get good victuals, now I tell you. Well, the fact is, she is as smart as a steel trap at anything she takes hold of. She makes all her own clothes and most of mine, and boards the farm hands, and once in a while takes some city boarders. I never would have been so forehanded if it hadn't been for her. And she's always at home, summer and winter; I don't believe she's been off the place, only to go to church, this twenty years."

"Poor drudge!" Mrs. Bradley exclaimed to herself, as the dinner-bell put an end to the conversation.

It so happened that in the course of that summer Mr. and Mrs. Bradley, wishing to find comfortable quarters for a few weeks in the country, near enough to the city so that Mr. Bradley could go in and out conveniently, were directed to Berkshire and to the house of Deacon Bates.

It was not until she was seated at the tea-table in the cool dining-room of the Bates family one July evening, that Mrs. Bradley identified the deacon as the man with an extraordinary wife. Mrs. Bates did not look in the least like the busy, bustling worker, Mrs. Bradley had pictured. She was a small, pale woman, with gray hair and wistful brown eyes. Her low spoken words were few, and her manner apathetic, as if life had lost its flavor, if it ever had any.

During the next few weeks Mrs. Bradley had opportunity to prove that Deacon Bates had spoken truly of his wife. Her house was a model of neatness, her "victuals" were truly delicious, and each day she turned off an amount of work, assisted only by one other pair of hands, which was truly incredible. A working machine," Mrs. Bradley thought, as she watched the treadmill round of skimming milk, churning, baking, dressing poultry, washing, ironing, cooking and washing dishes, beginning at sunrise and not by any means concluded at sunset.

Sometimes in the twilight the tired woman rested a few minutes, then Mrs. Bradley, pitying the narrow life, would try to awaken her interest in an article in the newspaper, or a bit from an amusing book; but the weary listener usually nodded in the midst of it.

One evening after tea, as Mrs. Bradley wandered about the place, she came upon Mrs. Bates, who was out under the apple tree engaged in picking chickens.

"You are at it early and late, aren't you?" Mrs. Bradley said as she watched the swift fingers travel over the plump chicken. "I heard that you were perfectly remarkable, but I had not imagined that one so persistently industrious existed."

"You heard that of me?" Mrs. Bates exclaimed, with more interest than she had ever before displayed. "How could you?"

"It was when the convention was held at Berkshire. I happened to overhear your husband sounding your praises."

Mrs. Bradley hoped that at last she had found a key to open this closed heart, as a gleam of surprise flashed for an instant on the worn face of the farmer's wife, so she exerted all her powers of pleasing; she praised the flower garden, remarked on the fine chicken, and admired the luxuriant vine which clambered over the woodhouse; but Mrs. Bates seemed absent-minded and less inclined to talk than usual. There was silence for a minute while she worked as if her life depended upon getting done at a certain moment. Mrs. Bradley was just thinking how useless it was to try to get anything out of such a wooden woman, when suddenly Mrs. Bates, without such a wooden woman, when suddenly Mrs. Bates, without lifting her eyes from her work, jerked out a question.

"Mrs. Bradley, I should like to know—would you mind telling me what it was Daniel said that day up to Berkshire?"

"Who? Mr. Bates? Oh, he said he had the best wife in the whole country."

And then, searching her memory, Mrs. Bradley gave a faithful report of what she had heard.

It was curious to note the effect of her words in the light which came into the sad eyes, and the faint flush which stole over the faded cheeks.

"Did Daniel say that?" The wistful tone and the starting tear were pitiful to the other woman, who detected not to see or hear anything. She broke off a spray of flowering currant, and said, as she tucked it in her belt and moved away.

"Yes, he did, and I quite agree with him. And then remarked to herself, "Poor creature, she has a heart, after all!"

It was an hour later, when Mrs. Bradley sat alone on the front piazza, that Deacon Bates, his chores all done, came and sat on the upper step. He was a man of much shrewd intelligence, who read his weekly religious paper from end to end, and liked to discuss an article or a doctrine with a bright woman like Mrs. Bradley.

His wife was still busy in the kitchen, as the rattling of milk pans occasionally testified. Mrs. Bradley thought of the weary life of this woman different kind heart longed to make the weary life of this woman different. If only somebody would speak a few plain words to her husband, she reflected, and get his inner voice.

"Why not do that yourself?" said her conscience that perhaps she would sometime tell her a good opportunity.

The deacon, taking off his hat, put his fingers meditatively through his gray locks, and opened up an article he had read that afternoon on the comparative merits of a trade or profession, compared with farming.

"In my opinion, he declared, after descending at some length upon the subject, "the farmer has the best of it every time; it's a healthy, independent sort of life, and he doesn't have to work like a slave the year round. In the winter he can get time to tinker at odd jobs, and to a sight of reading besides, if he's so disposed."

Then Mrs. Bradley could not help saying, "I have a good rest in the winter—fairly idle, aren't you?"

"Oh, no; there's plenty of work, but it isn't hard. In the fall, after the berries are put up, comes the drying of apples and pumpkins. Then there's sausages to make, and lard and tallow to fry out. When all that's done, there's a lot of sewing and knitting and carpet-rags. My wife makes her own carpets, and my clothes and the boys', all but our Sunday coats. Then it takes a lot of cooking to keep three or four appetites going, and we don't have any help in the winter, usually."

His listener could scarcely keep indignation from her tones as she replied: "Is it possible that all this is added to the work of the summer? I do not wonder that according to statistics a large proportion of the women confined in lunatic asylums are farmers' wives. It is a dreary life, making a woman into a perfect drudge."

"Well, I don't know," the farmer answered musingly; "we must earn our bread by the sweat of our brow. The Bible says that work's good for us. I guess it is, and a wise provision of Providence, I don't know as it's any worse for women than it is for men."

"But it seems to me that the lot of the farmer's wife is less desirable than that of her husband. According to your own account, she has less leisure, and then he seems to have more variety in his work, and it is relieved by small pleasures. In summer it is mostly out of doors; then he jumps into his wagon and is off to town two or three times a week on errands; and his neighbor often happens along and leans on the fence and talks. At noon he takes a nap in his chair or reads his paper a few minutes; but according to my observation, a farmer's wife is a drudge. She seems to have no time for these little rest places, and the consequence is, all is dreary and monotonous. It is no wonder she loses her mind and has paralysis, for her work is never done."

Deacon Bates sat silent for a minute, while he thoughtfully stroked the gray stubble on his chin, then he said slowly: "I don't know, maybe it's so. I never thought about it in just that way."

Mrs. Bates came around the corner of the house just then, and took down some clothes from the line in the side yard. Her husband watched her mechanically as she folded and placed them in the basket.

"Your wife is a marvel to me, accomplishing all she does," Mrs. Bradley said as she watched her; "but she looks worn; she will break some day suddenly, I fear. It would make a wonderful change in this house to have her busy hands and feet still forever, wouldn't it?"

The deacon turned and looked at Mrs. Bradley half wistfully, as if such a thing had never crossed his mind. Then he got up, strode over to the line just as his wife was about to lift the basket of clothes, and taking it from her, carried it into the house. She followed amazed.

Not since the first years of their married life had "Dan" offered to do any of her work. What had come over him?

When Deacon Bates had anything special on his mind he was wont to betake himself to the orchard. He went there now and sat down on a low, gnarled limb, and leaning his head against a tree, tried to think over the tormenting words Mrs. Bradley had just spoken. They nettled him. He told himself he ought to mind her own business. But, after all, he had himself worked for his own business. He had prided himself on being kind to animals and considerate toward help. Was it possible he had been cruel to his own wife? It must look so, or a good woman like Mrs. Bradley would not have spoken as she did.

The deacon was a good man. He was not going to spare himself now that his eyes were getting wide open. He went back over the years when they first came to the farm, when "Cynthia" was young and bright. She used to talk and laugh then. What had changed her into the silent woman she now was?

"If her busy hands and feet should be still forever!" What awful words! He had no more calculated on any change of that kind than that the old eight-day clock which had ticked on for forty years should suddenly leave its place. And then, that dreadful thought about farmers' wives becoming insane, he had read enough to know that melancholy is one species of insanity. What if that state should be slowly coming upon his wife, for certainly she grew more silent and sad year by year.

It must be that she did work too hard, for when he came to reckon it up and tell over to Mrs. Bradley all the work she did summer and winter, it was more than he had supposed. How could she get any time for reading or going out? And how could he thought of her never going anywhere, except to church, if he thought of her reading or going out? How different it used to be! Once she frequently went to town with him, and they occasionally took tea with a neighbor or drove in to the sewing society.

But of late years work had been so pressing that there had been no time for going out or writing company. He had just gone on to his own land and more cows and employing self was wont to be busy. He had no time to spare. And, as if helper they used to have when the farm was small. And, as if this was not enough, he had encouraged her to go on taking summer boarders occasionally, as she had herself suggested.

It was not like Deacon Bates to say much about his good resolutions, but to proceed to put them in practice as rapidly as possible. There was no light in the sitting-room when he entered but that of the moon which streamed in at the long window. He thought the room was empty till he caught sight of his wife asleep in her chair. Her mild, pale face upturned in the white light sent a pang through the heart of the self-convinced man. He went over to her and laying his hand on her head, said:

"He hated himself! For, although he had been mean, selfish and grasping, he still loved the wife of his youth. What would all he had laid her in the old burying-ground? The hardy farmer, as he sat there thinking these sharp truths in the gathering shadows, realized for a moment, and prayed with of going on without her. He bowed his head and prayed with all his soul that he might be forgiven, and that he and his wife might go together, hand in hand, down the hill to the gate that leads out of this life to life eternal.

The darkness had settled down when Deacon Bates got up and went into the house. He had gone over everything, had reconstructed affairs on a new basis and made several plans. He would have no difficulty in carrying them out, for his work had ever been law in his own house. If he had suggested any had ever been law in his own house. If he had suggested any had ever been law in his own house. If he had suggested any had ever been law in his own house.

"Father knows best," was her unvarying decision. It was not like Deacon Bates to say much about his good resolutions, but to proceed to put them in practice as rapidly as possible. There was no light in the sitting-room when he entered but that of the moon which streamed in at the long window. He thought the room was empty till he caught sight of his wife asleep in her chair. Her mild, pale face upturned in the white light sent a pang through the heart of the self-convinced man. He went over to her and laying his hand on her head, said:

"Go right to bed if I were you."

He continued to smooth her hair as he said it, and Mrs. Bates presently sat up straight and wondering. It was long since her husband had lost the habit of bestowing little endearments; he used often to do this very thing in the old days.

"Was Daniel going to die?"

The next morning, soon after breakfast, Mrs. Bates went away in his spring wagon, returning in the space of two hours with the strong, capable girl who assisted them on extra occasions, announcing to his wife that Sophia Mills had come to stay till the "heat of the summer" work was over, "and mind you keep her busy," he told the astonished woman, "and you get some time to rest."

In the afternoon Mr. Bates drove to town, and as Mrs. Bradley had the day before said she wished to match some worsteds, he took her along, taking occasion to say as they were well on their way:—

"I'm much obliged to you, Mrs. Bradley, for giving me a hint about my wife, last night. I have been as blind and dumb as an old bat. But 'nough said. Things'll be different. Now I want to ask another favor. I wish you'd pick out a dress for my wife—a nice one that'll do for best. I'm going to take her out West to see her sister when the crops are all in. She don't know a word about it yet."

Mrs. Bradley was delighted; she would be glad to help. What would he like?

"Oh, you must settle that; something sort o'ladylike; black, I guess; and get some of that soft, white stuff such as you wear, to go round her neck, and some ribbons and all the trimmings."

A more dazed woman than Mrs. Bates could not be found, when her husband, that night, after everyone else had gone to bed, presented her with a roll of handsome black cashmere.

"And, Cynthia," he said, "you must have it made up nice, like Mrs. Bradley's, with some ribbon a flutterin' in the wind."

"What's the matter with you, Dan?" his wife asked anxiously. "Whatever does all this mean?"

"You must settle that; something sort o'ladylike; black, I guess; and get some of that soft, white stuff such as you wear, to go round her neck, and some ribbons and all the trimmings."

"It means, little woman, that I've been an old brute. I've let you slave yourself 'most to death with not a mite of fun thrown in. Now it's going to be stopped. I'm going to take care of you the rest of the way. What would you say now to takin' a trip out West next month to see your sister Hannah?"

It was too much. Mrs. Bates could only cry and cry as if she would never stop, while her husband murmured as he stroked her hair:

"Women are curious. I looked for you to laugh instead of cry, Cynthia." The Home Queen.

Only Poachers in Disguise.

An amusing incident occurred lately at a Scotch Lunatic Asylum. It appears that a harmless patient, who had received an injury to his head in an affray with poachers, when employed as gamekeeper, was employed doing odd jobs on the estate outside the lodge gates. The office of chaplain to the asylum having become vacant, about half a dozen selected candidates were requested to attend before the Committee of Management on a certain day and hour.

Sandy's delusion at occasional times was that he was still looking after his employer's preserves, and the fit, unfortunately, came upon him at the time the clerical candidates were boldly advancing along the road leading to the asylum. Sandy immediately seized a big stick and advanced to meet them, and, after several parleys and remonstrances, he made them beat an ignominious retreat, waving the stick in a threatening attitude, and threatening dire vengeance if they returned.

In the meantime the committee postponed the business, owing to the unaccountable delay, and matters were only explained after the lapse of four hours, when the reverend gentlemen returned to the asylum escorted by a posse of county policemen. Poor Sandy's perambulations were curtailed for the future, but he took an inveterate hatred to the cloth, and declares to this day that they are only "poachers in disguise—every one of them!"

Catch Words.

Nearly everybody is familiar with some of the many catch-words with which the English language abounds, but these three have not often come under our notice, "Reeking," "Desiccated," "Lurid." Ask your friends what they understand by them.

"Reeking!" one will say. "Why, reeking means dripping with moisture, soaked with wet."

Another will say that it means "slippery, slimy; as with filth." "Reeking with filth. Having a pungent, unpleasant odor."

Note his surprise when you tell him that "reeking" means: "Smoking, steaming." A chimney can reek. When a horse reeks with moisture, it is because its flanks smoke and steam. Jean Ingelow writes:

"No flame did flash or fair blue reek  
Rose up to show me his place."

