

Technical and Bibliographic Notes/Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

- Coloured covers/
Couverture de couleur
- Covers damaged/
Couverture endommagée
- Covers restored and/or laminated/
Couverture restaurée et/ou pelliculée
- Cover title missing/
Le titre de couverture manque
- Coloured maps/
Cartes géographiques en couleur
- Coloured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire)
- Coloured plates and/or illustrations/
Planches et/ou illustrations en couleur
- Bound with other material/
Relié avec d'autres documents
- Tight binding may cause shadows or distortion along interior margin/
La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure
- Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/
Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.
- Additional comments: / Continuous pagination.
Commentaires supplémentaires:

- Coloured pages/
Pages de couleur
- Pages damaged/
Pages endommagées
- Pages restored and/or laminated/
Pages restaurées et/ou pelliculées
- Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées
- Pages detached/
Pages détachées
- Showthrough/
Transparence
- Quality of print varies/
Qualité inégale de l'impression
- Includes supplementary material/
Comprend du matériel supplémentaire
- Only edition available/
Seule édition disponible
- Pages wholly or partially obscured by errata slips, tissues, etc., have been refilmed to ensure the best possible image/
Les pages totalement ou partiellement obscurcies par un feuillet d'errata, une pelure, etc., ont été filmées à nouveau de façon à obtenir la meilleure image possible.

This item is filmed at the reduction ratio checked below/
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	12X	14X	16X	18X	20X	22X	24X	26X	28X	30X	32X
										✓	

CANADIAN BREEDER

and
AGRICULTURAL REVIEW.

VOL. II.

TORONTO, DECEMBER 17, 1885.

No. 49.

THE CANADIAN BREEDER AND AGRICULTURAL REVIEW.

Weekly Paper, published in the Stock and Farming interests of
Canada.

SUBSCRIPTION, - - \$2.00 per Annum.

ADVERTISING RATES.

Per line, each insertion, 10 cents.
(Nonpareil measurement, 12 lines to one inch.)
Breeder's cards, five-line space, \$20.00 per annum; each additional
line, \$5.00 per annum.

Condensed advertisements under classified headings, one cent per
word, each insertion, for which cash must accompany order, as accounts
will not be opened for them.

Contract rates on application.

All communications to be addressed to

CANADIAN BREEDER,
COR. CHURCH AND FRONT STS.,
TORONTO.

S. BEATTY, MANAGER.

TORONTO, THURSDAY, DECEMBER 17TH, 1885.

Advertisements of an objectionable or questionable
character will not be received for insertion in this
paper.

THIS PAPER may be found on file at Geo. P. Rowell &
Co's Newspaper Advertising Bureau, 10 Spruce
Street, where advertising contracts may be made
for it in **NEW YORK.**

N. W. AYER & SON, Times Building, Phila-
delphia, are agents for this paper. Files may be
seen and contracts made at their office.

The CANADIAN BREEDER is represented in
Liverpool, England, by Mr. J. F. Reid, Chapel
Walks, where contracts for advertising may be
made and subscriptions sent.

TUBMAN FOR SALE.

For the production of half-bred horses big sires
are always popular, as however fallacious the con-
jecture may often prove, breeders always persist in
looking for large produce from large sires. It often
happens, however, that a small sire will produce
large colts, and sometimes (though not so often) it
happens that a large sire gets small colts. In the
famous thoroughbred stallion Tubman (advertised
for sale elsewhere) the buyer will find not only great
size and substance, but a well proved ability to get
large solid colored produce. Tubman should be a
very useful horse wherever he may go, but if bred to

large, heavy mares he could hardly fail to produce
carriage horses of rare quality, size and finish.

As a sire of race horses, Tubman should be very
successful. In his day on the turf he was a
thorough race horse at all distances up to four
miles (having won the Bowie Stakes at Baltimore)
and fashionably bred as he is (by War Dance out of
Lass of Sidney, she by imported Knight of St.
George) he should be popular either as a producer
of thoroughbreds or half-breds.

HORSES FOR SALE.

In another column will be found an advertise-
ment of the sale of the following horses: Midlo-
thian, Direction, Kennesaw, Miss Archibald, and
Wildwood. In this lot, though it is not a very large
one, race-horse owners and breeders have a con-
siderable variety from which to make their selec-
tions. First in the list comes imported Midlothian,
an extremely handsome and well-turned English
thoroughbred, descended of some of the most
fashionable strains now represented on the English
turf. Were it not for the alleged question as to his
breeding it is very doubtful if Midlothian would
have ever crossed the Atlantic, for with Lufra for
his dam, had it been settled whether he was by
Strathconan or Rataplan he must have been highly
prized for stock purposes, but men who pay fancy
prices for finely bred sires, want to be absolutely
certain as to the blood lines they are following, so
that while either sire was good enough the question
as to which of the two was the sire must have been
a powerful agency in lessening his price after he
had closed a very successful career on the turf.
But while Midlothian, with his double parentage,
might not be quite the article for the patrician
matrons of the English studs, there is no reason
why he might not be successful as a sire of both
thoroughbreds and half-breds in Canada, and it is
to be hoped that he will not be permitted to go out
of the country.

The rest of the animals offered are of less value
to the breeder, though Miss Archibald should make
an excellent brood mare, and as her produce could
claim half-bred allowance they should be excep-
tionally useful on the turf. She was a wonderfully
game and clever cross country mare herself, and if

is not improbable that when coupled with a
thoroughbred stallion she might produce race
horses having all the speed, courage and endurance
of animals that were strictly thoroughbred. She is
in foal to Scalper.

The closely inbred son of Disturbance and
Nettie, Direction, is a very speedy sprinter, and
being eligible for half-bred races should be especi-
ally valuable for a class of races that are every year
becoming more and more popular.

Kennesaw, a great race horse in his day, is still a
grand-looking gelding, and though it is not probable
that he would stand training he should be a superb
hunter.

Wildwood is a chestnut two-year-old gelding,
fashionably bred, but as yet untried.

THE BEST BREED OF FOWL.

This oft-mooted question arises up as regularly
as winter follows fall. To my mind every breed
has its place, and it is useless and idle talk for any
breeder to claim that any one variety is the breed
par excellence for everybody. But still some men
have the idea that they know all that is worth
knowing, and as a general thing the statements they
make are so manifestly partisan as to render them
useless as an argument. I read in one of the
poultry journals lately just such an article. In it
the writer asserted it to be a fact that the Wyan-
dotte is the only breed that is adapted to all coun-
tries, climates and conditions. Now, in my long
experience as a poultry breeder, I have handled
probably every variety that has ever gained any
prominence in America. I have handled at least
twenty-five breeds, and I have yet to find the first
one that nature has not made a special place and
position for it to fill. Nature never makes a mis-
take, and where a breed is deficient in one point
it makes up for it somewhere else. Now let us
look the breeds over and try and find one that
has not got a place laid out for it somewhere. Let
us commence with the Plymouth Rock, a breed
that is probably bred pure about two to one of any
other breed among the farmers of the United
States and Canada. This breed is essentially, to
my mind, a general utility fowl. It reaches an
average weight of four pounds in six to eight

months. It lays quite a number of eggs, and generally sells a cent or two better than the common market fowl.

Then comes its likeness, the Wyandotte, a bird of very much the same quality both in regard to eggs and weight, although its markings are much finer and the lacing is more perfect. This breed is eventually, to my mind, to become the rival of the Plymouth Rock as the farmer's bird. They lay a goodly number of eggs, and grow to a pretty good weight. The one great beauty of these two breeds lies in their early maturity both as regards eggs and meat. Then comes the Leghorns. This breed does not mature so early in regard to flesh, but does mature earlier for eggs. The laying of eggs is the forte of this breed both in the brown, black and white. Of these I think the brown Leghorn the hardiest, also the best layer. This breed, I should not think would do well in Canada, owing to their large combs and wattles. The brown Leghorns are the most common, the black most scarce. This breed is of the Spanish class, most of which are noted for their egg-laying capacities. Others of this class are the Andalusians and the black Spanish. These are both very good layers, and quite hardy.

A long list might be made of the many different varieties bred by one or two fanciers, but they are not common.

The Cochins are a breed that mature rather early, although the young chicks incline to legginess. The most hardy, I think, is the Partridge Cochin. Then come the buff, black and white. The buffs are much admired by a large class of fanciers and farmers. The Partridge Cochins are also well liked by a large number of fanciers and farmers, as are also the blacks and whites. The Langshan is also much admired by a very large class of farmers and fanciers as birds for crossing on the common stock. They give large size, which is a very essential point to farmers who breed poultry for market.