That is the surest catch-word of the three. "Desiccated" is pretty good, though. Nine out of every ten will instantly say that the word means, "Chopped up in little bits." In this word, as in "reeking," the process of change from the real meaning can be traced. Anything very wet would reek in frosty weather, so the wetness was assumed to be the real characteristic of reek.

Pretty much the only article in common use to which the adjective "desiccated" is applied, is cocoanut prepared for use in cakes and pies. It is chopped up in small bits. But it is chopped up that it might be thoroughly dried, and "thoroughly dried" is the only proper meaning. "Lurid" is a word a little better known. Ask a man what color lurid is, and he may answer correctly, but the chances are that he will say "red, flaming orange, or bright yellow." Of course, lurid means smoky or dull color. London fog is lurid; thick, suffocating smoke is lurid. Lurid and livid are almost synonymous. "Lurid flames" are flames almost choked with smoke. A lurid sunset is not a brilliant one, but one dull and gray and cheerless.

A judge, joking a young lawyer, said: "If you and I were to be turned into a horse or an ass, which would you prefer to be?" "The ass, to be sure," replied the lawyer. "I've heard of an ass being made a judge, but a horse—never."

Here is a story which Baron Dowse, the celebrated Irish judge, once told:

"I was down in Cork last month, holding the assizes. On the first day, when the jury came in, the officer of the court said:

"Gentlemen as the jury, ye'll take yer accustomed places, if ye please."

"And may I never laff," said the Baron, "if they didn't all walk into the dock."

## MINNIE MAY'S DEPARTMENT.

MY DEAR NIECES:—

The approach of winter leads us to inspect our wardrobes with a view to ascertaining our needs for the coming season, and the prevailing hard times will render us more content with the possibilities of making over whatever is already contained therein. It is really wonderful how much can be done by a little care and ingenuity, and how garments, which are now hopelessly out of date, may be evolved into those which will give to the wearer the comforting assurance that she is well and suitably dressed. By "well dressed" I do not mean the wearing of expensive clothes—the simpler these are the better for the ordinary affairs of everyday life. But the fact of their being simple, or even made-over garments, is no reason why they should not be pretty and attractive, and a few hints and suggestions in this respect may be found useful.

Begin by looking through the trunks, boxes, closets and bureau drawers, and collect all of the garments "left over" and trimmings on hand. It will take some thought to realize their best possibilities, the advisability of dyeing, turning, combining, etc., which will have to be gone through before the new garments will be developed.

There are several good manufacturers of dye who sell their goods at ten cents a package, but there is a difference in their results; that is, one brand of dye is more satisfactory than all the others in black, while another excels in red, etc. You can find out these details from your druggist. Be sure that you purchase sufficient dye for your goods. Divide it in equal proportions, half and half. Then divide your goods in the same way, testing your accuracy for weighing the material. If the same



Fig. 1.

quantity of water is used, and the goods remain in the same length of time, they will all be exactly the same shade. One reason why some dyeing is so frequently a failure, is that it is done in such a careless manner, resulting in as many shades as there are pieces. Fix your dye, then take a sample and time its immersion by the clock. When it has arrived at the proper depth, you can dye the goods exactly like it by proceeding the way I have directed you. In making over, dyeing is very useful in bringing into harmony things that could not possibly have been used together if left in their normal colors.

To renovate clothing, first remove all dust with a whisk broom. Spots may be taken out of dark goods with a hand-brush dipped in equal parts of ammonia, alcohol and water. This will brighten as well as cleanse. If the goods are very much soiled, it is better to wash in water with soap bark, and rinse well; press on the wrong side between newspapers when nearly dry.

Benzine is useful in renovating grease spots. These may be removed from silk by a soft flannel, from velvet with a fine brush.

Here is a formula for a cleaning fluid for general use in renovating woolen clothing: One pint of deodorized benzine, one-half drachm sulphuric ether, one drachm alcohol, and a little cologne. It can be used on light colors as well as dark. This mixture is not expensive: twenty-five cents will pay for a quart.

Shining places can be removed from black cloth or silk by sponging with cider vinegar. Dry in the shade slowly and do not press.

The cream cashmere dress which has done duty for two summers can be colored a pretty shade and made into a waist for afternoon or evening wear. These separate waists are so useful, and perhaps no prevailing fashion has so much to recommend it as this one. Silk, woolen goods, and even flannelette, made into waists and worn with a dark skirt, all

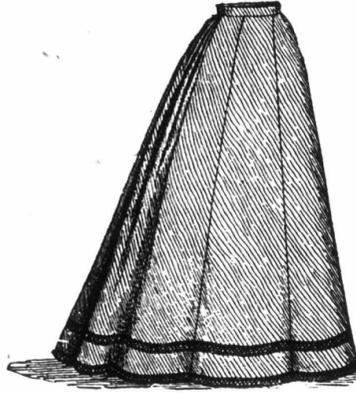


Fig. 2.

have their reasonable time and place in which to be worn, and afford many pleasing variations of costume.

In Fig. 1 we have quite a striking arrangement of black velvet on a white nun's veiling for house wear. The yoke, collar and corslet are of the velvet, with a fall of creamy lace from the lower edges of both yoke and corslet. Bands of ribbon velvet, three inches wide, encircle the fitted lower sleeve. The same is arranged in a V pointing upward between the yoke and corslet, with rows running parallel to this on either side that reach from the yoke to the under-arm seam. The back has four bands of velvet close together at the waist line and radiating to the yoke.

Black satin or velvet, or, in fact, any color in these or in moire, are effective on plain colors for such a bodice. The lace may be omitted and the result will still be pleasing.

This same waist may be made up in different ways to suit the taste of the wearer. A very pretty one, cut from the same pattern, is made without the velvet, and has a yoke and belt of pica lace, with bands of insertion lace to match on the sleeves. The lace is black, and over white satin of a very open pattern, the waist being of tan cloth. The yoke is outlined with black satin ribbon, drawn in and bunched up at intervals. Rosettes of the same finish the opening of the corslet, and are set on each band of lace on the sleeves.

The ever popular leg-o'-mutton and balloon sleeves still continue in favor, but many varieties are shown for dressy waists in slashed effects, or daintily trimmed with lace and rosettes of ribbon.

The new six-gored skirt, given in Fig. 2, will be found suitable for wearing with a waist of different material or as part of a winter suit. It consists of a front gore, first and second side gores and the back gore. The fold of the goods is used for the centre of the front and back gores, while the side gores are cut with the front edges on a straight edge of the goods. An interlining of canvas or grass-cloth should be sewn to the skirt lining, eighteen inches deep. After the inner lining is sewn to the lining, the material is basted to the gores and the seams closed. A binding finishes the lower edge, and the upper edge has the centre back gathered on each side of the opening. A belt of the required size is made and the skirt sewn to it, allowing a little fullness across the front and sides in place of the usual darts. Moire, or satin ribbon running down the seams, on each side of the centre, finishing below the knee with a rosette, forms a pretty trimming; the other seams being treated in like manner, but without carrying the ribbon so far down.

Capes promise to be as generally worn as jackets, both far autumn and winter, and the design for a girl's cape, given in Fig. 3, will be found a good one for school and general wear, and is in the same style so popular for ladies.

If the storm cape is desired, use the large cape and hood, omitting the smaller cape. By omitting the hood, you have the double cape with the turn-over collar. Two straps of the goods are made and tacked to the shoulder darts; these are crossed over the bust and fastened to the waist at the back. These straps aid in keeping the cape in position



Fig. 3.

over the shoulders when not buttoned. Striped or plain serge lining is used for this cape, also surah and satin, and when a pretty, contrasting color is selected, the lining of the capes and hood makes quite an important feature in its construction.

Those who intend buying new dresses will probably be interested in knowing what is shown in fashionable goods. Camel's hair fabrics come in stripes, solid and blended colors, and one variety shows a heavy nap, all being well liked.

Hop-sacking opened the way for a return of the basket and canvas weaves, in close and loose mesh. Serges and diagonals have a heavy twill, and, though the solid color is offered, as a matter of course, the two-toned color combination grows in favor. Those in gold and dark brown, navy blue and gold, or dark green and navy blue are attractive.

There seems to be no end to the variety of wool fabrics, and while some are very expensive, proportionally, all are reasonable. Whip-cords, cheviots and tweeds commend themselves by their serviceableness. Tailor cloths are velvety in their smoothness, but many object to their weight. Light, in comparison, and suitable for early fall, is the wool sateen, exquisitely woven, shown in plain colors, or finished in self-colored dots. It combines admirably with another fabric.

Grosgrain silk and the corded varieties, so long out of general service, are shown in fall goods. Moire antique, satin-striped, plain or brocaded, and satin-striped grosgrain are among the heavy silks.

In millinery, broad effects are sought after in trimming hats and bonnets, each side being trimmed alike, as shown in Fig. 1. Beaver will be worn as last year, with velvet and satin for dressy occasions, while small-crowned jet bonnets, profusely trimmed, but less pronounced than in summer, continue in favor.

In felt hats, square or low crowns will be more generally worn than high ones. Brims are of moderate width, variously shaped, and some are allowed to droop in pleasing manner. Birds and wings are largely used in trimming, and jet adorns everything, being fashioned into flowers, leaves, sprays and fanciful conceits of many sorts. Moire, satin, and velvet ribbon, piece velvet, velvet flowers as roses, violets, geraniums, all hold place as accessories, whether in contrasting or self-colored hues.

MINNIE MAY.

## The Care of the Aged.

Many of us have the care of aged people, and whether they be parents or friends only, they need a great deal of care, and special care, too. The chief points to be considered for their comfort are moderate digestible food, sufficient warmth, and an even, quiet life, free from trouble.

The chief of the three is the food. While all fixed dieting is bad where it can possibly be avoided, a few hints can be given that may prove of value.

The older a person is, after fifty, the less food he requires. Luigi Cornaro, who lived to one hundred, though of a feeble constitution, took twelve ounces of solid food and fourteen ounces of fluid daily during the latter part of his life; and his most severe illness was caused by his increasing his allowance, through the continual entreaties of his friends.

Very little animal food is required, and though in many respects false teeth are a great boon to the aged, they may lead to too great a consumption of animal food. The food of the nursery is the best in old age. Bread and milk is a capital diet. Milk agrees with nearly all.

Hot milk with a little prepared food forms an admirable drink at night, and can be kept warm in a hot water jug covered with a cosy. Fruit is wholesome, if ripe or well cooked; fat is also good, as cream or fresh butter. Warm food is very suitable, and all meals should be regular, and excesses avoided.

As to clothing, it should be both warm and light. Fur is an admirable material, and the underclothing should be of wool. A sealskin waistcoat is useful, and the feet and hands should be well and warmly clad. An eiderdown quilt on the bed is a good covering, for no aged person should be suffered to get cold in bed.

I will here specify some erroneous ideas current with regard to old people:—

1. That the aged require rich and very nourishing food.
2. That early rising is good for them.
3. That cold baths invigorate them; whereas, they are fraught with imminent danger, and are often fatal.
4. That continual medicines and dinner pills are needed to digest the food; whereas, instead, less should be eaten.
5. That their rooms should be hot; whereas, they should be cool, but not cold—65 to 70 degrees.
6. That a fixed diet should be rigidly adhered to; whereas, variety is often essential.

Two o'clock a. m. is the hour when most deaths take place: then the temperature of the body is lowest, and its powers feeblest. The warmth of the bed is of great importance in old age. A warm bath should be taken every day, with plenty of pure soap to keep the skin supple and soft. It is better for old people, who have the opportunity, to winter in a warm climate, but if they cannot, they should shut themselves up in a well-warmed house at this season. All habits of old people should be respected, and not lightly altered.

Whatever causes exhaustion should be forbidden. Early rising is therefore bad.

"From London to London."

I do not know what sort of a place London, Canada, may be in the month of September, but I do know London, England, and I can confidently state that of all seasons in the year that is the one in which she appears in her least attractive guise. Fresh from the delights of the country, the unfortunate mortal whose duties summon him back after a brief four-week's holiday, returns to town. The very approach is depressing. All the chief lines of railway run through miles and miles of squalid suburbs before London itself is reached. I cannot explain why it is, but it is an undoubted fact that when one arrives in town, after an absence of any length, it is invariably raining. It is a libel to say that we have no blue skies in London: I have seen skies as softly, tenderly azure here as any in the heart of the country, but certainly at this time of year they seem to convert themselves into a thick grey blanket of heavy cloud. We have had a wet and gloomy summer, and the harvest prospects in many parts of the country are melancholy in the extreme. Here in London, we have already had more than a foretaste of the depressing fogs which were rampant two or three years ago. It is most unusual for them to begin so early, and the prospect is anything but cheering. Just now, too, there is an entire absence of the stirring mental atmosphere which may come to us later on, to compensate in some measure for the outward gloom. The city streets, to be sure, are packed as thickly as ever, but in the West End, one traverses street after street of empty houses, where the endless rows of white-shrouded windows make one feel as if one had strayed into a city of the dead. Half the roadways are given over to repairers, and "No Throughfare" stares one in every direction.

But to realize more strongly the difference between London in "the season" and London out of it, one has only to take a stroll in Hyde Park between the hours of three and five. The rows of chairs are still there, facing "The Ladies' Mile," and many of them are occupied, but the inhabitants might belong to another hemisphere, so strangely out of keeping do they look to eyes that are accustomed to the Park in May or June. Here is the wandering tourist, with guide-book in hand, and travelling satchel slung across his shoulder. Then, there are large family parties—stout papas, harassed-looking mammas, squads of children. Troops of youngsters run riot in Rotten Row. In place of the ceaseless roll and rattle of hundreds of perfectly-appointed carriages, passing backwards and forwards continuously, five abreast, there are now only a few belated vehicles, ambling by in a shame-faced and desultory manner. Now and then may be seen a stylish carriage-and-pair from one of the fashionable hotels, filled with a party of foreigners. If, as often happens to be the case, these are all men, the effect is far from picturesque. Why is it that a carriage filled with men alone looks so ugly? A carriage filled only with ladies has not at all such a jarring effect.

Each year sees an increase of American visitors to London, and I hear that the custom is growing of American ladies doing their shopping over here, instead of devoting themselves to Paris, as used to be the case. Many of the fashionable shops now do a busy trade in what was formerly the "dead" season. The great difference in price between London and Parisian goods is probably accountable for this, and the attributes of taste and excellence are certainly not a monopoly of the latter.

There is a lull just now in the world of fashion. Late autumn and winter novelties are not yet being displayed, but softly-blended shades and mixtures will probably be the favorite wear. Checks and stripes and figure-pattern stuffs of all kinds give a stylish and dressy effect that no plain material seems to attain to. It is to be hoped that the greatly over-laden bodices of last year will not be so much in vogue. The big frills, and the lappets over the shoulders, were very trying to all but the slender and graceful, while the dresses that were not so adorned had a dowdy look. The sudden bursting into extra gigantic sleeves, both in gowns and out-door coats, stamped irretrievably as out of date those unfortunate wearers who are compelled to make their garments cover more than one season. The only people that benefit by these shifting vagaries of fashion are the dressmakers, who, apparently, drive a more thriving business each year. THISTLE.

Infant's Knitted Belt.

An immense amount of illness might easily be prevented, both in childhood and in later life, if only people would wear what are known as "cholera belts." Unless a cold affects either head or chest it is rarely considered a cold at all, and yet, I suppose, a good half of our ailments are caused by chill in the lower part of the body. For young children, warmth is specially necessary, and I think mothers generally would do well to provide their little folks with warm knitted belts. For an infant make one as follows: Cast on 60 stitches on 4 needles, and knit round as if for a stocking. Knit 3 plain, 2 purl, until a depth of about 8 inches has been worked, then cast off all but 12 stitches. Knit backwards and forwards on these, narrowing at the beginning of each row till only one stitch is left. This makes a tab by which to pin the band in place.

Mrs. Brown nudging Mr. Brown, who snores with his mouth open: "William! you'd make less noise if you'd keep your mouth shut!" Mr. Brown (only half awake): "Said you?" Life.

Heard in the Music Shop.

The assistant in the music shop was dozing in his chair, waiting for customers, when he heard a faint consonance of musical tones. He could distinguish nothing at first, but presently shapes came out of the sounds, and these shapes were words.

"You are only a quadruped," remarked the organ to the piano.

"Get a stop on yourself, will you!" said the piano: "you are always blowing."

"You are too close kin to be quarrelling," ventured the music-box.

"We'll wind you up in about a minute," grumbled the organ. "It takes a crank to do that," whistled the flute. "Aw, you are full of holes," blared the cornet. "Well, it isn't the brazen thing you are," squealed the piccolo, in defence of its kind.

"That beats me," rattled the drum, as it joined in the fray. "Two heads are better than one, if both are sheep's heads," twanged the guitar. "Go string yourself," bellowed the base drum. "Suppose you soak your head," suggested the accordion, coming to the rescue of the guitar. "Rats!" screamed the trombone, "you are full of wind."

"Here, it's time for you to slide out," squeaked the violin, reaching for the trombone.

"Hold up," thrummed the harp. "You think you are very smart because you have a bow, don't you?"

"My opinion of you," rasped the violin, turning fiercely on the harp, "is that you are only a sort of lyre, anyhow;" and with this Wagnerian outburst, such a wild discordance arose that the assistant fell out of his chair, lit on the cat, asleep in the sun, and raised so much fuss that a policeman came in to see who was taking a music lesson at that hour.

When I Was a Girl.

Aunt Clarissa wears her snow-white hair In the fashion of long ago. With three little curls each side her face. Arranged in a spiral row. But she looks askance at my frizzy bangs. And when their fluffy kinks unfurl. And mutters, with disapproving air. "La! me, when I was a girl!"

She gowns herself in a skimpy frock That is fearfully short in the waist. But opens her eyes at my high-cut sleeves. And thinks them devoid of taste. It fairly gives me a fit of the blues. And sets my head in a whirl. When she arches her brows and says with scorn. "La! me, when I was a girl!"

You'd think the girls, in Aunt Clarissa's time. Were angels from top to toe. To hear how grimly she lectures me. When I chance to mention a beau. And if I just venture to speak of love. Her lips take an upward curl. And she says, in a prim and prudish way. "La! me, when I was a girl!"

But I found her reading a letter once: It was tied with a ribbon blue; The writing was dim and blurred by time. But I know 'twas a billet-doux. For I saw a flush on her faded cheek. Half hid by the spiral curl. And I heard her murmur, in accents low. "La! me, when I was a girl!" —Good Housekeeping.

Puzzles.

PRIZE PUZZLE.

1—RIDDLE.

I paint without color, I fly without wings; I people the air with most fanciful things; I hear sweetest music where no sound is heard; And eloquence moves me, nor utters a word. The past and the present together I bring. The distant and near lightning's my wonderful flight. Far swifter than lightning's my wonderful flight. And those who would find me, must find me indeed. As they narrowly scan and this poesy read. MORLEY SMITHSON.

2—HALF-SQUARE.

- 1st. Endeavor of the soul to speak. 2nd. Resting on. 3rd. To cover with grass. 4th. A proposition. 5th. A letter. IRENE M. CRAIG.

3—NUMERICAL.

- Whole, a wise sentence. My 5, 7, 17, 2, 16, is famous. My 10, 13, 11, 21, 15, found in every animal. My 22, 1, 11, 19, 1, used by fishermen. My 3, 8, 9, 6, 2, in natural history means winged. My 10, 18, 20, 22, found at every fishing station. HENRY REEVE.

4—CHARADE.

I used to take the ADVOCATE. And the puzzle column PRIME. While into the SECOND of fancy. Have I wandered many a time. And THREE won many prizes. But it seems that time is past. And soon, I fear, I'll find that THREE. Is with the dunes clasped. But LAST my word, I'm not to blame. And though it gives me pain. I'll tell the cause, it simply is. The TOTAL of my brain. ADA ARMAND.

Answers to Sept. 15th Puzzles.

- 1—A pair of snuffers. 2—Spies pies. 3—Palm Sunday. Z E B R A E Q U A L B O U N T R A N G E A L T E R

The prize winners for best answers to puzzles for the last three months are: 1st, Henry Reeve; 2nd, Charlie S. Edwards.

THE QUIET HOUR.

The Children's Crusade.

Have you heard the wonderful story Of what happened so long ago. Away in the Rhenish country. In sight of the Alpine snow? How thousands of little children. With scallop and staff in hand. Like "Peter the Hermit's" pilgrims. Set forth for the Holy Land? From hamlet and town and castle. For many a weary day. These children had seen their fathers March to the East away. "Why do they go?" they questioned. Of the mothers who watched and wept: "They go to wrest from the Pagan The tomb where the dear Lord slept." And the thought in their young hearts kindled, "Let us do as our fathers do— Let us wear the Cross on our shoulder, And help in the conquest, too." "The strength of a child is nothing. But we'll gather in one strong band. The strength of ten thousand children. For Christ and the Holy Land." And so, as they tell, these children On their strange wild mission went: But the Saviour, Who would not lead them In the way He had not sent. Lifted them up in His pity. (Misguided, and yet His own)— And, instead of the tomb they sought for. Sent them up to find His Throne. Now, what is the tender lesson Wrapped up in the story so. And what can we learn from the children Who perished so long ago? For the sepulchre's sake, where only Three days the Redeemer lay. They were willing to face such perils As wasted their lives away. For a Temple that is eternal. Where the "Living stones" are piled. Each stone of the costly building The soul of a heathen child. Are there ten thousand children. Over this land so broad. Willing to work— their shoulder Wearing the badge of God? Are there ten thousand children. Filled with a zeal intense. Ready for Christ to offer Their labors, their prayers, their pence? For the gifts and the prayers of the children. Gathered in one strong band. Could conquer the world for Jesus. And make it a "Holy Land." —Mrs. M. E. Preston.

Children's Work.

"Do not, because you can do so little for others, do nothing. Look around you—first in your own family; then amongst your friends and neighbors—and see whether there be not some one whose burden you can lighten, whose care you may lessen, whose pleasures you can promote, whose wants and wishes you can gratify. Giving up cheerfully our own occupations and self-denials; is one of the little kindnesses and self-denials; doing little things that nobody likes to do, but which must be done by someone, is another." "We can seldom perform little kindnesses without little self-denials; and the habit once formed of daily attending to others, and trying to please and serve them, is of inestimable use in repressing our natural selfishness."

"Now I Lay Me."

Golden head so lowly bending; Little feet so white and bare; Dowy eyes, half shut, half opened— Lapping out her evening prayer. Well she knows when she is saying— "Now I lay me down to sleep, 'Tis to God that she is praying, Praying Him her soul to keep. Half asleep, and murmuring faintly. "If I should die before I wake" — Tiny fingers clasped so saintly— "I pray the Lord my soul to take." O, the rapture, sweet, unbroken, Of the soul who wrote that prayer! Children's myriad voices floating Up to Heaven, record it there. If, of all that has been written, I could choose what might be mine, It should be that child's petition. Rising to the Throne Divine.

Opportunities.

There is always someone to smile at; somebody to whom a book, a flower, or even an old paper, will be a boon. These small attentions will open the way to confidence, will make it possible that in need these friends will give you opportunities to help them, which, unless you had shown thoughtfulness and regard for them, they would never have done. A quiet, sympathetic look or smile many a time unbars a heart that needs the help that you can give. —Josephine Pollard.

The Best That I Can.

"I cannot do much," said a little star. "In making the dark world bright; My silvery beams cannot struggle far Through the folding gloom of night; But, still, I'm a part of God's great plan, And I'll cheerfully do the best that I can." "Oh, what is the use," said the fleecy cloud, "Of these tiny drops I hold? They will hardly freshen you lily proud. When caught in her cup of gold; But, still, I'm a part of God's great plan, And I'll cheerfully do the best that I can."

A child went merrily forth to play. But a thought, like a silver thread, Kept on winding in and out all day Through the happy golden head: "Mother said I'm a part of God's great plan. So must try to do the best that I can." So she helped a neighbor's child along. Though tired her own small feet; And she sang from her heart a little song Her father thought so sweet: And he said, "I, too, am part of God's plan. And, though weary, must do the best that I can."

IMPORTANT AUCTION SALE

SHORTHORN CATTLE & LINCOLN SHEEP,

Wednesday, Oct. 31st, 1894, at 1 o'clock p. m., at lot 30, con. 13, London Tp. Shorthorns consist of Royal Chief = 19269 =, sire Indian Chief (imp.) = 11108 =, dam Imported Mary Ann of Lancaster 14th = 5173 =. Red bull calf, calved Jan 5th, 1894, sire British Chief = 11243 =, dam Imported Wimple = 3233 =; and three other young bulls equally well-bred; also twelve registered cows and heifers. The heifers got by British Chief = 11243 =. Lincolns—ten ram lambs, eight shearing and aged ewes, ten ewe lambs. Also nine head of carriage and roadster colts and fillies.

T. E. ROBSON, Iderton, Ont.

DUROC-JERSEYS Are the most profitable breed of swine in existence, combining all the qualities to make the ideal hog. They are non-squealers, good feeders, fast growers, quiet and contented, and very prolific, and they produce the finest quality of meat. We have on hand a fine lot of young pigs bred from first-class stock. We keep no other breed. Nothing but first-class stock shipped. Correspondence solicited. Prices reasonable. Satisfaction guaranteed. Address TAPE BROS., Ridgeway, Ont.

TRUSSES on 30 Days Trial. Easy, durable and cheap. A radical cure effected. Send for sealed catalogue. EGGLESTON TRUSS CO., Masonic Temple, Chicago, Ill.

POULTRY KEEPING

A practical guide to the breeding, feeding, rearing and general management for domestic use, and exhibition, of the Houdan Fowl, by Charles Lee. Price, 65 cents. For copies apply FARMER'S ADVOCATE OFFICE, London, Ont.

STOCK GOSSIP.

Tape Bros., Ridgeway: "We have returned home from the fairs, this being our experimental visit to the Industrial, Toronto, and the Western, London. Permit us to say that we were well-pleased with the usage we received at the hands of the officials, all being courteous, kind and accommodating in every way. We may also say that we were encouragingly successful at either of the above-mentioned fairs, securing on our herd of fourteen entries at the Industrial, seven firsts, four seconds and three thirds, and in competition with the Tamworths at the Western, we secured a large percentage of the prizes, and the two bronze medals. We met many of our customers at the fairs, and all were well-pleased with the Duroc-Jerseys. We made a number of good sales. Among the purchasers are Newrick Wilson, Brougham, a boar; Geo. Orr, Tempo, a boar; Jos. F. Hooper, Granton, a pair; Hodgins & Stanley, Clandeboye, boar; C. Sparling, St. Marys, sow; Robt. St. Johns, Woodham, sow; David Clangersmith, Moravian, boar; Con. Wilson, Thamesville, boar. The demand is rapidly increasing, and the Duroc-Jerseys are destined to be the leading breed of swine in Canada."

IT PAYS TO ADVERTISE

FARMER'S ADVOCATE

HOME MAGAZINE.

Leading Agricultural Journal of the Dominion.

If you have anything to sell, SEND AN ADVERTISEMENT to

The William Weld Company LONDON, ONTARIO.

HOW TO MAKE DOLLARS OUT OF WIND!



It will Save Many Dollars in Time and Trouble if you buy a CHATHAM FANNING MILL With Bagging Attachment.

It Cleans Alsike Clover to Perfection; also Marfat and Black Eye Peas. 1,000 Mills Sold, 1884; 1,330 Mills Sold, 1885; 2,000 Mills Sold, 1886; 2,300 Mills Sold, 1887; 2,500 Mills Sold, 1888; 3,900 Mills Sold, 1889; 4,000 Mills Sold, 1890; 4,500 Mills Sold, 1891; 5,000 Mills Sold, 1892; 6,000 Mills Sold, 1893.

Manufacture and solicit orders for Perforated Zinc; all sizes of holes for Threshing Machine and Clover Mill Riddle. Also Wire Cloth for all purposes.

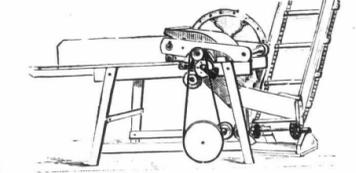
MANSON CAMPBELL, CHATHAM, ONT.

For Sale by all MASSEY-HARRIS CO. Agents in Manitoba and N. W. T.

ANDERSON'S DOUBLE ACTING Force PUMPS. For Wells, Cisterns, Spraying Trees, Hand-Power or Wind-Mill. NEVER FREEZES! ALWAYS PRIMED. Guaranteed the easiest working, most durable and best Pump made, or no sale. Live men, pushers, wanted in every township in Canada, to sell these Pumps. For particulars address: J. W. ANDERSON, Patentee, 19-1-y-om Aylmer, Ont.