Another large breed which is much admired for both size and egg-laying qualities is the Brahma. Your correspondent has found the last season that this breed is becoming very popular among farmers, and especially Canadian farmers, as the large number which has been shipped there will testify. Of these there are two varieties, the light and dark Brahmas. The light variety is much preferred by some, the dark by others. But of this more anon.

GRAPES OF THE SOUREST DESCRIPTION.

From all that can be gathered it appears that prior to their public sale the Jerseys composing the famous Burnside Park herd were allowed to materially deteriorate in condition before being offered at auction. If this be true they are not the first cattle that through carelessness or bad management have been allowed to go off condition just at a time when they should have been looking their best. It is also true that the famous butter cow Princess 2nd died within a few months after the completion of the greatest butter test ever accomplished.

On the strength of these two facts a tremendous howl has been raised over the cruel practices of gentlemen who have made the most successful butter tests with their Jerseys. Because Princess 2nd died a short time after a phenomenal butter test, is far from being proof that she died from the treatment to which she was subjected during that test. The truth is that many of the editors who are preaching long and solemn funeral sermons on the death of Mrs. Shoemaker's wonderful cow and upon the hard luck that has followed the Burnside Park herd, merely do so because it is a rather easy subject upon which to grind out editorial when subjects are scarce. It looks to be very cruel, of course, to force a poor cow to eat so much more than she wants that she will die of the effects of it. And if that be cruel, what shall be said of the monster who will extract so much butter from a poor little Jersey that she has nothing left with which to sustain life?

For the benefit of the many agricultural editors who never saw a cow, it may be well to explain that a Jersey cow, in fact any kind of a cow, takes her food "by the mouth," as the doctors say, just as a dog or a cat would. It may be further explained that with a Jersey cow, and indeed we might say with any cow, eating is a purely voluntary act, so that the alleged cruelty so far as feeding for these tests is concerned is neither very immediate nor far-reaching. With regard to the extracting of the butter from the Jersey cow, or in fact from any cow, it may be a little more difficult to make ourselves clearly understood by the class of agricultural editors for whose edification we are just now writing.

The butter is not extracted in bulk by means of a surgical operation, as might be supposed. It is detached from the cow in a fluid form by a process known as "milking," so called because the fluid thus extracted is called "milk." This fluid, from which the butter is afterward taken, must not be confounded, however, with a fluid bearing the same name which flows from large brass-hooped tin cans that are carried about in wagons in every large city, early in the morning. If the milk is allowed to stand in a clean, cool place for a reasonable space of time a thick yellowish scum is found to have risen to the surface, and this is called "cream" (not to be confounded with ice-cream), and this cream, when suitably agitated and kept at a proper temperature, is converted into butter and buttermilk. Sometimes, when extraordinary results are desired (as in the case of butter tests), all the milk is agitated or "churned," an operation which takes its name from the "churn" or vessel in which it is performed. Thus it will be seen that it does not require any powerful surgical process either to feed the cow or extract the butter from her during these "horrible tests."

But it was not one or two in the large army of agricultural editors who would not know a cow if they saw one, who originated this outcry about the cruelty of butter tests. It was practical men who ought to know better—men who found their affections set upon and possibly their money invested in, cows that were not likely to greatly distinguish themselves as butter producers even

under the most favorable circumstances. Some of them may have been sufficiently deluded to be running after that Eutopian-bred animal the "general purpose cow," but whoever they were and however situated, they found that such cows as Mary Anne of St. Lambert and Princess 2nd were able to accomplish feats in butter production such as they had never supposed within the limits of possibility, judging from the capabilities of cows of the breed they felt bound to think the best. A short time ago grumblers of this type contented themselves with saying that a grade Shorthorn, or a native, would do as much on the same rations, but none of them tried it, or if they did they never gave to the world the result of their experiments.

Just now, however, the cry is changed to "improvidence and cruelty." What the next will be no one knows, but whatever it may be the motive will always be much the same, jealousy of the bitterest type.

But aside from showing a paltry childish spirit, these carpers are doing harm in the way of clogging the wheels of progress. Nobody among all these fault-finders appears to realize that these experiments are productive of any good. True, it may not be wise to give one of these heavy feeders all the rich food she will consume and properly digest, from one year's end to another, but it is one thing to test a cow for a week and another thing to have her producing butter at high pressure as long as she lives. The owners of Princess 2nd, Mary Anne of St. Lambert and other famous butter cows have done a great deal for cattlemen and farmers by their experiments. They have established the unquestionable value of the Jersey as a butter cow, and have shown to the world what careful breeding and judicious management can do in butter production. No one can doubt that the offspring or near relatives of such great cows are to a large extent be endowed with similar capabilities. The feats accomplished by these cows confer the same benefits upon the bovine race that the achievements of Maud S., Luke Blackburn, St. Gatien, Foxhall, Plesantrie do upon the equine race. They show of what the race is capable and what form, character and blood lines are found to produce the best. Horses have broken down in training before they ever faced the starter, others have broken their necks at the first hurdle, and yet no one of common sense will raise such a howl about racing as these people who have not first-rate cows, do about butter tests.

Horsemen sometimes make mistakes when trying to do the best they can with their race-horses, and why should the cattleman escape without occasionally falling into error?

Some say Princess died of over-feeding, others say that during the test she broke out of her stall and helped herself at the feed-box till she could hold no more. It is also said that by an unfortunate accident this famous cow caught cold and died from the effects of it. But whether this cow was destroyed by the great strain on her system incurred during her last butter test or not does not materially alter the case. If she was destroyed in this way, that does not constitute any valid reason why butter tests should be discontinued. Nobody will say that

Mary Anne of St. Lambert looks like a cow that had been very much enfeebled by the overtaking of her constitution during any of her great butter tests, but on the other hand every new test made with her has surpassed the one that preceded it.

The gentlemen who have made these tests have conferred a very great benefit upon the stockbreeding generally, and upon the "Jersey" portion of it particularly.

GENERAL PURPOSE COWS AND DEFINITE PURPOSE COWS.

No intelligent reader of the CANADIAN BREEDER can accuse it of being the organ of any breed or faction. What we have aimed at so far has been to do all in our power to encourage Canadian farmers and stockmen to keep fully abreast of the times, and avail themselves to the greatest extent possible of the benefits resulting from the researches and experiments of intelligent stockmen, agriculturists and scientists, so far as these experiments and researches have any direct bearing upon their everyday pursuits. To this end we have argued, that a farmer should not attempt to make himself a jack-of-all-trades. We have held that if a man wanted to succeed in any particular line he must concentrate his energies on that particular line. We do not mean, of course, that the grain farmer should buy his milk, butter, cheese, beef and pork, nor that the man who wants to make a success of beef growing should buy the bulk of his feed and all the farm and dairy products required for his family. Such ground would, of course, be wholly untenable. What we do urge is, that the farmer should market not more than two or three given products, while it is perfectly proper and economical for him to raise enough of others for home consumption. We do not like to see a farmer fooling away his time marketing a "little jag of hay," two or three bags of oats, a few rolls of butter, a small cheese, a basket of eggs, and a hind-quarter of lean beef, all on one trip. It is with such frittering away of their energies that many of our farmers are kept "with their noses on the grindstone" all their lives. If a man wants to be a dairyman, let him get possession of a herd of good dairy cows as rapidly as his circumstances will permit, and never stop adding to his herd, either by breeding or purchase, till he has enough to utilize all the surplus that his farm can produce over what is necessary for home consumption. Let his dairy cows manufacture into butter or cheese, everything that he does not require to use up on the place. He will, of course, keep pigs enough to utilize the waste from the dairy, and these will require grain, and, perhaps, roots, but at the same time, butter or cheese, one of the two, remains the staple product. There is no selling of raw material, and the farm is worked up to its full capacity.