FARMERS AND STOCK FEEDERS!

Your special attention is called to the merits of the RIPPER FEED CUTTER



One prominent stock man has said in his testimonial that for cutting corn stalks the Ripper is the only machine worthy of barn room. Rips and tears corn stalks into a soft, spongy feed, making it easily masticated, and thus avoiding the sharp edges so hurtful to the mouths of stock. Just the machine for filling silos. Send for testimonials. Also manufacturer and patentee of the Famous Watford Riding Plows.

THOM'S IMPLEMENT WORKS, Established 1875. WATFORD, ONT.

9 CORDS IN 10 HOURS. RUNS EASY. Weighs only 100 lbs. FOLDED. BY ONE MAN. Send for free illustrated catalogue, showing testimonials from thousands who have saved from 5 to 9 cords daily. It saws down trees, folds like a pocket knife, easily carried on shoulder. One man can saw more timber with it than two men with a cross cut saw. 84,000 in use. We also make larger sized machine in Canada. First order receives agency. FOLDING SAWING MACHINE CO., 241 to 249 S. Jefferson St., CHICAGO, ILL.

Spavins, Ringbones, etc. Cured by Dick's Blister. Dick & Co., P. O. Box 482, Montreal.

FOR SALE.

Two imported Shire mares, in foal, coming four years old. Superb quality and breeding. For particulars and price address

WM. DAVIES, Toronto.

1864. HILLHURST FARM. 1894.

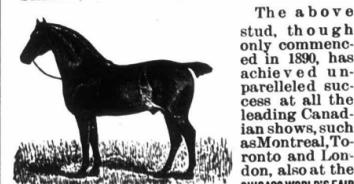
HACKNEY HORSES, Shorthorn and Aberdeen-Angus cattle, Shropshire and Dorset-Horn sheep.

M. H. COCHRANE, 16-2-y-om HILLHURST STATION, P. Q.

HORACE N. CROSSLEY,

PROPRIETOR OF THE SANDY BAY STOCK FARM,

Importer and breeder of SHIRES, HACKNEYS, AND COLLIE DOGS.



The above stud, though only commenced in 1890, has achieved unparalleled success at all the leading Canadian shows, such as Montreal, Toronto and London, also at the CHICAGO WORLD'S FAIR. The most notable in this stud are, the Shire horse Bravo II, 12335, winner of first at Toronto, Montreal and London, and also beating all Clydes at the latter show in the sweepstakes. Hackney, Fireworks No. 3602, winner at Chicago, Toronto and London. Shires and Hackneys always on hand for sale. For further particulars apply to the Proprietor, ROSSEAU, Muskoka. 10-y-om

CLYDESDALES & HACKNEYS

We have a few choice young stallions that will be sold away down. Also a number of superior fillies bred in the most popular lines, in foal to our sweepstakes winner, Grandeur. We will make prices right. Come and see us or write for particulars to D. & O. SORBY, - GUELPH, ONT. 6-2-y-om

SHORTHORNS, SHROPSHIRE AND BERKSHIRES

10 choice Shropshire yearling rams, 15 yearling ewes, 20 ram lambs, and 20 ewe lambs, all from the (imp.) Bradburne ram, for sale at prices to suit the times. Inspection invited.

W. G. PETTIT, 13-y-om Freeman P. O., Burlington Stn., G. T. R.

A. CRUICKSHANK, SHORTHORNS

of the Duchess of Gloster family. A few straight-bred young bulls and heifers by imp. Duke of Lavender. THOS. ALLEN & BROS., OSHAWA, ONT. 8-2-y-om

CARGILL HERD OF SHORTHORNS.

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

DEEP MILKING SHORTHORNS.

For sale, young cows and heifers. Fair Maid of Hullet, which produced 3,520 pounds milk and 150 pounds butter in the 90 days test at Chicago, is a specimen of what this herd can do. WM. GRAINGER & SON, Lonsboro, Ont. 13-y-om

IMPORTED SHORTHORNS.

D. D. WILSON, Ingleside Farm, SEAFORTH, Ont. IMPORTER AND BREEDER OF

SCOTCH SHORTHORNS.

Imported stock from the herds of Wm. Duthie and W. S. Marr for sale; also Canadian-bred from imported bulls and out of imported dams. Farm one mile from G. T. R. station. 13-L-om

SHORTHORNS.

We have seven bulls from twelve to fourteen months old, from our best sires and dams, of choicest Scotch breeding, that, for hair, color, size, feeding qualities, constitution, general style and character, cannot be equalled, and we will sell them low. Also some show heifers for sale.

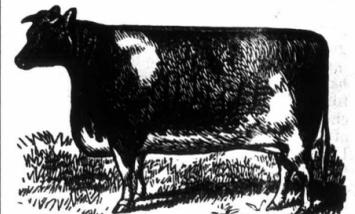
JOHN MILLER & SONS, Brougham, 12-2-y Ontario.

DAISY CHIEF 18674 is FOR SALE at a bargain; he is gentle, sure, and in good service condition. Also for sale young bulls and heifers of his get. Prices to suit the times.

A. J. C. SHAW & SONS, 22-y-om THAMESVILLE, ONT.

SEND for Catalogue of CHAMBERLAIN FARM, PROPRIETOR, THE G. H. GRIMM CO., Montreal. 7-0

ARTHUR JOHNSTON, Greenwood, Ont.

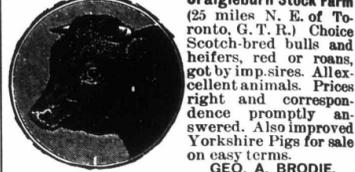


GRAND YOUNG BULLS.

Offers for sale at very moderate prices, a number of exceedingly good young bulls fit for immediate service, and a number of excellent young cows and heifers, all fit to show at leading exhibitions. Send for Catalogue, Greenwood P. O. and Telegraph Office, Clarendon Station on the C. P. R., or Pickering Station on the G. T. R. Parties met at either station on shortest notice. Come and see my cattle. 4-2-y-om

SHORTHORN BULLS

Sired by imp. Prince Royal, and from dams with all imported crosses, also cows and heifers. J. & G. TAYLOR, Rockwood P. O. & Station. 6-2-y-om Farm close to station.



Craigieburn Stock Farm (25 miles N. E. of Toronto, G. T. R.) Choice Scotch-bred bulls and heifers, red or roans, got by imp. sires. All excellent animals. Prices right and correspondingly promptly answered. Also improved Yorkshire Pigs for sale on easy terms. GEO. A. BRODIE, Bethesda, Ont. 12-2-y-om

IF YOU WANT a well-bred Shorthorn Bull for use on grade cows, or a heifer to start a herd with, or some Improved Yorkshire pigs from imported sow Lady Lindsay #422, write C. G. DAVIS, Woodland's Terrace Farm, Freeman P. O. 13-y-om

SHORTHORNS.

I have for sale two Shorthorn heifers and two bull calves of fine breeding, fine colors, fine form and carriage, in fine condition, at fine cut prices. Also one or two cows. D. ALEXANDER, Bridgen, Lambton Co., Ont. 3-y-0

MAPLE LODGE STOCK FARM.

A splendid lot of Leicester sheep, both sexes, for sale now. Some good young Berkshires also, and our young Shorthorn bulls are an excellent lot. JAS. S. SMITH, Maple Lodge P. O., Ont. 3-2-y-om

FOR SALE.

A choice lot of Shorthorns—bulls & heifers—of good quality and of the most approved breeding. Show animals a specialty. The accompanying cut represents Fair Queen 2nd, the foundation of my herd. Her produce offered for sale. Come and see us, or write for particulars. JOHN MORGAN & SONS, KERRWOOD, ONT. 16-2-k-om

MAPLE HILL HOLSTEIN-FRIESIANS.

The fine yearling bull Netherland Consul, a son of the silver medal bull Netherland Statesman's Cornelius, and the great cow Polianthus imp., that gave 13160 lbs. milk in a year at two years old, now for sale. He should go to head a herd. G. W. CLEMENS, ST. GEORGE, ONT. 12-y-om

SUNNYSIDE HOLSTEIN-FRIESIANS

Choice animals, either sex, all ages, for sale at any time. Correspondence solicited. Address McDUFFEE & BUTTERS, Stanstead, P. Q. 16-y-om

HOLSTEIN-FRIESIANS AND TAMWORTH PIGS.

Will Again Exhibit at Toronto. Will be pleased to meet all our old friends and many new ones to see our stock and consult our prices. A choice lot, of excellent breeding, and all ages, for sale. Our Tamworths are a rare lot. Come and see them. Prices with the times.

A. C. HALLMAN & CO., New Dundee, Waterloo Co., Ont. Shipping Stations: Petersburg, G. T. R., and Arr. C. P. R. Send for catalogue. 16-y-om

CHOICE HOLSTEINS FOR SALE

I have a few very nice pure-bred registered Bulls and Heifers for sale at very reasonable figures. Write, or come and see them. JOHN A. LINE, Sherbrooke, Ont. Richmond Station. 6-2-y-om

STON, Ont.



Our herd is composed of seventy-five head...

BULLS

Selected from dams and heifers...

THORNS

For sale two heifers and calves...

LE

Offered for sale particulars...

FRIESIANS

and Consul, a German States...



For sale two heifers and calves...

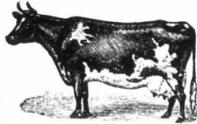


For sale two heifers and calves...

For sale two heifers and calves...

J. YULL & SONS, Meadowside Farm, Ontario.

Our herd is composed of seventy-five head...



FOR SALE 2 EXTRA GOOD AYRSHIRE BULL

Calves, nearly ready for service; one out of Second Prize Cow...

W. M. & J. C. SMITH, FAIRFIELD PLAINS, ONT



Champion Dairy Herd of Ayrshires at various government tests...

THE GLEN STOCK FARM AYRSHIRES

AND BERKSHIRES. A few good Ayrshire bull calves and heifers...

Whiteside Bros., INNERKIP, ONT

DANIEL DRUMMOND, BURNSIDE FARM, Petite Cote, P. Q.

DOMINION PRIZE HERD OF AYRSHIRES



We have the oldest established, largest and best herd of Ayrshires in Canada...

AYRSHIRE BULL FOR SALE

17 months old, registered, sired by Prince of Byron...

Prize-Winning AYRSHIRES FOR SALE

I have at present one of the largest and best herds in Ontario...

JAS. McCORMICK & SON, ROCKTON, ONT.

GUERNSEYS AND LARGE YORKSHIRES

FOR SALE A choice bull calf, two months old, bred from heavy milking...

JERSEY-CATTLE

Of the heaviest milking strains, one of the largest herds in Canada...

HOW IS YOUR HORSE? IF HE'S SICK AND YOU CAN'T TELL WHAT'S THE MATTER He surely Needs MAUD'S CONDITION POWDER

We offer to mail for 10c. a regular 25c. package to anyone who wishes to try them before purchasing a supply.

SPECIAL OFFERINGS AT REDUCED RATES DOUBLE THE BUTTER YIELD OF THEIR HERDS.

6 Jersey bull calves, 2 to 4 months old, bred entirely for GREAT BUTTER YIELD.

As my fall cows gave an unusual number of bull calves, I have decided to place them within reach of all who want an extra bull for next summer...

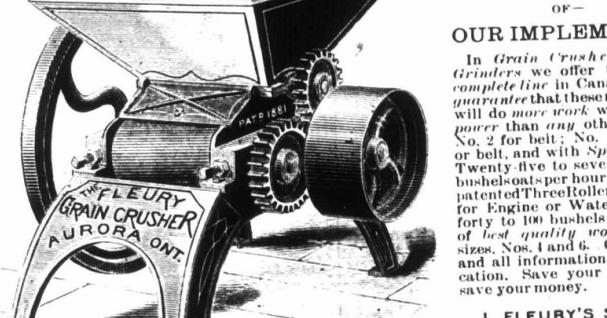
HIGH-CLASS IMPORTED AND HOME-BRED AYRSHIRES FOR SALE

Having decided to reduce our herd, we offer for sale a few very choice animals of different ages...

ISALEIGH GRANGE FARM, DANVILLE, P. Q.

SOLD AGAIN! Three of the four Guernsey bulls advertised by us are sold and delivered. We claim to have the longest, deepest and most typical IMPROVED YORKSHIRES...

TO THOSE WHO FEED STOCK YOU NEED SOME OF OUR IMPLEMENTS



In Grain Crushers and Grinders we offer the most complete line in Canada...

FOR SALE

Owing to lack of accommodation, we have decided on disposing of a number more of our HIGHLY-BRED EXMOOR HERD OF IMPORTED JERSEYS...

JERSEYS AND SHROPSHIRE

Two bulls, solid A. J. C. C., fit for service; Ram and Ewe Lambs from imported stock...

Ste. Annes Herd Jerseys

Consignment from this herd to the Quebec and Ottawa Fairs was awarded two Gold and Silver Medals and Diploma on herd...

FOR SALE

Jersey Bull calf, bred by Mrs. E. M. Jones, Brockville, Ont. Dam Massena's Fancy 1983...

GLEN ROUGE JERSEYS

WILLIAM ROLPH, Markham, Ont., offers Twelve Jersey Bulls and Heifers (pure St. Lamberts) out of tested cows...

STOCK GOSSIP.

In this issue Mr. A. M. McIntyre offers a very desirable bull calf; his dam and granddam are very superior cows...

Canadians came well to the front at the great St. Louis Fair. In the Lincoln sheep class, Gibson & Walker, Denfield, Ont., and William Oliver, Avonbank, Ont., captured all the prizes offered...

At Newcastle-on-Tyne, Eng. lately, a firm of live stock agents sold by auction, on behalf of Mr. Louis Zollner, the consigned, 10,339 sheep from Iceland...

We direct our readers' attention to the important sale of Capt. T. E. Robson, London, advertised in this issue. The Shorthorn herd and Lincoln flock, of which the stock of this sale forms a part, are well known in Western Ontario as first class in breeding and condition...

In another column appears an advertisement of a useful illustrated volume for poultry keepers, to which attention is directed. While it devotes space especially to the Houdan fowl, the practical instructions are general in their character...

OUR BOOK TABLE

Mr. J. H. Monrad, the well-known dairy expert, has given up his position as Western States representative of Chr. Hansen's Laboratory, and has assumed the editorship of a new monthly dairy paper, "The National Dairyman and Dairy Messenger," published at Kansas City, Mo...

NOTICES

This is the time of year to saw your summer's wood, and the best, cheapest and easiest way is with a Folding Sawing Machine, made by the Folding Sawing Machine Co., 211 249 South Jefferson St., Chicago...

ADVERTISE IN THE ADVOCATE

NOTICE.

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

"HOME COMFORT" RANGES.

A REUNION OF ONTARIO SALESMEN HELD IN TORONTO—HOW "HOME COMFORT" RANGES ARE SOLD—HISTORY OF THE CANADIAN BUSINESS OF THE COMPANY.

Thousands of visitors to the Great Fair in Toronto, took away with them neat and useful little souvenirs, in the shape of the malleable iron skillets which were distributed by the exhibitors of "Home Comfort" range. Those who did not get one cannot fail to remember the "Home Comfort" display, where from morning until night, on each day of the Fair, long rows of people stood patiently waiting their turn to register in the visitors' book and receive the usual gift, which so well illustrated in itself the great strength and durability of the "Home Comfort" goods. It will interest many to know that during the last three days of the Exhibition there were in Toronto over fifty salesmen belonging to this company. They came from all parts of Ontario, at the invitation and entirely at the expense of their employers, to pay a visit to the city, hold a reunion, and talk business together. They visited the Fair, went for drives, saw Sol. Smith Russell's performance at the Grand Opera House, and held several meetings at the "Home Comfort" offices, 70 to 76 Pearl street, where matters relating to the Canadian business of their company were fully discussed. On Saturday last they returned to their fields of labor in various parts of the Province. They were a fine body of men, courteous in their demeanor, intelligent in their conversation, and every one of them honest and upright in principle; and they work for a company of which they are all justly proud.

It is hardly two years since the Wrought Iron Range Company of St. Louis, Mo., manufacturers of "Home Comfort" ranges, entered Canada, and established their present factory in Toronto. They now employ about a hundred men in making and selling "Home Comfort" ranges throughout Ontario, and their business is rapidly increasing. The causes of their phenomenal success are not hard to find. Backed up by the lessons of an experience extending over a quarter of a century, selling an article the superiority of which could not well be questioned, and bearing a name for fairness, commercial honesty, and liberality well known in the United States, they have succeeded in a short time in building up an extensive trade, which will continue to increase in volume and importance as their ranges become more widely known, not only in this Province, but throughout the whole of the Dominion. There are two or three things in connection with the "Home Comfort" ranges which must be remembered. They are made only of malleable iron and steel, and are lined with asbestos. Thus they are practically indestructible, and can neither warp, crack, or burn out. There is no expense spared to make them as perfect as any range can be made. There is only one quality, and every separate range is guaranteed by the company, which is worth a million dollars paid up capital. Every improvement known in the art of manufacturing ranges is put into the "Home Comforts," making them the most complete in existence. They are sold only in one way, and that is from the company's own waggon, by authorized salesmen, and there is only one price, which is that named by the salesmen. This system has been adopted for the purpose of delivering a greatly superior article at a price very little in advance of that of an ordinary cast-iron range, by saving the middleman's profit. So that when one of the "Home Comfort" ranges calls at your house you are assured that the salesman is an authorized man, that the price he asks is the only price at which you can buy, and that the range which he will deliver you is absolutely guaranteed, and is of the very finest quality that can be purchased in any part of the world. It would be well also to remember, when a salesman for "Home Comfort" ranges calls at your house, that he is not an agent selling goods on commission, but a salaried salesman, who has not the slightest interest in misrepresenting the goods he is selling, who is the trusted employee of a wealthy corporation, who will not make any assertion unless authorized by the company which he represents, and whose word may therefore be unhesitatingly accepted on any matter connected with his business.—Toronto Mail, September 27th.

STOCK GOSSIP.

We are pleased to notice the success of Ontario sheep breeders in addition to those mentioned elsewhere, who exhibited their stock at the Illinois State Fair. In the Lincoln and Leicester class, Gibson & Walker, Denfield, and Wm. Oliver, Avonbank, received all the awards but one second for flock of ram and six ewes, bred by exhibitor. In the Oxford class, W. B. Cockburn, Aberfoyle, received a nice lot of valuable awards, consisting of second on aged and yearling rams, first on ram lamb, first on yearling ewes, second on ewe lambs, second on flock of ram and six ewes.

The Illinois State Fair is considered among the best stock fairs of the American Republic. It was held this year from September 24th to 29th. Although all lines of live stock were well represented, the show of Southdown sheep was considerably above the average. Our correspondent, Mr. J. G. Springer, states that never before was presented in an American show ring such numbers and quality of Southdowns, the World's Columbian Exposition not excepted, as was seen at Springfield this year. In the ring of aged rams were ten entries, the first prize going to an Ontario sheep owned and shown by T. C. Douglas, Galt, Ont. For sweepstakes ram any age, Mr. Geo. Allen, Allerton, Ill., was awarded first prize on his yearling ram, County, which excellent judges stated was the best specimen they had ever seen. The same exhibitor won the sweepstakes prize on ewe of any age. "The great exhibit of Southdowns," writes Mr. Springer, "indicates that while the sheep industry of the country has received a very 'black eye,' yet their breeders have faith in the belief that their sheep will not be downed. Their hardiness and the excellence of mutton that can be produced at an early age, and with less cost than that of any other breed, will bring them into extended use by the farmer and the herdsman."

FOR HEREFORDS

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, and we handle none but the best, and can supply select specimens for breeding or exhibition purposes, and residing in the centre of the Shropshire Sheep Breeding District buyers are assisted in selecting from other flocks. Write for prices or visit us before going elsewhere. Visitors met by appointment at Baschurch Station, G. W. R. Address—J. & T. THONGER, Wolf's Head Farm, Nesscliff, Baschurch, Shrewsbury, Eng. Telegram: Thonger Nesscliff. 2-2-y-om



BEAM - HOUSE - SHROPSHIRE

This is the Home of the Blue Bloods.

Wm. THOMAS offers for sale Rams and Ewes from his famous flock, which has sent so many winners to our leading shows, and here also was bred Mr. A. O. Fox's noted ram "Blue Blood Yet," which so ably piloted Mr. Fox's flock of Shropshires at the World's Fair. Wm. Thomas will have several grand shearing rams for sale this next season, sired by his grand old sheep "Blue Blood," and also a grand lot of shearing rams by other noted sires; also about 150 splendid shearing ewes to select from. Foreign buyers always welcome. If not able to come and select for yourselves, write and obtain prices from Wm. THOMAS, The Beam House, Montford Bridge, Salop. Railway Station: Baschurch, G. W. R. 2-2-y-om



SHROPSHIRE

A choice lot of Shearling Rams and Ewes, and this season's lambs from imported dams, and sired by a Beny ram, to choose from.

JAMES COOPER & SON, 14-2-y-om Kippen, Ont.

IMPORTED SHROPSHIRE EWES. And their lambs for sale by car lots; also a very choice Short-horn Bull calf, ten months old. W. S. HAWKSHAW, Glanworth P. O., Ont. 7-1f-om 7 miles south of London.



Choice Shropshires, Shearlings and Lambs. Of both sexes, from imported stock, for sale at prices to suit the times.

CHAS. CALDER, 17-1-om BROOKLIN, ONTARIO.



Imported and Home-bred LINCOLNS. The first Royal winner, Royal Chester, at the head of the flock. Ewes from the best English flocks, such as those of Dudding, Bailes, Wright and Clark. Rams to head flocks a specialty. R. W. STEVENS, LAMBETH, ONT. London Station. 5-y-om

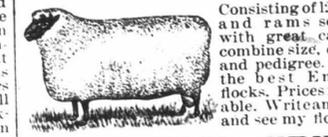
LEICESTERS FOR SALE

15 Ram Lambs, \$8 each; 1 Shearling Ram, \$15; also a few good ewes. Rams are a very superior lot, well woolled and good quality. Average weight on 1st Sept., 112 lbs. Can ship either by G. T. R. or M. C. R. M. C. R. direct connection with C.P.R. Registered letters at my risk. Mungo McNabb, COWAL P. O. 1-1-om



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

IMPORTED OXFORD AND SUFFOLK SHEEP



Consisting of 120 ewes and rams selected with great care to combine size, quality and pedigree. From the best English flocks. Prices reasonable. Write and come and see my flock. W. B. COCKBURN, 17-y-om Greenhouse Farm, ABERFOYLE, ONT.

OXFORD-DOWN RAMS FOR SALE.

Young Rams for 1894 season, registered; also a few improved Yorkshire Boars, with pedigree. Address—LANCLOT TASKER, 19-c-om HARLOCK, ONT.

IMPROVED YORKSHIRES,

Sired from imported stock of Duckering, Sanders Spencer and Walker Jones breeding stock, of all ages, for sale; also a few Bates bulls of milking stock. WM. COWAN, V. S., Galt, Ont. 9-y-om

Specialty of Improved Large Yorkshire Hogs



This herd has again won first prize at Toronto Exhibition. Two hundred pure-bred Pigs, of the type most profitable to the feeder, and the pork-packer's favorite. Individuals from this herd have been prize-takers at the principal Canadian Exhibitions. I request a personal inspection of my herd. Visitors welcome. All stock guaranteed to be as described. J. E. BRETHOUR, Burford, Brant Co., Ont. 3-y-om

YORKSHIRE PIGS

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

BREEDERS OF Large Improved Yorkshire Pigs.

Markham Baron, the sweepstakes Barrow over all breeds at the Guelph Fat Stock Show, 1892, bred by us. A choice assortment of Pigs now on hand. Only first-class stock shipped to order. Write to J. M. HURLEY & SON, Locust Hill, Station. 17-y-om JNO. PIKE & SONS.

Large (White) Improved YORKSHIRES AND ENGLISH BERKSHIRES

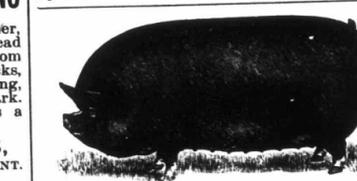
The undersigned offers for sale this fall an exceptionally fine lot of Young Pigs, also a few Sows ready to breed, also a few Sows in farrow. Pairs supplied not skinned. Prices to suit the times. Correspondence solicited. Apply to WM. GOODGER & SON, 11-y-0 Box 160, Woodstock, Ont.

LARGE IMPROVED YORKSHIRE PIGS and Holstein Cattle.

We breed nothing but the best, and sell cheap, and guarantee satisfaction or ask no pay. Come and see us, or write for prices and be convinced. FLETCHER BROTHERS, Oxford Mills P. O., Ont., Kemptonville St'n., C. P. R. 6-2-y-om

LARGE ENGLISH BERKSHIRES

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



GOLD MEDAL BERKSHIRES.

Young boars fit for service; young sows fit for breeding; fall pigs at six to eight weeks old. All bred straight from imported stock. Three imported boars in use. Can supply pairs not skinned. We ship to order and guarantee satisfaction. J. C. SNELL, 8-y-om EDMONTON, ONTARIO.

C. J. GILROY & SON

Glen Buell, - Ont., BREEDERS OF HOLSTEIN-FRIESIAN CATTLE. Large English Berkshires & Imp. Yorkshire Swine. Bred from imported stock. Personal inspection solicited. 7-3-0

BERKSHIRES AND YORKSHIRES.

Choice stock for sale at reasonable prices. Orders filled in rotation. Inspection invited. Write for prices. THOMAS WATSON, Springvale, Ont. 8-2-y-om

S. COXWORTH, CLAREMONT, ONT.,

Breeder and Importer of Berkshire Hogs. A choice lot of young pigs, just fit to ship. Pairs supplied, not skinned, by my three grand stock boars, "High Clear Prince," "King Lee" and "Champion Duke." Also a few choice sows of Oct. litters. Write for prices or come and see my stock. 8-y-om

THE HOME OF THE BERKSHIRES.

J. G. SNELL & BRO., Edmonton, Ontario.

Now is a good time to order pigs from litters farrowed this year. We never had so many fine sows to breed from as at present. Can supply a few pigs from litters farrowed in January and February. These will be right for the fall exhibition where prizes are given for pigs of this year. We have also for sale some young boars fit for service. Write for descriptions and prices. 8-y-om

H. J. DAVIS, Woodstock, Ont., Breeder of High-class Large Berkshire and Imp. Large White Yorkshire Swine, Short-horn Cattle.—A grand



lot of young pigs ready for shipment of both breeds; also boars fit for service from prize-winning stock. Stock shipped to order. Satisfaction guaranteed. Young Bulls generally on hand. 8-y-om

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

The Oxford Herd of Registered Poland Chinas

Our herd of Improved Poland-Chinas won 36 first, 18 second and 6 third prizes in 1893, including the Herd prize at Montreal and Toronto, for best boar and two sows, any age. Stock, both sexes and all ages. Pairs and trios not skinned for sale at all times. Correspondence solicited or inspection of herd invited. 15-y-om W. & H. JONES, Mount Elgin, Ont.

1500 lbs. of Honey

Extracted, and in sections, for sale, cheap; also Cocks and Cockerels of the following breeds:—L. Brahmas, Br. Leghorns, G. Dorkings, Bl. Spanish. Correspondence solicited. Descriptive catalogue free. 17-y-om CAPT. A. W. YOUNG, Tupperville, Ont.

GREAT SWEEPSTAKE HERD OF OHIO IMP. CHESTER WHITE SWINE.

Our herd won more first prizes and sweepstakes than all others combined, including Toronto, Montreal, London. Thirty imported and home-bred sows for the spring trade. Orders booked for spring pigs in pairs or trios not skinned. Stock for exhibition a specialty. Pedigrees furnished. Reduced rates by express. Write for particulars. H. GEORGE & SONS, Crampton, Middlesex County, Ont. 7-y-om

IMPROVED SUFFOLK SWINE, THOROUGH-BRED HORSES, DURHAM CATTLE AND - SOUTHDOWN SHEEP. -

A grand lot of Suffolk Pigs, all ages, for sale at prices to suit the times. A. FRANK & SONS, The Grange, four miles from Cheltenham Stn., C. P. R. & G. T. R. 24-2-y-om

Duroc-Jersey Swine

Are the best all-round hog known. No squealing; quiet disposition; good grazers; defeated the Berks and P. C. on all points at Mich. Ag. Coll. test. Pigs for sale. Address, P. E. LAMARSH, Wheatley, Ont. 4-2-y-om

ELLIOT, Pond Mills, Ont., breeder of Tamworth pigs, Oxford sheep, and Munger's sweepstake strain of Bronze Turkeys. Toms, \$3 to \$4; hens, \$2 to \$3. 20-2-y-om

Plant Now... GOLD MEDAL NURSERY STOCK

Fruit Trees, Berry Bushes, Hardy Grape Vines, Trees for Shade, Trees for Shelter, Trees for Ornament, Trees for all purposes. Flowering Shrubs, etc., etc. Plant this Fall and save a year's time in growth of your plantings. First-class stock only. PRICES VERY LOW; some lines of stock cheaper than ever was known. Price Lists on application. GEO. LESLIE & SON, Toronto Nurseries. Established 57 years. 19-a-0

MUNGER'S AMERICAN STRAIN.