In like manner, if beef-raising be the object, let the attention be devoted to that. Let the farmer select his stock for beef, and not for milk, butter or cheese production. If he cannot make more money at beef-raising than at any other pursuit, he would have selected some other line more in accord with the capabilities of his farm. He selects beef-

growing, however, and, having done so, let him bear in mind that every product of the farm not wanted for home consumption must be converted into his staple product—beef. And here is where we desire to take issue with Professor Brown, of the Agricultural College, who, in spite of his thorough intelligence and comprehensive grasp of most subjects, appears to be still afflicted with Eutopian dreams regarding that bovine myth, the "general purpose cow." His own experiments have afforded to others valuable data, while he himself appears to be disregarding the fundamental lesson taught by them. His favorite Shorthorn stood well, but there were cows that surpassed her for butter, and cows that surpassed her for milk, and all this time no account was made of the relative quantities of food consumed by the representatives of the different breeds. The truth is just this: Some cows convert grains, grass, roots and hay into beef, others convert these substances into butter, and others into cheese. Every pound of butter that a beef-producing cow makes, means that the product of so much of her food has been diverted from the channel in which it would have made the best returns, and in the same way a milch cow that is inclined to be heavy fleshed is not making the best use of the food which the dairyman gives her. If a man wants to sell beef, let him devote himself to that, but the fact that his farm is stocked with Shorthorns, Herefords, or Scotch Polls, will not render impossible for him to keep two or three Jerseys to supply milk and butter for his family. Let his beef cows dry off as soon as the calves are done with them, and then every pound of food they consume will be devoted to beef production.

The question is sometimes asked, "What is to be done with the carcass of the worn out Jersey, Holstein, Guernsey or Ayrshire?" The answer is not hard to find. In the first place, the carcass of any cow that has served out her full period of usefulness in the dairy (say, a term of ten or twelve years), is not likely to be worth much for beef, and will do little more than pay for the feed used in fattening, if, indeed, it will do that. It is not a matter of very great moment how worn out dairy cows are disposed of, but, of course, they will usually find their way to the shambles, where the cow of the heavy fleshed variety would bring a slightly higher price than a representative of one of the deep milking or heavy butter producing strains. But the question for Professor Brown to solve in his next series of experiments will be whether or not the amount of butter lost by feeding half for beef and half for butter during ten or twelve years would not more than cover the price that could be realized for the carcasses of two or three old worn out cows.

Where we differ from Prof. Brown is just here. While he is looking for the "farmer's general purpose cow," we nail our colors to the mast in defence of the "definite purpose cow." If we want to produce beef profitably we shall expect to find those cows that show the greatest tendency to beef and the smallest tendency to milk the animals we want, whether they be Shorthorns, Herefords, Angus, Galloway, Sussex or Devon, does not matter to us. If we want to make butter profitably we shall look

for the cows that turn their food into butter and not beef. One animal cannot excel in the production of both beef and butter. The cow that does neither very well, is the nearest approach to a "general purpose cow" that will be found in this world, and we believe that for cows, as for men, the motto should be, "Whatever is worth doing, is worth doing well."

VERY CHEAP PROTECTION AGAINST COLD.

FOR PEOPLE AND ANIMALS.

Prairie Farmer.

Let it be remembered that the heat of our bodies, and of that of all animals, is chiefly produced *within*; clothing and bedding mainly prevent its escaping outward. This escape goes on with more rapidity in proportion to the coldness of the surrounding atmosphere. It is warmed up by fires to prevent its absorbing heat too rapidly from the surface of the body. As heat is not as easily conducted *through* air, as it is through metals, and through many solid substances, the warmest clothing, for example, is that which is porous, or has within it the largest number of air spaces. The crinkled fibres of wool make an immense number of these air chambers in woollen clothing. In down and light feathers, the amount of open space is very great in a small weight of the substance. Brick walls with a hollow air space in their centres are warmer even than are solid walls of any material.

Moving air abstracts heat far more rapidly than still air, because the moment that portion of it in contact with the body is warmed up, it moves away and fresh cool air comes in to take the place of that already warmed, and thus more heat is abstracted. One sitting in a room at 80 degrees, may take cold by having a door open into a room at 75 degrees. When the door is opened the interchange of the colder and warmer atmosphere to secure an equal temperature, produces a draught or air motion. This motion extends to all parts of the room, and the quiescent air about one's body that was nearly at its temperature, is replaced by other air at only 80° or 75°, or colder than the body (which is about 98 degrees). This motion, therefore, brings many successive portions of the colder air to the body, and far more rapidly extracts its heat. The atmosphere at 32°, with a high wind, or even a moderate one, is a far more rapid extractor of cold than still air at 10 or 20 degrees lower temperature. Now let us

Apply the Above Principles. A single newspaper spread upon a bed confines a thin layer of air under it, and this of itself is a non-conductor of heat, and far less of heat escapes from the bodies of the persons in the bed. At the same time it keeps that layer of air from motion, and thus affords extra protection. Two layers of paper afford a double protection. Let any one try pasting together several sheets of even common newspapers, to form a coverlid, and they will find its protection almost as great as that of an extra closely woven bed spread. Two or three such layers will equal in warmth quite a thick comfortable. They can be pasted or fastened together at the edges for easy handling, and be kept folded in a closet for extra cold nights. This is of great importance to poor persons, and to all who have not an abundant supply of warm bedding. Any one caught from home in cold weather with an insufficiency of clothing, will find much help from simply wrapping a large newspaper, or other paper, around any exposed part of the body, as over the shoulders and back, around the limbs, over the feet, etc. The same in riding. Newspapers under the blankets or robes, if these are not of ample thickness, will be useful in retaining warmth.

Paper is Useful in Many Ways, as a protection against cold. In new settlements, where the frame dwellings are not yet made cold proof, a few layers of common newspapers, or of any cheap paper, tacked against the walls, will have a magic effect in keeping the house warm. The edges can be pasted on more securely than tacking, but it is desirable to have the papers lie not too compact, as every additional layer of air between the papers is a non-conducting wall, so to call it.

In all houses where the lower floor is of single boards or planks, the rooms will be doubly warmed if one or more thicknesses of paper (newspapers will do) are tacked or pasted upon the joists supporting the floor, as a paper ceiling to the cellar. Half-a-dozen layers of paper under the carpets of the lower rooms will often save a great deal of fuel, and add wonderfully to the comfort of the occupants. Few houses are so tightly banked up that more or less air does not enter, and few floors are so tight after seasoning that more or less of cold air does not find its way up through them, even though tongued and grooved. This air passes through the thickest carpet. It will not pass through a few layers of paper, so put down as to break joints.

Paper to Protect Animals.—Most barns, horse and cattle stalls, sheep and hog pens have cracks between the boards, that let cold air draughts pass through them. Newspapers tacked up against them on the inside, the more thickness the better, will render them far warmer. An hour spent in thus putting up such protection will not only add to the comfort of the animals, and save them from colds, but it will save a large amount of food that would otherwise be required to supply the heat carried off by the cold air coming in through cracks and chinks in the covering.

NOW REMEMBER :

1—That the blood circulating through every human body *must* be kept, winter and summer, night and day, at all seasons, and in all climes, at just about 98°. If it rises ten degrees, death is close at hand. If it sinks ten degrees below 98°, unless quickly restored, the wheels of life will soon stop. The same is the case with all our domestic animals, excepting that in some of them the normal temperature varies slightly from 98 degrees.

2—That, as a rule, all this heat is produced *inside* of the bodies of the human and every other animal, from the fuel taken in as food and slowly oxidized (burned) in the body, that excepting when the atmosphere is 98° or higher, some of this heat is always escaping from the skin, and by the breath.

3—That if there is not fresh food enough in the body to produce the required heat to maintain the blood at 98°, then nature has provided that the fat and tissue stored up from food previously consumed shall be drawn upon, and used in producing this heat.

4—That heat has a constant tendency to equalize itself in all substances in contact, and that the colder the air is next the skin, the more rapidly does the heat of the body pass off into it; and that (as noted elsewhere) moving air, or wind currents, exhaust heat much faster than still air.

5—That all the heat leaving the bodies of men or other animals must be constantly resupplied by new heat, and that this requires more food to be consumed, or the using up of more fat and tissue that have accumulated.

6—That any protection to men or other animals which prevents escape of heat from their bodies, saves a proportionate amount of food, or of fat or flesh that would be used up in supplying the heat always required.

7—That warming the air around the bodies, or surrounding them with clothing, or blankets, or walls, or sheds, or wind breaks, to keep cold air

away, and especially cold moving air, helps prevent the escape of heat and saves food, or the using up of fat or flesh.

8—That the warmer this protection for men, for horses, cattle, sheep, hogs, or poultry, the less will be the escape of heat, the less will be the food required, the less will be the waste of fat or flesh previously stored.

9—That nature has so arranged the internal machinery of men and all other animals, that of the food eaten, enough shall *first* be used to keep up 98 degrees of heat; that *second*, if there is any left after supplying this heat, enough shall be used to restore the natural wastes of the system; and *third*, that if after these are both provided for, there is more food, that the human or other animal will store it by increase of fat and flesh.

10—That in very cold weather, it takes so much food to keep animals simply warm, that they cannot lay on much fat or flesh; and so it is far less profitable to feed animals for fattening in winter, than in autumn.

Finally, and Important. Is is not plain and clear that the warmer the animals of all kinds are kept, the more that cold still air, and especially that cold moving air, is kept away from their bodies, the less food they will require, and the more of it can they use in laying on flesh, producing milk, growing wool, and manufacturing eggs and so on?

Lastly, Firstly and Always.—In the light of the above facts and explanations, is there any doubt that protecting animals *in all ways possible*, even if it be only by a straw shed and wind-break, will *pay!* and that the greater the protection, the better it will pay?

"A merciful man is merciful to his beast."

BUYING HORSES IN FRANCE.

Michigan Farmer.

In France the eighth wonder of the world is said to be the securing of a perfect horse at a public sale, that is, one sound and well shaped and answering to all points desired. Perhaps French are no more than other horse dealers. But they are not the less capable of deceiving even the elect—often they take in one another. In selling horses in Paris the event is arranged like a strategy. If the animal be for the saddle it appears before the public mounted, if for a vehicle it is yoked.

Now all is prepared beforehand; the ground, the canter alley, etc., are perfectly known. The dealer is "up" on the weak points of the animal; if it be too ardent, shy, irregular, etc., these are tenderly treated. During the preparatory training all the yard will be brought to bear to calm the horse, to caress and accustom him to surprises. Patience and dissimulation will do the rest. But when the animal changes owners, is removed to a new stable, and confined to a strange groom, the borrowed docility will promptly disappear. The soothing system will be replaced by stentorian roars and sharp lashings.

The common "drugs"—if such can be called, used, are ginger and sugar. The former is placed under the animal's tail, to provoke ardour; and dissolved sugar will tranquilize—momentarily, a very passionate horse. To all observations urged by the purchaser, that the horse has unbesecmed the promise of his spring, the dealers will reply. "We did not make the horse; alas! were it in our power, not an animal but would be perfect."

The grand lesson to bear in mind in horse buying is, the defects as well as the good qualities of a horse are essentially hereditary. An animal can certainly become bad by vicious or foolish treatment, but it is the hereditary traits of his character—good or bad, that must be remembered. The great aim of a buyer should then be to judge a horse not so

much by its own points as through the history of its sire and dam—their ancestors even. It is there will be found the history of its health, merits and drawbacks.

If a person who is unknown to you, calls on you for the first time, your immediate impulse is to study his features, look into his eyes—which are the expression of character. Horse dealers study the features and eyes of horses in a similar sense. Horses that resist or shy, generally view man with defiance from the corner of their eye. These horses will generally have convex foreheads; the ears animated, one moving forwards, the other backwards. In the stable they will have the habit of switching their tails.

Docility and fidelity are hereditary or inherent qualities, but can be abused by ill-treatment. Horses possessing these qualities have the eye open, the forehead spacious between eyes, and no jerky action of the ears. Often horses docile with man, are not neighborly for their companions. The eye of a good horse has a regular oval form, the long axis going from the front, backwards. There ought to be no wrinkle on the upper eyelid, and it should be perfectly symmetrical with the under lid. The Norman horses have the reputation of being rather unmanageable, easily frightened and timid. In the selection of a horse then, character is the point to determine. A horse is useful for its advantages, but is not required for producing accidents.

While on the subject of horses, I may observe, that in the buying of them the seller's recommendation never receives any weight. He is too well known to have an axe to grind. The intending buyer endeavors to obtain a private peep at the animal in the stable, take the horse unawares, as when the dealer is present it would appear different. A look can thus be obtained at the animal feeding; its age controlled; the eye peered into to ascertain if the owner be mild or wicked. Care is taken to have the horse shown off, not on a littered run, but on a hard or stone covered road, making it at first walk, and next to stand in a horizontal position. Then order a trot, observing well if the animal on turning yields to a side, to relieve some drawback about the feet. After the run listen to the respiration and note the movement of the flanks; press the throat to provoke a cough; if the latter be frank and sonorous, the horse is in good health; if dry and short, beware. In the case of saddle horses, the purchaser ought to mount himself and remark if the animal replies to the pressure of the knees and the spur; if the buyer is occupied with a pair for a carriage, have them put to, and take the ribbons yourself.

THRIFTON NOTES.

The 11th of December this year finds the winter wheat in Central Illinois frozen in under an icy sleet, and over this a slight covering of snow. Had the snow come first, and been followed by sleet, the prospect for a good wheat crop in 1886 would have been more encouraging; but as it is, the present conditions are by no means favorable.

On the 7th inst. the thermometer marked 4 degrees below zero at 5 a.m., the coldest to that date of the winter; since then the cold rain, the sleet and the snow have brought to a close the hog-fattening season, and consequently the slaughtering of fat hogs has been the order of work, within the last five days, on nearly every farm.

The expense of the National Swine Breeders' Committee appointed to visit Washington next month—about \$300—is being raised by the several Swine Record Associations. This is a right move on their part, as they are looked upon as the leading organizations of swine breeders in the country. If they fail to take hold in a case of this kind, who else can be expected to do the work required or provide the means for having it done?

PROVINCIAL FAT STOCK SHOW.

THE THIRD ANNUAL EXHIBITION AT WOODSTOCK
A GREAT SUCCESS.

The third annual Provincial Fat Stock Show, held at Woodstock last week under the auspices of the Agricultural and Arts Association, was a great success.

The officers of the show are: Pres., E. W. Chambers, Woodstock; treas., John Craig, Woodstock; sec., Henry Wade, Toronto; general superintendent, Stephen Hall, Washington. The committee of management from the Agricultural and Arts Association are: Geo. Moore, Waterloo; J. C. Snell, Edmonton; J. B. Aylesworth, Newburgh; Stephen White, Chatham; Henry Parker, Woodstock. Those from the Oxford Fat Stock Club: E. W. Chambers, Woodstock; A. Clarkson, Woodstock; W. Strode, Norwich; G. A. Murray, Woodstock; S. Bickle, Woodstock. Ald. Frankland, of Toronto, the pioneer of the Canadian cattle trade was present and officiated as one of the judges.

The total number of entries outside of poultry is about 160. The entries of sheep are more numerous than at either of the former shows, at Toronto and Guelph. The number of cattle and hogs on exhibition is very large. The display of poultry is also first-class. Among the prominent exhibitors are: H. & I. Groff, Elmira; Simon Beattie, Markham; Wm. Murray, Chesterfield; Wm. Donaldson, S. Zorra; John Kelly, Jr., Shakespeare; H. H. Hurd, Hamilton; Stephen Hall, Washington; Geo. Keith, Elora; J. E. Brethour, Burford; J. R. Davis, Woodstock; J. & R. McQueen, Salem; M. & W. Schell, Woodstock; Jas. Allenby, Woodstock; R. Bickle, Walmer; Geo. Denoon, Milton; R. Crozier, Paris; J. Rutherford, Roseville; Jas. Glennie, Guelph; Wm. Oliver, Plattsville; Wm. Walker, Ilderton; G. H. Cook, Ingersoll; E. and A. Stanford, Steyning, England; Alex. McDonald, Chesterfield; Thos. Lee, Oxford Centre; J. Featherston, Credit; Walter West, Guelph.

THE HERDS.

The most prominent herd in the show is that of H. and I. Groff, Elmira. They have ten head present as follows:—Baron, three years old, thoroughbred Shorthorn, red, winner of first prize wherever shown; Elmira Boy, red, winner of first prize as a yearling at the fat stock show, Guelph; Tralton and Elmira Ranger, one-year-olds, red; King, two-year-old Shorthorn grand, red, winner of several prizes; Ranger, two-year-old Shorthorn grade, red with little white, winner of sweepstake and grand sweepstakes for the best ox or steer at last Provincial Fat Stock Show, against all ages and breeds, and first wherever shown this year; he is considered by competent judges the best steer in Canada; Elmira, red, and Roan Warlaby, one-year-old Shorthorn grades; Louisa, red and white, five-year-old Shorthorn grade; Dora, roan, four-year-old Shorthorn grade, has been a prize winner ever since a calf, having won first prizes all over the country.