Have won GRAND sweepstakes at the Great Chicago Fair, 1893, and other exhibitions. 25 Year Experience in Mating and Breeding. 40 Grand Breeding Pairs for 1894. Fowls and Eggs For Sale at all Times. Pairs, Trios and Breeding Pairs Mated for Best Results. Write for full particulars. Address, F. M. MUNGER, DeKalb, Illinois.

Fall Sale at Fallen Prices.

As I am over-crowded with stock, I will sell at very low prices the following extra choice fowls:—1 Trio Rose-comb Brown Leghorn Chicks, 1 Cock and 3 Hens of Light Brahmas, 1 Trio Black Langshan Chicks, 1 Indian Game Cockerel, and several Golden, Silver and White Wyandotte Cockerels and Hens. For bargains write quick to JNO. J. LENTON, 15-y-om PARK FARM, Oshawa, Ont.

PLYMOUTH ROCK CHICKS.



A fine cockerel and two choice pullets for only \$1. if ordered during August, for delivery Sept. 1st. A good opportunity to start with good stock. Can ship any distance. Will please or send your money back. Splendid bargains in choice yearling hens. If you want prize-winners for the fall shows, we would like to tell you about our stock. Write. Catalogues free. C. W. ECKARDT, Hazelton Fruit and Poultry Farm, RIDGEVILLE, ONT. 3-3-0m

INCUBATORS We Warrant The Reliable... 110 Year High Class Fowls... Reliable Incubator and Brooder Co., Quincy, Ill.

2000 lbs. Of Goose and Chicken FEATHERS WANTED AT ONCE.

We pay as high as 50c. a lb. for prime live Geese; 25c. for Duck. We also buy Chicken and Turkey Feathers. Write us what you have. First come, first served. It means money to you, for we pay cash.

Alaska Feather & Down Co., Ltd., 10 ST. SACRAMENT STREET, Montreal.



MOODY THRESHING MACHINES

Will thresh from 40 to 60 bushels of oats per hour under good conditions, with two horses. Write for prices. M. MOODY & SONS, Terrebonne, Que. 20-0

GRATEFUL-COMFORTING. EPPS'S COCOA BREAKFAST-SUPPER.

"By a thorough knowledge of the natural laws which govern the operation of digestion and nutrition, and by a careful application of the fine properties of well-selected Cocoa, Mr. Epps has provided for breakfast and supper 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., Ltd., Homoeopathic Chemists, London, England. 20-2-f-0

PURE WATER FROM ARTESIAN WELLS. Write for particulars to WILLIAM SHARP, 184 Hamburg Ave., Toronto, Ont. Practical Well Driller. 22-f-0

PORTABLE AND TRACTION ENGINES - First-class. Write for Catalogue. N. C. PETERSON & SONS, Sarnia, Ont. 15-f-0m

GODERICH ORGAN High grade, fine tone. Send for Catalogue. Made at Goderich, Ontario. 1-7-0m

TRY OUR NEW STEEL GANG CHEESE PRESS All kinds of Cheese and Butter Factories furnished with the latest machinery.

THE "MONARCH" ENSILAGE CUTTER (Carries any length, angle or direct.) Full line of Fodder Cutting Machinery, Horse Powers, Grinders, Root Pulpers and Agricultural Implements. Write for prices. Satisfaction guaranteed. Address, RICHARDSON & WEBSTER, 102-y-0 ST. MARY'S, ONT



OUR NEW 70 DEGREE BUCKET CARRIER

FURS! FURS! FURS!

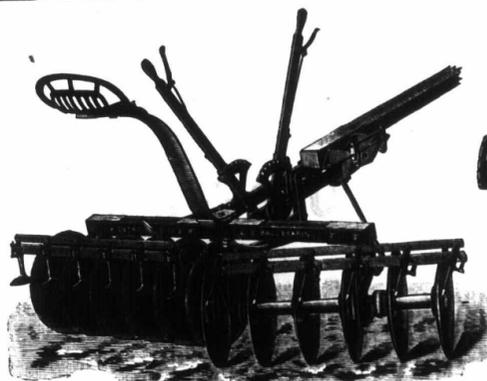
If you would like to buy a fur cap, a fur coat, a fur robe, a fur muff, a lady's fur cape, or a pair of fur driving gauntlets at hard times prices, then write to us for our free catalogue. For only \$6 we are selling ladies' black opossum fur capes, eighteen inches long and beautifully lined and quilted. A 28-inch black sable cape costs you only \$12. We have ladies' fur muffs at \$1.25, \$1.50, \$2.00 and \$2.50 each. Ladies' fur storm collars cost you \$2, \$2.50 and \$3.00 each. Men's fur caps, \$1.50, \$2.00, \$2.50 and upwards. Men's fur gauntlets, \$2 and \$3 per pair, and so on through the whole list, and our free catalogue describes everything. Our store is a general distributing centre for all the different articles which farmers have to buy. Our prices are the lowest we know of, but we sell goods only to spot cash buyers; that is, our terms are cash with your order, and we deliver (freight prepaid) all orders of \$10 and upwards to all Ontario stations. To all stations outside of Ontario, we make a liberal allowance for freight on orders, of ten per cent and upwards. Write for our free catalogue of prices.

The following goods are some that may be sent by mail to your nearest post office, all charges prepaid at the prices quoted: A first-class genuine Waltham stem-winding silver watch for only \$7.50; ladies' sword-pin brooches only 25c.; men's warm-lined choring mitts 55c. per pair. These mitts are faced with calfskin and will give grand wear. Another article which every farmer should have is a pair of our calfskin facings for his woolen mitts. These calfskin facings have thumb pieces attached, and are made to sew on the palms of woolen mitts. Price, only 25c. per pair. Then we have farmers' imitation dogskin, warm-lined driving gloves or mitts at \$1.05 per pair, post-paid. Boys' buckskin moccasins, \$1.10 per pair. Men's buckskin moccasins, \$1.35 per pair. The above few articles must satisfy you that we sell goods at right prices. In our harness department we show an excellent set of single strap single harness, at only \$8 per set, and for only \$10 we offer grand value in doubled and stitched single harness. Our catalogue describes them all. Our cook stoves are the best made in Canada. They give satisfaction every time. We have cook stoves from \$11.50 to \$22 each. The Stanley Blade Lance-tooth cross-cut saws are acknowledged by all about these famous saws. We are headquarters for them, and our catalogue tells you all about these famous saws. We sell guns, rifles and revolvers, horse-blankets, road carts, sewing machines, scales, churns, schoolhouse bells, saddles, crockery, window blinds, musical instruments, cutting box knives, farmers' and carpenters' tools of all kinds, cutlery and silverware, tinware, boots and shoes, and hundreds of other articles. Write for catalogue to

STANLEY MILLS & CO. Hamilton, Ontario.

Pink Pills (postage paid) only 35c per box. Dodd's Kidney Pills, 40c. per box. 20-0m.

DETROIT DISC



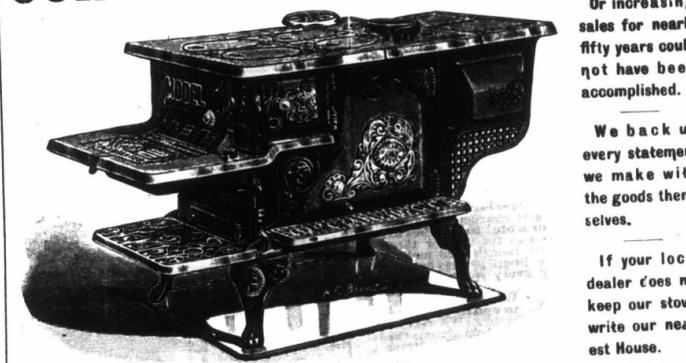
Steel frame, Ball Bearings (dust proof), Double Levers, Adjustable Scrapers, cuts even depth, sections run level at any angle, tongue changed quickly for two or three



horses, no weight on horse's neck. Most complete and perfect Disc Harrow made. Highest awards Columbian Exposition. Send for circulars to

AMERICAN HARROW CO., Detroit, Mich., U. S. A.

OUR STOVES MUST BE GOOD



Or increasing sales for nearly fifty years could not have been accomplished.

We back up every statement we make with the goods themselves.

If your local dealer does not keep our stoves write our nearest House.

THE McCLARY MFG. CO. LONDON, TORONTO, MONTREAL, WINNIPEG, VANCOUVER.

GREENER'S RENOWNED CLOSE SHOOTING GUNS FOR GAME AND PIGEONS

May be obtained through MESSRS. HINGSTON SMITH ARMS CO., WINNIPEG, or any gun dealer or store-keeper in Canada. PRICES RANGING FROM \$60. These guns are specially noted for their fine shooting qualities and strong breech action, and have won more valuable prizes and made higher scores than any guns in the world.

Before ordering a new gun, read Greener's latest book; 3rd edition now ready; price, 5s.; 270 pages; copiously illustrated. It may be obtained from Messrs. B. & S. H. Thompson, Merchants, Montreal, or from the author.

W. W. GREENER, ST. MARY'S SQUARE, BIRMINGHAM, and 68 HAYMARKET, LONDON.



The FAVORITE CHURN

The most simple. The most durable. The most effective. The easiest to keep clean. Water tanks a specialty, and shipped to all points. Correspondence and shipments promptly attended to. All kinds of cooperage. ST. MARYS COOPERAGE

F. E. BUTCHER, St. Marys, Ont.



SILVER WATCHES wear a life time. Cut this ad out and return to us and we will send you by express C. O. D. subject to examination, this full engraved, stem wind and set, 11 jeweled watch. Examine it and if you find it equal to any 50c. coin silver watch you ever saw, pay express agent \$1.50 and I charge, otherwise pay nothing. With each watch we send our guarantee to take water back any time within one year if you are in any way dissatisfied. One free if you will in 90 days. Sent by mail if you send cash with your order. Address, CHARLES MARTIN & CO., 88 Church St., Toronto, Ont.

BRANTFORD



STEEL WIND-MILLS With Internal Gear. STEEL TOWERS-IRON PUMPS WATER-TANKS-PIPING, ETC. The IDEAL JR. Sectional Power Mill is a Wonder. Send for circulars, and mention this paper.

GEM STEEL WINDMILLS, Steel Towers,

AND THE OLD RELIABLE: HALLADAY STANDARD PUMPING and GEARED WINDMILLS

Guaranteed to be the Best Made. Also Pumps, Tanks, Feed Mills, Haying Tools, Saw Tables, etc. Send for illustrated catalogue. Ont. Wind Engine & Pump Co. 367 Spadina Ave., TORONTO, ONT. Mention Farmer's Advocate. 10 y-0m

S. S. KIMBALL, 577 Craig St., Montreal. P. O. Box, 945. MANUFACTURER OF



CHAMPION Stump and Stone Extractor

OVER 1,000 IN USE IN THE DOMINION. 20-0

ADVERTISE IN THE ADVOCATE

**STOCK GOSSIP.**

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

The twelfth annual meeting of the National U. S. Swine Breeders' Association will be held at 10 o'clock a. m. in the Sherman House, Chicago, Ill., on Tuesday, November 29th, 1894. This is a very important meeting, and taking place while the Fat Stock Show is in progress, should have a large attendance of breeders. The programme will include papers and addresses by leading breeders and writers. J. G. Springer, Springfield, Ill., is the Secretary.

At the last agricultural show held at Nelson, New Zealand, one of the most interesting contests was for the special prize offered by Messrs. Nelson Bros. for the best pen of sheep suitable for freezing. The competing pens consisted of the following breed and crosses: Border Leicester and Lincoln, Lincoln and Shropshire, Lincoln and Merino, and Merino. The judges awarded the prize to the Lincoln-Shropshire cross, though Mr. Nelson considered the Border Leicester-Lincoln cross the best. The winning sheep averaged seventy-two pounds. The Border Leicester-Lincoln cross sheep averaged sixty-two pounds. The Lincoln-Merino sheep averaged fifty-seven and a-half pounds, and the Merinos sixty-four and a-half pounds. Neither the Lincoln-Merino sheep nor the pure Merinos were considered as of good quality, the latter being regarded by the butchers as quite unfit for the English markets. The ages of the competing sheep were not given.

**GREENLANDS STOCK FARM.**

Mr. C. C. Cleveland, the popular member for Richmond, in addition to being connected with the large Leather Belt Manufacturing Co. of J. L. Goodhue & Co., finds time to give a considerable share of his attention to the improvement of live stock. With this object in view, he erected a large and substantial barn and cattle stables, which should serve as an incentive, and also as a guide for others to go and do likewise. The farm is conveniently located in the town of Danville, on the main line of the G. T. R., and about midway between Montreal and Quebec, where Mr. Cleveland has gathered together a choice collection of Short-horn cattle, Standard-bred horses, and Chester White swine. About a year ago he made a draft of a number of very fine animals from the herds of S. Pearson, Meadowdale, and Arthur Johnston, Greenwood, and to these he has added both by purchase and breeding, until now he has the foundation of a superior herd of Shorthorns. This herd is headed by a young thirteen-months-old son of Wimple of Trafalgar, and got by imported Tofthills. He is a very fine animal for his age, thick, and well-fleshed, and should be of great service to the herd. The five-year-old cow, Wimple of Trafalgar, portrayed in the *ADVOCATE* some time ago, still carries a great wealth of flesh, though she is suckling a fine bull calf by H. I. Elliott's imported Cruickshanks bull, King James, of the well-known Maid of Promise family. Another excellent animal is bracelet, by Waterloo Warder, imported, and will be a valuable addition to the herd. The swine kept on this farm are of the Chester White breed, of which the foundation was obtained from Mr. E. D. George, Putnam. Mr. Cleveland has been very successful in the breeding of these, and by this means has been the medium of distributing them throughout the Eastern townships, and all over Quebec.