Messrs. Groff have sold Dora and King to Messrs. Hauraban Bros. at very high figures.

Messrs. J. & R. McQueen, of Salem, have only two head on exhibition this year, Red Duke, 5-year-old Shorthorn steer, has taken prizes wherever shown at all the leading shows, securing the Hope silver cup, valued at \$100, at the Fat Stock Show at Guelph last year; Daisy, roan, 5-year-old Shorthorn grade, has also taken first prizes, getting first at Toronto this year, and is allowed to be the best heifer in Canada.

Mr. G. Keith, of Elora, shows two yearling Shorthorn grades, Prince and Duke, both red. They have never been shown but are remarkably promising young steers.

Mr. Simon Beattie, of Markham, has two remarkably fine white ones in the show, Snowflake,

3-year-old Shorthorn steer, and Snowball, 3-year-old Shorthorn steer. They have never been exhibited before, but when the prizes are awarded are sure of a place.

Wm. Donaldson, of South Zorra, one of Oxford's most prominent breeders, has five good ones in the show, Lily, white, Shorthorn cow 6 years old; Constance, roan, Shorthorn cow, two 2-year old steers and a heifer. Mr. Donaldson also shows a shearing wether, Shropshire Down, weighing 222 lbs.

Wm. Murray, Chesterfield, shows Lally of Ellington, Shorthorn cow, a very fine one. He also exhibits an Oxford Down ewe.

Adam Mohr, Tavistock, shows two, Tilda, 4-year-old Shorthorn, and Barney, yearling Shorthorn steer.

M. & W. Schell, Woodstock, show two 3-year-old and over, Shorthorn grades, Empress and Beauty. Both of them secured prizes before.

Mr. W. Schell, Woodstock, has on exhibition the 5-year old Shorthorn grade Grand Duke, weighing 2,575.

Stephen Hall, of Washington, another prominent breeder of the county, has two 2-year-old steers, Shorthorn grades, Dick and Harry, in the show. They are remarkably fine ones and will develop.

Mr. Hurd, of Hamilton, has his grade steer Hamilton, present.

Mr. J. E. Brethour, Burford, has his heavy yearling steer, Cherry Bounce, in the show.

Mr. John Kelly, Jr., Shakespeare, has eight of his fine sheep on exhibition. Mr. Rutherford, of Roseville, who took a great many prizes at the late Chicago Fat Stock Show, has eighteen. Mr. Geo. Denoon, of Milton, has twenty-two. E. & A. Stanford, of Steyning, Eng. have also present six imported sheep. The exhibitors in hogs are J. Featherston, Geo. Denoon, T. Lee and J. Rutherford.

Following are the weights of some of the principal cattle in the show:—Red Duke, weight 2,600; Daisy, 2,430; Prince, 1,400; Duke, 1,400; Snowflake, 2,060; Snowball, 1,695; Lily, 2,065; Constance, 1,695; Lally of Ellington, 1,760; Tilda, 2,095; Barney, 1,460; Grand Duke, 2,575; Empress, 1,475; Beauty, 1,415; Dick, 1,905; Harry, 1,870; Ranger, 2,235; Baron 2,275; Cora, 1,990; Louisa, 2,085; Elmira Boy, 1,790; Trolton, 1,215; Elmira Champion, 1,530; King, 1,930; Roan Warlaby, 1,350; Elmira, 1,530; Hamilton, 2,055; Cherry Bounce, 1,488; Red Rose, 1,595.

The Warden, Col. Munro, formally opened the show at 2 o'clock yesterday afternoon.

The prize list will appear in our next issue.

The Messrs. Groff pronounce the arrangements of the present show as being ahead of those of former ones. The committee appear to have done their work well.

Many prominent gentlemen from a distance were present besides the exhibitors. Hon. Oliver Mowat and Hon. A. M. Ross were unable to be present owing to pressure of government business.

Mr. Groff, Sr., father of Messrs. H. and I. Groff, expressed himself in flattering terms about Woodstock and the show on Thursday morning. They all say the same.

Mr. Wade and his two assistants have been kept very busy taking entries and attending to the many wants of exhibitors.

Mr. Gibson, a prominent breeder from Ilderton, was present at the show yesterday.

A good bran mash is composed of two quarts of oatmeal, one of bran and half a pint of flaxseed. The oatmeal is put in a bucket, over which is placed the linseed and boiling water added, then the bran is put in and the mixture covered with a cloth and allowed to stand five hours when the whole is well stirred and fed.

TORONTO POULTRY AND PET STOCK EXHIBITION.

There was a large attendance at the exhibition in St. Lawrence Hall, of the Toronto Poultry, Pigeon and Pet Stock Association. Judge, Mr. I. K. Welch, of Natick, Mass. His method of judging is that known as the scoring system, the possible number of points being 100, from which deductions are made for defects and blemishes. The following score-card for light Brahmas will give an idea of the division of the points:—Symmetry, 10; weight, 13; condition, 8; head, 5; comb, 8; wattles and earlobes, 5; neck, 10; back, 6; breast and body, 10; wings, 7; tail, 7; fluff, 5; legs and toes, 6; total, 100. The division of the points varies according to the peculiarities of the breeds. For instance, in Leghorns weight is not considered, and size only scores a possible of 5.

Among the awards posted up the most important was that of the \$50 challenge cup for the best black-breasted red game cockerel, which was won by J. Armstrong, of North Toronto, his bird scoring 95 points. The next highest score for cockerels of the same variety was made by H. P. Harrison, 49 King Street East, whose bird was marked at 94½. The highest scores among the games was made by a brown red pullet belonging to G. Goulding, of Parkdale, her total being 95½. She of course took first prize in her class. Mr. Goulding also took first for his brown red game cockerel, with 93½ points. In golden duckwing games, W. Barber, Toronto, took first prize for his pullet and cockerel, scores 93 and 91 respectively. G. Goulding took first premium for a silver duckwing cockerel, score 91½, and also for a pyle pullet, score 93. In light Brahmas the competition was very keen. J. N. Finch, Seaforth, took first for his cockerel, score 91; and R. Large, Toronto, for a pullet, score 92½. A. G. Willson, Seaforth, won the red ticket in dark Brahmas for old male birds, with a score of 88, and for pullets, score 93½. F. Wixon, Homewood poultry yards, Ingersoll, scored 92 for his dark Brahma hen and took first place. He also took first for a white Leghorn cockerel, score 94, and for black Leghorns, both cockerel and pullet. Mr. J. F. Wagner took first and second for rose-combed white Leghorns. H. G. Jackson, Toronto, won the principal honor for black Hamburg pullets, scoring 96 on the prize-winner, a high standard. I. F. Rice, of Whitby, took 94½ for a cockerel, same class, and got the red ticket. W. F. Banks, Toronto, scored 94½ for his black Spanish hen, and took first prize. His male bird was disqualified on account of the bird's sight being obscured by the abnormal development of the white face. He took second prize with 94 points for another hen of the same variety, but the male bird in the same coop was also disqualified for imperfect sight.

A worse place for holding such an exhibition could not be chosen; at midday the light was so poor that it was impossible to see one half of the exhibits.

During the progress of the Fat Stock Show at Chicago the breeders of Cleveland Bay horses met together to form an organization. At an election of officers the following parties were chosen for the ensuing year:—President, Geo. E. Brown, Aurora, Ill.; Vice-Presidents, M. M. Fields, Cedar Falls, Ia., and W. A. Banks, Door Village, Ind.; Secretary, R. P. Stericker, Springfield, Ill.; Treasurer, George T. Van Norman, Aurora, Ill. Directors—E. W. Gilmore, Albany, Wis.; C. J. Fields, Cedar Falls, Ia.; I. S. Fitch, Oakwood, Ind.; Robert Burgess, Winona, Ill.; Samuel Bell, Wooster, O. A committee was appointed to draft a constitution and by-laws for the Association. Discussion was had upon the publication of a stud-book and the rules that should govern entries. It was realized by those present that a system of registry was a necessity.

THE COST OF POULTRY.

Farm and Garden.

Five cents a pound will cover the expense of raising chicks to the age of three months. That is for the feed, but we must also consider that in order to hatch and raise a brood of chicks, there is the value of the egg from which the chick is produced, the interest on capital invested in quarters, fences, etc., and the labor of caring for the fowls. The larger the number of chicks raised the smaller the expense proportionately, as but little more care and labor is required for a large number than for a smaller. In one lot of 3,000 chicks on a farm in New Jersey, a strict account of all the expenses developed the fact that while but five cents was required for producing a pound of poultry, the total cost for buildings, labor, feed, and interest, was nine cents. This sum may be safely estimated as the maximum cost of producing a pound of poultry, but it may be reduced or increased in proportion to the number raised, the larger the number, as we stated before, the smaller the expense for each chick. The expense for food will not be diminished or increased, but the buildings, fences, and labor will fluctuate in value according to the number.

It has been estimated that the cost of the quarters amount to about one dollar per head, or, rather, that it requires about \$10.00 to build a house for ten fowls, and \$100 for a house for one hundred fowls, but it is apparent that the larger the house the cheaper the cost proportionately, while so far as the labor is concerned, one can as easily feed one hundred fowls as ten, and also keep the quarters clean more economically as compared with the fewer number. Yet, in the face of these advantages in favor of the keeping of poultry in large numbers, the general result heretofore has been that the smaller the number the larger the profits, a result entirely at variance with the rules applying to all other industries. This can only be accounted for on the supposition that the small flocks receive more attention than large ones, and it is probably the solution of the problem. Those who have a few fowls only, are careful to feed them a variety, and the quarters are made as comfortable as possible, not a day passing by that some member of the family does not assist in caring for the fowls, while larger numbers are often overlooked, and many of the essential details neglected.

The cost, of course, depends upon the labor, but with a small flock there is a bestowal of labor which is not valued, being performed by children and ladies as a source of pleasure, but which would be considered as an important item in an account kept with a large flock. That nine cents will cover all the cost is a fair estimate, and it leaves a large margin for profit if the chicks are hatched early and advantage be taken of high prices. Even if only 12 cents per pound be realized, the profit is 33 1/3 per cent, which is much larger than may be expected from many other sources.

ONE THOUSAND HENS.

Poultry Journal.

This heading will catch the eye of hundreds of readers, who have been trying so hard, yes! and for so long too, to find out whether it were profitable or even safe to breed fowls on a large scale. Well! The heading stands above an article recently appearing in the *Poultry Keeper*, and the article itself is as follows:—

There are but very few places where large numbers of fowls are kept, and such enterprises should be well considered. A subscriber, Mr. Geo. D. Demaree, Madison, Indiana, now has 900 hens, which he keeps on three acres of ground. In a letter to us he says:

"I have about 900 hens on about three acres of ground, and in a house 80 by 24 feet; but I think

the house is somewhat too small. I expect to put in 300 more hens this fall. Do you think if I would enlarge the yard about one-half acre, and build three additional houses, 50 by 24 feet each, it would then accommodate 1,200 hens?"

Mr. Demaree will have 230 feet (in length) of house room, 24 feet wide. We are interested in knowing how he kept his 900 hens. Are they together, or divided into flocks? The width being 24 feet, certainly gives a large space *under cover*, which is excellent for a winter arrangement. The 900 hens have already been kept in a house 80 by 24, or at the rate of over 11 hens to each running foot. As the total area on the floor is only 1,920 feet, each hen has had but a fraction over two square feet of room. They must have been very much crowded. It is surprising that so large a flock escaped disease. The three acres can be made to afford yard room, but the *house* room has been too small. The three new houses, 50 by 24 feet, will give 3,600 feet more, which, with the 1,920 feet already built, gives 5,520 feet, or over 4 1/2 square feet of room to each of the 1,200 hens, which is sufficient, provided Mr. Demaree can properly arrange the roosts, nests, etc., and so separate them as to keep them in good, flourishing condition. We will be pleased to hear from Mr. Demaree again, as many of our readers are no doubt interested in his operations. We would be pleased if given all the minor details, and if our readers can give him any assistance we believe it will be cheerfully done.

We have concluded, by actual experiment, that in cold weather, in well ventilated buildings, if not too low-posted, where cleaned out often, and with great attention to the comfort of the birds, etc., etc., according to knowledge—one fowl to every two square feet of floor area, can be wintered in health. But we don't advise every one to try it, nor do we expect to learn where fowls became diseased by the use of too much room, unless they had *all out doors*. But keep on experimenting, and when you make a point, why, speak right out, and let us know about it.

ORIGIN OF AMERICAN DOGS.

A. Packard, in *American Naturalist*.

The impression that the domestic dog of the Old World has descended from wild species distinct from the wolf may be well founded, but in America the evidence tends to prove that the Eskimo and other domestic varieties of dogs were domesticated by the aborigines and used by them long anterior to the discovery of the continent by the Europeans, the varieties in question originating from the grey wolf or prairie wolf. First as to the Eskimo dog. From the following extract from Frobisher it appears evident that the Eskimo had the present breed of domestic dogs long anterior to the year 1577. Frobisher's account of the Eskimo themselves is, so far as we know, the first extant, and is full and characteristic. After describing the natives he goes on to say:—"They franke or keepe certaine dogs not much vnlike wolues, which they yoke together, as we do oxen and horses, to a sled or traile; and so carry their necessities over the yce and snow from place to place. as the captive, whom we haue, made perfect signes. And when those dogs are not apt for the same vse: or when with hunger they are constrained for lack of other vituals, they eate them, so that they are as needful for them in respect of their bignesse as our oxen are for vs."

Confirmatory of the theory of the pre-Columbian origin of the Indian dog may be cited the following extract from Hakluyt's voyages regarding the Indian dogs seen on Cape Breton Island, p. 1,593:—"Here diuers of our men went on land upon the very cape, where, at their arrival they found the spittes of Oke of the savages which had roasted meate a little before. And as they viewed the

countrey they sawe diuers beastes, and foules, as blacke foxes, deere, otters, great foules with red legges, pengwyns, and certain others. Thereupon nine or tenne of his fellows running right vp over the bushes with great agilitie and swiftnesse came towards vs with white staues in their hands like halfe pikes, and their dogges of colour blacke not so bigge as a greyhounde followed them at the heeles; but wee retired vnto our boate without any hurt at all received." (The voyage of the ship called the *Marigold* of M. Hill of Redrise vnto Cape Breton and beyond to the latitude of 44 degrees and a half, 1593, written by Richard Fisher Master Hilles man of Redriffe. Hakluyt, II., 239.)

It is probable this variety, the bones of which have been found by Dr. J. Wyman, in the shell-heaps of Casco Bay, Maine.

"The presence of the bones of the dog might be accounted for on the score of its being a domesticated animal, but the fact that they were not only found mingled with those of the edible kinds, but, like them, were broken up, suggests the probability of their having been used as food. We have not seen it mentioned, however, by any of the earlier writers that such was the case along the coast, though it appears to have been otherwise with regard to some of the interior tribes, as the Hurons. With them, game being scarce, 'venison was a luxury found only at feasts, and dog-flesh was in high esteem.'"

It is possible that the Newfoundland dog was indigenous on that island, and also an offshoot of the gray wolf, allied to the Eskimo. In their "Newfoundland," Messrs. Hatton and Harvey say that there are few fine specimens of the world-renowned Newfoundland dog to be met with now on the island from which it derived its name. "The origin of this fine breed is lost in obscurity. It is doubtful whether the aborigines possessed the dog at all; and it is highly improbable that the Newfoundland dog is indigenous. Some happy crossing of breeds may have produced it here. The old settlers say that the ancient genuine breed consisted of a dog about 26 inches high, with black ticked body, gray muzzle, and gray or white stockinged legs, with deer claws behind." "It is now generally admitted that there are two distinct types of the Newfoundland dog, one considerably larger than the other, and reckoned as the true breed; the other being named the Labrador, or St. John's, or lesser Newfoundland. The latter is chiefly found in Labrador, and specimens are also to be met with in Newfoundland."

Regarding the dogs of the Mexican Indians, Nadaillac says in his "Prehistoric America"—"The European dog, our faithful companion, also appears to have been a stranger to them. His place was very inadequately filled by the coyote, or prairie wolf, which they kept in captivity and had succeeded in taming to a certain extent."

In a recent visit to Mexico, not only along the railroads, but in the course of a stage ride of about 500 miles through provincial Mexico, from Saltillo to San Miguel, we were struck by the resemblance of the dogs to the coyote; there can be little doubt that they are the descendants of a race which sprang from the partly-tamed coyote of the ancient Mexican Indians. At one village, Montezuma, we saw a hairless or *Carib* dog, as we supposed it to be; similar dogs are sometimes seen in the United States.