**AYRSHIRES AT SPRUCE HILL FARM.**

A short time ago one of our staff had the pleasure of visiting the farm of Messrs. A. McCallum & Son, Danville, Que. The Messrs. McCallum have been breeding Ayrshires for a number of years, and by careful selection, skillful breeding, and strict attention to business, this firm has become favorably known as reliable breeders. The farm is situated about a mile and a-half from Danville Station, on the main line of the Grand Trunk Railway. The herd numbers sixty-eight animals, and are mostly of their own breeding. At the head of the herd is the fine yearling bull, Derby, got by the well-known bull, Silver King, and out of Derby of Petite Cote, imported, which was sired by Travellers, so will be seen that he traces back to this celebrated bull on both sides. He is a very superior animal, and won sweepstakes as a calf at Sherbrooke. Among the cows we noticed especially Derby of Petite Cote, a four-year-old matron. She has very highly developed milk veins, and will give fifty pounds of milk per day, for several months at a stretch. This cow was imported in dam, and is from imported Derby. So, in addition to his individual merit, it will be seen that the stock bull is of the right milking strain. Lady Gray, a cow that Mr. McCallum considers his best, from the standard of milk production, is six years old, and should be good for a number of years yet. Another choice cow is Blossom, one of the four cows that took the prize for both quantity and quality combined, at the Sherbrooke Exhibition. Sybel is another of the above quartet. In the field we noticed a cross between a Jersey cow and an Ayrshire bull, which showed the points of a dairy cow almost to perfection. We were informed that she was a wonderful producer, giving a large flow of high-testing milk for a long season, and scarcely the inferior of the best cows in the herd; and, as proof of this, we might mention the fact that she won the first prize of \$20 at the Provincial Exhibition, Quebec, as best grade on the grounds. As an evidence of the satisfaction which stock from this herd has given, we have only to mention the fact that in one county alone, that of Compton, eleven of his bulls have been purchased the past season. Ayrshires of the deep, long type, are also bred to a considerable extent, but for producing milk for the packers, Mr. McCallum prefers a cross between a Berkshire and a Yorkshire. Owing to the push and energy of Mr. McCallum, backed by other representative farmers there, he has erected on his farm a fine creamery, which is giving good satisfaction to his patrons.

**Neuralgia**

**ATTACKS THE EYES**  
Makes  
**THE LIGHT**  
Unbearable.



PERMANENTLY CURED  
BY USING

**Ayer's Pills**

"My husband was subject to severe attacks of neuralgia which caused him great pain and suffering. The pains were principally about his eyes, and he often had to remain in a darkened room, not being able to stand the light. Ayer's Pills being recommended, he tried them, using one before each meal. They very soon afforded relief, followed by permanent cure. I am a strong believer in the efficacy of Ayer's Pills, and would not be without them for ten times their cost."—Mrs. M. E. DEBAT, Liberty, Tex.

"I have used Ayer's Pills in my family for forty years, and regard them as the very best."—Uncle MARTIN HANCOCK, Lake City, Fla.

**AYER'S PILLS**  
Received Highest Awards  
**AT THE WORLD'S FAIR**

**IN MAKING A PRESENT** one desires a good and suitable article at a low price—something that will look well, last well, be useful and surely please. We meet these conditions. We sell Silver-Plated Hollowware, such as Tea Sets, Ice or Water Pitchers, Casters, Cake Baskets, Napkin Rings, etc. Silver-Plated Dessert and Table Knives; Tea, Dessert, and Table Spoons, Dessert and Table Forks, Sugar Shells and Butter Knives, in both Triple-Plate and Unplated White Metal. Waltham, Elgin and other American and Swiss Watches, and a desirable line of Mantel, Cabinet, and other Clocks, in Walnut, Oak, and Nickel. We ship with privilege of examination before paying for them. Send your address and receive FREE our wholesale Catalogue, with cuts, descriptions and prices.

THE SUPPLY COMPANY,  
NIAGARA FALLS, ONTARIO

**SECURE AN AGENCY!**

THIRTY DAYS' CREDIT.  
**No Capital Required.**

We Send by Mail Postage Paid.  
**You Don't Risk a Cent!**

All Our Agents Are Making Money  
Selling Our Beautiful

**Art Specialties!**

Teachers, Students, Clergymen, Farmers, Farmers' Sons, Ladies, Girls and Boys

Will find our Splendid Art Specialties standard, salable at sight and of the best character, and our dealings prompt, honorable and liberal. You can take up the business for two or three months, or even for but one month, and make it pay, or if you have only a few hours per day one day in the week, you can employ every spare hour and make it all count.

**We Trust You.** We send all pictures back all pictures in good order, not sold. This is the most liberal offer ever made, and the pictures are the handsomest and fastest selling art works ever placed in the hands of agents. You can secure without expense an honorable, legitimate and very profitable business.

If you wish to become an agent for us fill out the following agreement and return it to us, and we will at once send you six samples of the pictures without your sending us one cent in advance. Most agents retail these pictures at 50 CENTS EACH, thus getting a large profit on their first order. Address

**GREAT WESTERN SUPPLY HOUSE,**  
Pontiac Building, Chicago, Ill.

Fill out blank below and mail it to us and we will at once send you six oil pictures. All duties paid on pictures sent to our Canadian agents.

**CUT THIS OFF**

**AGREEMENT WITH GREAT WESTERN SUPPLY HOUSE.**  
GENTLEMEN:—Please send by mail, securely packed, and all charges prepaid, 6 New Fast Selling Oil Pictures, all different subjects, all 15x21 inches in size, which I agree to sell if I can and remit the sum of One Dollar, or return those unsold, in good order, and postage paid, within thirty days from the time they are received by me.

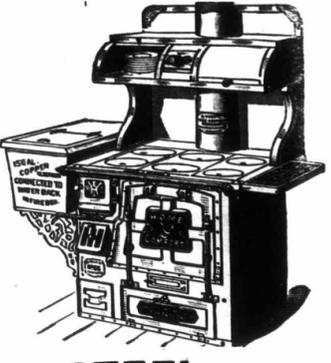
My Name .....

My Address .....

**HOME COMFORT**

ROLL OF HONOR.

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



**STEEL HOTEL AND FAMILY RANGES.**

CARVING AND STEAM TABLES, BROILERS, MALLEABLE WATERBACKS, ETC., ETC.

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

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

SALES TO JANUARY 1st, 1894, 277,188.

RECEIVED BY **WROUGHT IRON RANGE CO.,** MANUFACTURERS OF Hotel Steel Ranges, Kitchen Outfittings and "Home Comfort" Hot-Air Steel Furnaces. OFFICES, SALESROOMS AND FACTORIES, 70 to 76 PEARL STREET, TORONTO, ONTARIO, and Washington Avenue, 19th to 20th Streets, ST. LOUIS MO., U. S. A. Founded 1864. Paid up Capital, \$1,000,000. 7-y-om

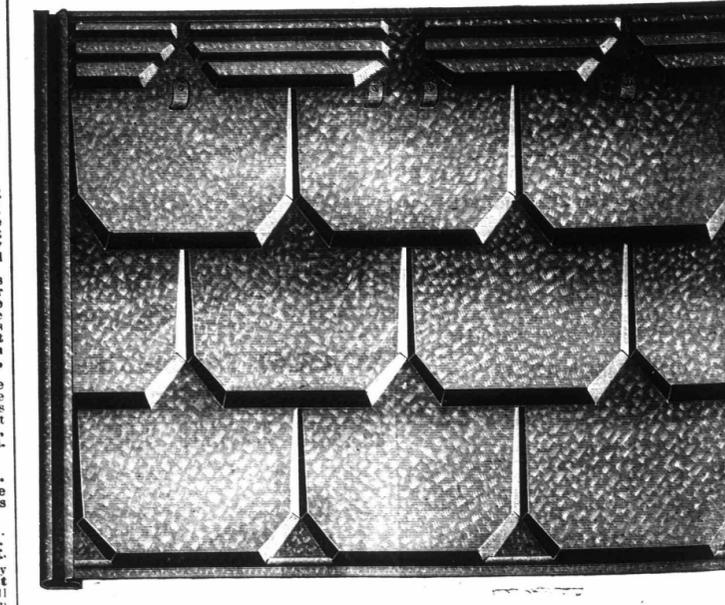
**Use:- Queenston:- Cement**

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

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

**ISAAC USHER & SON,** THOROLD, ONT.

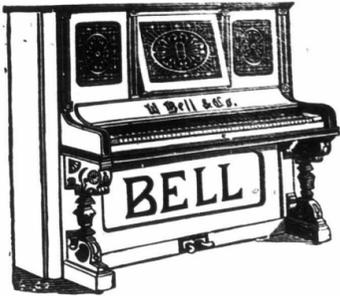
**"EASTLAKE" STEEL SHINGLES**



GALVANIZED OR PAINTED. THE SHINGLE OTHERS TRY TO IMITATE. HAS NO EQUAL. CAN BE LAID BY ANYONE. FULLY GUARANTEED. FIRE-PROOF, DURABLE, ORNAMENTAL AND CHEAP.

Sole Manufacturers

Cut out and send us this advt. and we will quote you special prices. 10-y-o METALLIC ROOFING COMPANY (Ltd.) 82, 84, 86, 88 and 90 YONGE ST., TORONTO, ONT.



PIANOS, REED ORGANS & CHURCH PIPE ORGANS THE STANDARD INSTRUMENTS OF THE WORLD. Send for Catalogue. BELL ORGAN AND PIANO CO., Guelph, Ont. 17-1-f-o



FARMER'S FRIEND AND ACCOUNT BOOK. Presenting separate accounts for all farm transactions, with miscellaneous rules, recipes, etc. Price, \$2. Will last for years. If no agent in your territory, send direct. Agents wanted. William Briggs, Publisher, TORONTO. 17-f-om

KNITTER The Improved Family..... Will knit 15 pairs of Sox a day. Will do all Knitting required in a family, homespun or factory yarn. SIMPLEST KNITTER on the Market. This is the one to use. A child can operate it. We guarantee every machine to do good work. We can furnish ribbing attachments. Agents wanted. Write for particulars. Dundas Knitting Machine Co., Dundas, Ont. 17-y-om

NORTHERN Business College IS THE PLACE TO ATTEND, if you want either a Business Education or a course in Shorthand. The Best in Canada. Handsome Annual Announcement free. Address, C. A. FLEMING, Prin., Owen Sound, Ont. 17-o

CANADA BUSINESS COLLEGE. HAMILTON, ONTARIO. The oldest established and most popular Business College in the Dominion. Excellent Shorthand Department in connection. Send for handsomely illustrated prospectus to R. E. GALLAGHER, Principal. HAMILTON, ONT. 17-f-o

CRADLE CHURN It is a Labor Saver. Is Always in Order. The Easiest to Clean. The Easiest to Operate. Allows a Free Circulation of Air while Churning. CHURNS WITH HALF THE LABOR REQUIRED BY ANY REVOLVING CHURN. TO BE HAD FROM ALL LEADING DEALERS. Awarded first prize at Toronto Industrial Fair over all competitors. Address CHAS. BOEHLKE & SONS, Toronto, or to the WATSON MANUFACTURING CO., Ayr, Ont. 15-y-om



YOU HAVE STOCK TO FEED Your Profits Will be increased and your land freed from foul weeds if you Feed your Stock grain ground by a WATEROUS BUHR STONE CHOPPER It grinds everything, even to the finest seeds. Stones last a lifetime. Iron plates chilled 1-16 are not in it with French Buhr Stones six inches thick. Chilled clear through. Simple, durable, fast. Can be driven by wind, water, steam, horse or electricity. Write us. WATEROUS BRANTFORD, - CANADA. GET OUR NEW CIRCULAR.



CASEY DIAMOND GRIP, Also Double Lock Farm, Garden and Boulevard FENCING. Agents wanted (farmers preferred) in every township. Must be had—men of push and energy. If you are a man of push, write us for terms. Our agents write they are more than pleased, and the farmers highly delighted, and say the Casey Diamond Grip is far superior to all others. Our fence is built on the premises, thus following hill and valley without lapping. Best post turned to order. See our exhibit at Toronto Industrial, also Western Fair, London, Ont. Address Cor. Bathurst and Clarence Streets, Between G.T.R. & M.C.R. Stn., London

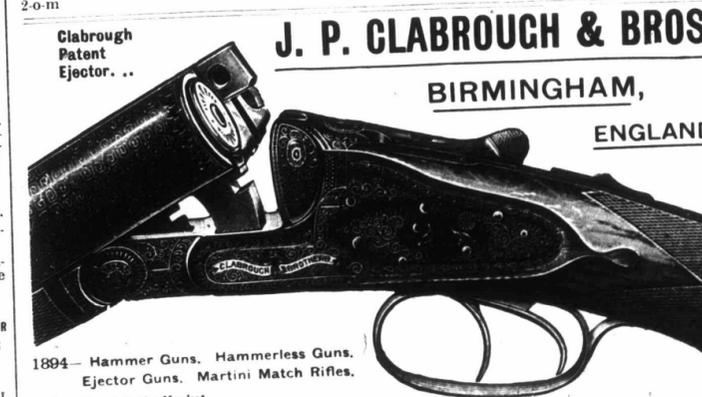
CANADA FENCE COMPANY, Cor. Bathurst and Clarence Streets, Between G.T.R. & M.C.R. Stn., London



Farmers: Don't Be Misled! THE MODEL ROOT PULPER Can do More Work with less exertion, and without danger to the operator's hands, than any Root Pulper made. Those who use it will have no other. If your agent does not supply you, write direct to T. T. COLEMAN, SOLE MANUFACTURER, Seaforth, Ontario. 2-o-m

J. P. CLABROUGH & BROS. BIRMINGHAM, ENGLAND. Clabrough Patent Ejector...

J. P. CLABROUGH & BROS. BIRMINGHAM, ENGLAND. 1894— Hammer Guns, Hammerless Guns, Ejector Guns, Martini Match Rifles. Are the Finest in the Market. May be had from all leading dealers in the Dominion. 14-j-om



ADVERTISE in the ADVOCATE.