Finally, that the domestic dog and gray as well as the prairie wolf will hybridise has been well established. Dr. Coues has observed hybrids between the coyote and domestic dog on the Upper Missouri (see the *American Naturalist*, 1873, p. 385). To this we may add our own observations made at Fort Claggett, on the Upper Missouri, in June, 1877. We then were much struck by the wolf-like appearance of the dogs about an encampment of Crow Indians, as well as the fort; they were of the size and color of the coyote, but less hairy and with

a less bushy tail. They were much like those lately observed in Mexico, and I have never seen such dogs elsewhere. Their color was a whitish tawny, like that of the Eskimo dog.

Confirmatory of these observations is the following note by J. L. Wortman in the report of the Geological Survey of Indiana for 1884:—"During extended travel in Western United States, my experience has been the same as that recorded by Dr. Coues. It is by no means uncommon to find mongrel dogs among many of the Western Indian tribes, notably among Umatillas, Bannocks, Shoshones, Arapahoes, Crows, Sioux, which to one familiar with the color, physiognomy, and habits of the coyote, have every appearance of blood relationship, if not, in many cases, this animal itself in a state of semi-domestication. The free inter-breeding of these animals, with a perfectly fertile product, has been so often repeated to me by thoroughly reliable authorities, and whose opportunities for observation were ample, that I feel perfectly willing to accept Dr. Coues's statement."

To these statements may be added those of Mr. Milton B. Peirce, published in *Forest and Stream* for June 25th, 1885, as follows:—"Hybrid wolves have always been very common along our Western frontiers. I have seen several of them, sired both by dogs and wolves, and all I have seen resembled wolves rather than dogs." It is to be hoped that our mammalogists may collect and examine this subject, particularly the skulls and skins of numerous specimens, both of dogs and wolves, and the hybrids between them. Further observations are also needed as to the fertility of the hybrids.

CONTAGIOUS DISEASES IN STABLES.

Spirit of the Farm.

When we consider for a moment the number of diseases of a contagious nature to which horses are subject, and the careless manner in which they are exposed to the same, it is astonishing that we do not have epidemics of this kind oftener with our horses. To fully appreciate the risk that is incurred, we need only visit the city or country towns on court days or Saturdays, and see the number of horses of all kinds and conditions that stand tied and almost touching each other in every available space about town, to say nothing of the numbers that are packed together in the public stables. The latter, as a rule, are much safer from coming in contact with disease than those outside, for no sensible stable-man would admit an animal inside of his stable that is affected with any kind of contagious disease if he knew it; but it often happens that neither the owner of the horse nor the stable-man is aware of the disease until it is too late to remedy the evil.

Contagious diseases of a most virulent character may be perpetuated for an indefinite length of time by feeding horses in stalls where the disease has existed. Of this kind we may mention glanders and Spanish itch especially. Either of those most fatal disorders may be conveyed to other horses by feeding in a stall where horses suffering with them have been kept. To destroy the virus, take a pint of sulphuric acid and put it in a bucket of water, and with an old mop wash all parts of the stall, especially the trough and manger, as well as the sides of the stall. Then put a few pounds of stick sulphur in an old iron pot, and, stopping the stable as well as possible, burn it, so as to fumigate the stable thoroughly, taking due precautions against fire. It is a good plan to set the pot in a tub of water; then whitewash with lime and carbolic acid. This will protect them thoroughly.

The Shorthorn cow Thorndale Rose 24th, for which Mr. H. Y. Attrill of Goderich, Ont., paid 500gs. at the Audley End public sale, June 26th, and her heifer calf, has reached the stock farm of her owner.

BONES DISSOLVED WITH ASHES.

Thomas D. Baird, Greenville, Ky., in Farm and Garden.

In dissolving bones with ashes, there are several things to be considered to prove successful. The ashes must be good; those of oak and hickory I find the best. Some say that wood grown on low land will not make soap, consequently will not dissolve bones. As I have always burned wood from off ridge land, I cannot answer for this. The ashes must be kept moist, just so they will not drain. They should be kept from freezing. If suffered to freeze, the process ceases. The smaller the bones the quicker they will dissolve.

This is the way I have managed my bones for the last two years. As fast as ashes can be had, they are put in barrels, the bottom is covered with about six inches deep in ashes, then a layer of bones, then a layer of ashes, then a layer of bones, and so on, until nearly full, and then finished with a layer of ashes. I use two-thirds ashes to one of bone. The ashes are kept wet all the time with soap-suds or chamber lye. When one vessel is filled, I then put in another until I have all the bones used. If I still have ashes, they are barrelled away until near spring, then they are put in a hopper as if used in making soap. When I wish to use the bones, and I find them not sufficiently dissolved, I put ashes and bones in a large kettle; the ashes in the hopper are leached and the lye put on the bones and ashes, and the whole mass boiled until the bones are entirely consumed. The mass is now in a doughy state; this is mixed with loam enough to make it dry as wanted. It is now ready for use.

When lye is not to be had, this mass is boiled with water, but it is not so good and takes longer to dissolve the bones.

I have heard it said that caustic lime would dissolve bones as well as wood-ashes, but I have not tried it, and cannot speak from experience.

ADVANTAGES OF UNDERDRAINING.

It prevents drought.

It furishes an increased supply of atmospheric fertilizers.

It warms the lower portions of the soil.

It accelerates the disintegration of the mineral matters in the soil.

It causes a more even distribution of nutritious matters among those parts of the soil traversed by roots.

It proves the mechanical texture of soil.

It causes the poisonous excrementitious matters of plants to be carried out of reach of their roots.

It prevents the grasses from running out.

It enables the surface soil to be deepened by removing excess of water.

It renders soil earlier in the spring.

It prevents the throwing out of grain in winter.

It allows works to be done sooner after rains.

It keeps off the effects of cold weather longer in the fall.

It prevents the formation of acetic and other acids, which induce the growth of sorrel and other weeds.

It prevents, in a great measure, the evaporation of water, and the consequent abstraction of heat from the soil.

It admits fresh quantities of water from rains, etc., which are always more or less imbued with the fertilizing gases of the atmosphere, to be deposited among the absorbent parts of soil, and given up to the necessities of plants.

It prevents the formation of so hard a crust on the surface of the soil as is customary on heavy lands.

It prevents in a great measure grass and winter grains from being winter-killed.

SILOING FIELD CORN.

New England Farmer.

When the silo excitement first began to rage in this country, under the teachings of Dr. Bailey and others, it was thought necessary to grow corn of some immense variety specially for ensilage, and "ensilage corn" to mean corn grown for fodder exclusively. Some of the conservative farmers have objected to the silo system, because they have found that where they have devoted large space to the growth of fodder corn, they have sadly missed the grain which was formerly raised under the old system.

Mr. Whitney, of Williston, Vt., after trying ensilage corn and field corn in comparison, decided that the field corn must not be given up. The farmers near the canning establishments have considered themselves specially favored, because they could sell the ears when in milk, and then have the fodder left in the very best condition for ensilage.

Mr. N. B. Douglas, of Sherburn, has gained a point the present season by successfully curing common field corn, and getting the fodder into the silo while in its green state. He picks the ears when scarcely past the milk, or just as the grain begins to glaze, and throws them in small heaps of a bushel or less in rows through the field, leaving the husks on. The fodder is then cut and stored in the silo just as if grown specially for that purpose. The ears are left in the field to cure till dry enough to husk and store in narrow cribs built in the open air. After a rain the heaps are sometimes stirred a little to aid the curing. This can be done quite rapidly with a fork. A portion of the corn was stored in the husks while yet green, in unused out-buildings, being laid about a foot deep on the floors, but it did not cure nearly as rapidly or as well as that left in the field where sun and air had full access to it.

Mr. Douglas is much pleased with his experiment, and thinks this is one of the last silo questions to be solved. He raised 700 baskets of ears on seven acres, and estimates 50 tons of fodder in the silo.

Putting the fodder in the silo saves all the labor of stocking, with the advantage of being at once safely stored and out of the way. The silo not being filled by the corn some forty tons of apple pomace from a cider mill has been recently put upon the top, both for weight and to be used as ensilage in the winter, pomace being found to be an excellent and cheap cattle food for milch cows.

Mr. Douglas is cultivating forty five acres, and has fodder enough on hand to winter fifty head of cattle. He will sell considerable of his best hay at \$20 or more per ton, and use the proceeds for buying cotton seed meal or other grain to use with his cheaper fodder materials.