PAGE WOVEN WIRE FENCE DO YOU WANT A Fence that is GUARANTEED To turn all kinds of stock. To keep tight in all temperatures. To give satisfaction. To last a few days less than forever. Can You Get Anything Better than This? - - It is neat and strong, and looks like a spider's web spun from post to post; but it is always there. Sold throughout Ontario by farmers who use it themselves and know its merits well enough to recommend it to their neighbors. If there is no dealer in your vicinity, write for circulars and illustrated paper to The Page Wire Fence Co. of Ontario, Ltd. WALKERVILLE, ONT.

THE BEST FENCE MADE FOR FARMS AND RAILROADS. Agents wanted in every township. Send for circulars and particulars. Address, THE LOCKED-WIRE FENCE COMPANY Ingersoll, Ont.

CHAMPION EVAPORATOR For MAPLE, SUGAR, CIDER, and FRUIT JELLIES. Has a corrugated pan over firebox, doubling boiling capacity; small interchangeable syrup pans (connected by siphons), easily handled for cleaning and storing; and a perfect automatic regulator. The Champion is as great an improvement over the Look pan as the latter was over the old iron kettle hung on a fence rail. Catalogue Free. THE G. H. GRIMM MFG. CO., HUDSON, Ohio, & MONTREAL, Quebec. 17-1-o

FRANKLIN HOUSE Cor. Bates & Larned sts. only a block from Woodward & Jefferson Aves., DETROIT, MICH. THOROUGHLY RENOVATED. Very central. Per day, \$1.00. 17-d-o

ALL KINDS OF FRUIT PACKAGES AND BASKETS. APPLY TO OAKVILLE BASKET CO., Oakville, Ont. 11-1-o

DOWSWELL WASHERS. Ash your hard ware for the DOWSWELL WASHER Best Washing Machine in the Market. 10,000 IN USE. Or write to manufacturer for catalogue and prices. We also manufacture Churns, Wringers, Mangles and other household specialties, and want good agents in every county. 122-y-o DOWSWELL BROS., Hamilton, Ontario.

ONTARIO VETERINARY COLLEGE Temperance Street, Toronto. The most successful Veterinary Institution in America. All experienced Teachers. Session begins October 17th. Apply to the principal, Prof. SMITH, V.S., Edin., Toronto, Can. 18-2-y WORK FOR ALL. \$75 a month salary and expenses paid. If you want employment write at once to P. O. VICKERY, Augusta, Maine. 62-y-o

**BREEDERS' DIRECTORY.**

Cards up to six line space inserted under this heading, one issue a month, \$3 per line per annum: every issue, \$5 per line. Payable in advance.

**ALEX. HUME**, Burnbrae, Ontario, Importer and Breeder of Ayrshire cattle and Yorkshire hogs. 330-2-y

**ALF. BROWN**, Bethel, Ont., breeder of Ayrshire Cattle, Shropshire Sheep and Leg-horn and Dorking Fowl. 14-2-y

**A. MANN**, Bowmanville, Ont., breeder of Pure Galloway Cattle, Tamworth Swine.

**M. & R. SHAW**, Brantford, Ont., breeders of Galloway Cattle. Choice young animals for sale. 4-2-y

**BLACKWOOD & McCALLUM**, Martintown, Ont., breeders of registered Clydesdales, Shropshires and Yorkshires. 340-2-y

**DANIEL BRIMS**, Athelstan, P. Q., breeder of Durham Cattle, Clydesdale Horses and Shropshire Sheep. 315-2-y

**D. A. CAMPBELL**, Mayfair P. O., Ontario, Appin Station, Breeder of Registered Lincoln Sheep. Stock for sale. 2-2-y-om

**D. G. HANMER & SON**, Mt. Vernon, Ont., Importers and Breeders of high-class Shropshire Sheep and Berkshire Pigs. 2-2-y-om

**FRED. S. WETHERALL**, Compton, P. Q., breeder of Jersey Cattle and Shropshire Sheep. 18-2-y

**JAMES STEPHEN & SONS**, Brookhill Farm, Trout River P. O., P. Q., importer and breeder of Ayrshire Cattle and Yorkshire Pigs. Young stock always on hand for sale. 6-2-y

**JAS. TOLTON**, Walkerton, Ont., importer and breeder of Oxford-Down sheep, also breeder of Shorthorns, Berkshire pigs and Bronze turkeys. 6-2-y-om

**JOHN JACKSON & SONS**, Abingdon, Ontario, Importers and Breeders of Registered Southdown Sheep. 322-y

**JOHN LAIDLAW**, Crosslee Farm, Wilton Grove P. O., Ont., breeder and importer of Border Leicester Sheep. Sheep for sale. Satisfaction guaranteed. 328-y

**JOS. CAIRNS**, Camlachie, Ont., Breeder of Pure-bred Chester White Swine. 4-y

**J. P. PHIN**, Breeding and Importing SHROPSHIRE SHEEP a specialty. 22 HESPELER, ONT.

**LEVI SKINNER**, Tyrone P. O., breeder of Shropshires and Shorthorns. Well-bred breeding stock a specialty. Satisfaction guaranteed. 22-2-y

**MARPLE RIDGE SOUTHDOWNS**, Guy Carr, Jr., Compton Station, Quebec, also breeder of P. Rocks and Wyandottes. 16-2-y

**PETER ARKELL**, Teeswater, Breeder & Imp. of Registered Oxford-Down Sheep. 22-yom

**ROBERT MARSH**, Importer and Breeder of SOUTHDOWN SHEEP. 14-y LORRIDGE FARM, Richmond Hill, Ont.

**SPRINGHILL STOCK FARM**, Wilfred Hansel, importer and breeder of thoroughbred Clydesdales. Stock for sale. Correspondence solicited. Thorold P. O., Ont. 22-2-y

**T. GUY**, Oshawa, Ont., Breeder of Ayrshire Cattle—prize winners at the World's Fair.

**THOMAS IRVING**, Montreal, breeder of Clydesdale Horses and Ayrshire Cattle. 8-2-y

**W. M. STEWART, Jr.**, Menie Stock Yards, Seymour, Ont., breeder of Ayrshire Cattle and Berkshire Pigs. 10-2-y

**W. H. BEATTIE**, Wilton Grove, importer and breeder of Shropshire Sheep. A choice lot of Collie Dogs and White Holland Turkeys. 319-y

**W. M. SMITH, M.P.**, Columbus, Ont., breeder and importer of Clydesdale Horses, Shorthorn Cattle, and Cotswold Sheep. Stock for sale. Terms and prices liberal. 325-2-y

**- SOUTH - SASKATCHEWAN LANDS.**

500 FARMS FOR SALE (areas to suit investors), all choice selected lands near SASKATOON, in that fine district known as "The Temperance Colony," equal to anything on the continent for grain growing or mixed farming. The homesteads are mostly taken up by a superior class of settlers. Every farm is within easy distance of a C. P. R. station. Some of these farms have frontages on the Saskatchewan River. Torrens Titles. No restrictions of any kind. Prices moderate; now is the time to buy. Apply to C. POWELL, Manager, 6 Victoria St., Toronto, Or to OSLER, HAMMOND & NANTON, 21-y om WINNIPEG, MAN.

**DRS. ANDERSON & BATES**, Surgeons of the Eye, Ear, Throat & Nose, 34 North James St., Hamilton, and 5 College St., Toronto. Sole agents for Prof. North's Earphone for the incurable deaf. A large assortment of artificial eyes. 16-2-y

*THE Very Best.*

**EDUCATION FOR FARMERS' SONS**

Is a practical business training, such as may be obtained at the CENTRAL BUSINESS COLLEGE, Toronto, or CENTRAL BUSINESS COLLEGE, Stratford, Canada's Greatest Business Schools.

Hundreds of young men from the farm have attended our schools, and many of them are out in the great world of business, earning large salaries. Our Colleges are the only commercial schools in Canada that guarantee to satisfy the patrons or refund the money. Write for new catalogue and mention "Advocate."

17-o SHAW & ELLIOTT, Principals.

**THE NEW Chatham and Chautauqua Giant Wagon**

With Unbreakable Axles and Unbreakable Arms.

THE BEST MADE ON EARTH. So said the Judges on Vehicles at the WORLD'S FAIR,

Who awarded us a GOLD MEDAL AND DIPLOMA

Over the heads of numerous old and extensive builders in the United States and Canada. The axles are unbreakable, because

**Van Allen's Patent Giant Arms**

Throw all the load directly on the arms, and the arms are also unbreakable, because they are the best refined.

**MALLEABLE IRON,**

Warranted as strong, more durable and lighter running than Steel Skeins. These Giant Arms completely revolutionize the building of wagons. Our 3-inch Malleable Giant Arm Wagon is

**WARRANTED STRONGER,**

Though less in price, than any ordinary 3 1/2 to 3-inch cast-iron arm wagon, and our 2 1/2-inch Malleable Giant Arm Wagon is warranted stronger than any ordinary 3-inch cast iron arm wagon, and less in price.

**USE RAMSAY'S Barn and Roof PAINTS.**

A few good Farms, improved and unimproved, from 7 to 20 miles from the city. Easy Terms. Prices to suit the times. Now is your time to secure a good Farm near the best market in the Province. Farmers are realizing that mixed farming is the only farming that will pay. Buy land where you can sell all you can produce for cash. Apply to

**G. J. MAULSON,** 195 Lombard St., WINNIPEG, MAN. 13-f-om

**BOYS FOR FARM HELP**

The managers of Dr. Barnardo's Homes will be glad to receive applications from farmers or others for the boys whom it is proposed to send out from England in several parties during the coming season. All the young immigrants will have passed through a period of training in the English Homes, and will be carefully selected with a view to their moral and physical suitability for Canadian life. Full particulars, as to the terms and conditions upon which the boys are placed, may be obtained on application to MR. ALFRED B. OWEN, Agent, Dr. Barnardo's Homes, 214 Farley Ave., Toronto. 4-y-o

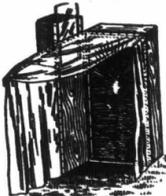
**HAVE YOU CONSIDERED THIS MATTER**  
FROM THE  
**Grange Wholesale Supply Co.**  
(LIMITED),

**YOU CAN ORDER BY MAIL:**  
Clothing,  
Boots and Shoes,  
Groceries,  
Harness,  
Sewing Machines,  
Patent Medicines,

**ALMOST ANYTHING YOU MAY NEED.**

The quality of Everything is guaranteed to be right, and at Wholesale Prices. Get our Catalogue of prices and terms and co-operate with us, the only farmers' chartered co-operative store in Canada.

**The GRANGE WHOLESALE SUPPLY CO.** (LIMITED),  
126 King St. E., TORONTO.  
7-om R. Y. MANNING, Manager.



**THE LATEST!**  
A MUCH NEEDED INVENTION,  
**THE Fly Trap**  
WORKS COMPLETE.

Guaranteed to remove and secure nine-tenths of the flies on a herd of cattle at a single stroke, 15 minutes for 20 cows. Township and County rights for sale.

**H. GUTHRIE,** PATENTEE,  
Paris Station P. O., Ont.  
23-y-om

**HARNESS**

We have just got out our new Catalogue of harness and everything required by a farmer in this line. It will pay you to send for one and examine it closely. We will guarantee to save you money and give you a No. 1 article, or no sale. ALL HAND SEWED. Deal with us and save middleman's profit. Send for Catalogue.

**Farmers' Harness Supply Co.,** 104 Front St. East, TORONTO, 7-y-o ONT.

**W. & F. P. CURRIE & Co.**

Wholesale General Merchants,  
100 GREY NUN ST., MONTREAL

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

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

**ROOFING**

**FREEMAN'S 3-ply Ready Roofing.**  
Send for samples and get our low prices, and compare the quality of goods and prices with others.

The Cheapest Roof on the market for the money.

Address: **THE W. A. FREEMAN CO.** 1-y-o HAMILTON, ONT.



TRADE MARK.  
The Belt with the above trade mark is the only successful one made. Used all over the world. Ten years in the market. Not an experiment. Real manufacturer in NIAGARA FALLS, ONT., CANADA; SUSPENSION BRIDGE, N. Y., U.S.A., and DURSLEY, ENGLAND. For Catalogue, etc., apply to  
10-y-om **ANTHON CHRISTENSEN & CO.**

**BARGAIN SALE STILL GOING ON.**

We have decided to continue our Bargain Sale of

**GUNS AND BICYCLES**  
for two weeks longer.

Intending purchasers would do well to place their orders at once. Write for Gun and Bicycle Catalogue. Mailed free to any address.

**The Bowman Hardware & Sporting Goods Co.** (LIMITED),  
7-om HAMILTON, ONT.

**UN-NERVED, TIRED**

People and invalids will find in **CAMPBELL'S QUININE WINE** A pleasant restorative and appetizer. Pure and wholesome, it has stood the test of years. Prepared only by K. CAMPBELL & Co., MONTREAL.  
20-2-y-om

**For Fall Planting.**

**FRUIT TREES, NEW KINDS and OLD; ORNAMENTAL ROSES, ETC., ETC.**

Clean and handsome. None better. They will please you. Be your own agent and save nearly one-half cost. Compare our prices and stock before placing your order; you will come again.

**A. G. HULL & SON,** CENTRAL NURSERIES, St. Catharines, Ont. 2-y-o

**400—Helderleigh Fruit Farms Nurseries—400** (Four Hundred Acres in Extent.) Established 1882.

There is no place in Canada where the season is longer than here. Hence we get trees brought to the fullest maturity, capable of withstanding the severest cold. Having one hundred acres in fruit, from which cuttings, buds, scions, etc., are taken, I can safely guarantee the purity of my stock to be equal, if not superior, to any other nursery. The soil is specially adapted to produce vigorous, hardy trees, a grand lot of which are now growing and for sale. All the leading sorts of both old and new varieties deemed worthy of propagation. Catalogues free on application. Agents wanted in every township.  
13-1f-om E. D. SMITH, Winona, Ontario.



**ALMA**  
The leading Canadian College for Young Women.  
ST. THOMAS, ONTARIO.  
Graduating Courses in Literature, Music, Fine Art, Commercial Science and Eloquence. The efficiency of Canadian Colleges is conceded by all. 20 professors and teachers. 300 students from all parts of America. Health and home. LOW RATES. Only 3 hours from Detroit. 60 pp. illustrated announcement. President AUSTIN, A. B.

EVERY PRACTICAL FARMER should read the Planet and if free, S. L. ALLEN & Co., 1107 Market St., Philadelphia. 10-r-o

**ADVERTISE IN THE ADVOCATE**