CATTLE IN SCOTLAND.

The Aberdeen *Free Press* gives a table which shows the remarkable fall in the prices of Scotch Polled cattle since 1882, in comparison with Shorthorns, which have been steady in the north of Scotland. The tables are:—

	Number.	Average.	Total.
1882—Polled.....	341	\$314	\$107,292
Shorthorns.....	547	131	72,048
1883—Polled.....	242	242	58,590
Shorthorns.....	481	146	70,489
1884—Polled.....	773	183	141,637
Shorthorns.....	762	137	108,249
1885—Polled.....	385	128	113,740
Shorthorns.....	720	122	88,322

It will be seen that the numbers of cattle offered have increased year by year, but that this increase in Shorthorns has not affected the prices, while in Polled the reverse is the case. In 1885, 885 cattle only realized \$6,500 more than 341 did in 1882.

HORNLESS CATTLE.

Southern Live Stock Journal.

There are many reasons why horns should be bred out of cattle intended for beef. The main reason is owing to the wounds inflicted one upon another when closely penned or crowded in cars and upon steamboats on their way to market. It is also argued that horns are useless appendages and have no marketable value. In cattle bred wholly or partially for ornamental purposes, it would detract from their beauty to do away with their horns, as in the case of the Jersey. The Jersey deprived of its horns would lose half its attractiveness to the eye, and might be likened to a sheep shorn of its wool. But in cattle raised solely for beef purposes and nothing else, and where beauty has no practical value, we think a hornless breed preferable. This subject is now attracting comment through the agricultural press both here in America and in Europe. J. J. Mechi, the famous scientific farmer of Great Britain, has the following to say on the subject:—

"I hate cruelty, but it is real humanity to remove the horns of cattle, and at the cost of temporary suffering to secure to them a peaceful enjoyment of the rest of their lives. Those who have seen the constant fear and disturbance to which horned cattle are exposed in a limited space, such as a covered or open farm-yard, and the injuries inflicted by horns, must come to the conclusion, that without horns the animals can feed and rest in peace—with horns, much of the farmer's profit must disappear."

One of our contemporaries advocates the dis-horning of calves when three or four months old, claiming that the cruelty (?) of such a practice is more than counterbalanced by the good results to be achieved. In England, it is stated, a heavy pair of shears are used for the above purpose.

GALLOWAY CATTLE.

English Live Stock Journal.

A well-directed attempt is being made to introduce Galloway cattle into Canada. Mr. James Biggar, of Grange Farm, Kirkcudbright, who was sent as a delegate from the tenant farmers in that district in 1879, to report on the Canadian North-West as a field for settlement, is one of the most prominent breeders of this class of cattle. He has of late been using his best endeavors to bring it into higher favor in the Dominion in competition with the more fashionable Polled Aberdeen-Angus cattle. With a view of furthering the interests of Galloway breeders, Mr. Biggar has visited the Dominion in the course of the past autumn, and as the result of this visit he has within the past few days shipped some 86 head of cattle to Quebec by the Dominion Line. The rival claims of these two black hornless breeds of cattle have, says the *Canadian Gazette*, been very freely and fully discussed in both English and American agricultural papers. Although apparently the Galloway cattle are very hardy and well adapted for the ranches of the North-West, the Polled Aberdeens have gained a firm footing in the Dominion, largely in consequence of the importations made by the Hon. J. H. Pope, lately Minister of Agriculture, and by the Hon. M. H. Cochrane, and other prominent stock-breeders. The general impression in Canada, indeed, says our contemporary, is that the Polled Aberdeens mature at least a year earlier than the Galloways, and breeders both here and on the other side of the Atlantic will await with some interest the results of the test to which the relative merits of the two breeds will now be put in the Dominion. We may add that Sir Charles Tupper has a small but valuable herd of Polled Aberdeens on his farm in Nova Scotia.

TRANSFERS OF THOROUGHbred STOCK.

American Berkshire Record.

Duchess XXVI., 12925. N. H. Gentry, Sedalia, Mo., to Newton, Bird & Son, Avenue City, Mo.
 Hopeful Duchess, 14552 N. H. Gentry to Geo. Hibler, Hume, Mo.
 Sovereign Duke XIX., 14555. N. H. Gentry to Cass & Burns, Buffalo Hart, Ill.
 Sovereign Duke XX., 14562. N. H. Gentry to O. K. Mills, Pinckneyville, Ill.
 Royal Derby, 4177. T. R. Procter, Utica, N. Y., to W. T. Miller, Bowling Green, Ky.
 Bob Tombs, 13457. and Miss Crown, 13693. W. T. Miller, Bowling Green, Ky., to T. R. Procter.
 Lee Bowling, 13691, and Young Surprise, 14597. W. T. Miller to Jas. Rogers, Jr., Ninety Six, S. C.
 Braw Lassie VI., 14599. D. W. Smith, Bates, Ill., to W. B. Chapman, Stirrup Grove, Ill.
 Lowland Mary III., 14600. D. W. Smith to W. F. Nevins, Modesta, Ill.
 Royal Prince, 14537. C. Hibbard & Son, Bennington, Mich., to J. Cummings, West Le Roy, Mich.
 Sallie R., 12123. John T. Wrinkle, Plattsburg, Mo. to Jas. H. Tinsley, Smithville, Mo.
 Jessie Hopeful, 13225. A. G. Epler, Virginia, Ill., to W. L. Propst, Plattsmouth, Neb.

The break up of Lord Lovelace's stud is much to be deprecated, in the interests of the breeding world, for it had been formed with great judgment, as may be inferred from the fact that six mares purchased when the stud was started for 3,800 gs. were sold on Saturday for 3,200 gs. This represents far less than what may be regarded as the average depreciation in value of brood mares, and considering that their yearlings have sold well in the interval, they must have yielded a handsome profit to Lord Lovelace, who started this stud when the neighboring one at Cobham, in which he was interested, had to be sold off. He purchased, together with these, among other mares, the stallion Blair Athol, whose sudden death soon afterwards was a great loss both to Lord Lovelace and breeders generally. Still, some good horses have been bred at the Pound Stud during its too brief existence, and a total of 6,690 gs. for 25 colts, including 17 mares, seven foals and a yearling, is equivalent to the very respectable average of 267 gs. each.—*London Live Stock Journal*.

Veterinary Department.

F. A. CAMPBELL, V. S., EDITOR.

[All communications desired to be answered through this column should be addressed to the "Veterinary Editor, CANADIAN BREEDER, corner of Front and Church Streets, Toronto."]

ANSWERS TO CORRESPONDENTS.

T. A. B.—A three-year-old filly of mine turned out in the hop-yard got frightened at something, and ran with such great force against a slack wire used for the hop-vines to run on, that it lifted her right off her feet and threw her on her rump. She was not able to get up, so we had to draw her into the stable on a stoneboat, and she has lain there ever since—about three weeks. Her appetite is not very good, and she is getting thinner every day, and the side she lies on is all raw from lying on it. She has no power in her hind parts. A neighbor of mine, who is somewhat of a horse-doctor, has been looking after her, and he says she has sprained the muscles of her back. If you will tell me what the matter is and what I can do for her, you will greatly oblige. ANS.—From the nature of the accident and the symptoms, I am inclined to think your filly has fractured one or more of the bones of her back.

The most humane thing to do would be to put her out of her misery by a bullet, or a blow on the head with an axe.

J. R.—I wish your opinion on a horse of mine. He is a very promising four-year-old. Last spring his right eye was very much swollen and inflamed. I bathed it with salt and water and he got over it in a few days, but his eye is bad again, much worse than it was in the spring, and a film of a yellowish tinge has come over it. Will he go blind? Can I do anything to save his eye? ANS.—Your colt has got specific or periodic ophthalmia. It might be caused by keeping him in a badly drained and ill-ventilated stable, or it may be hereditary. Give a mild cathartic, such as a pint of linseed oil; bathe the eye twice a day with hot water, and put in between the lids, after each bathing, a few drops of the following:—Atropine, two grains; water, two ounces. Give internally, night and morning, a teaspoonful of the tincture of belladonna. Keep the stable dark and well ventilated, and feed on soft food, such as bran mashes, carrots.

W. J. T.—Unfortunately we have no regular veterinary surgeon in our neighborhood, and when any of our horses get sick we generally have to treat our own horses. I have a four-year-old stallion colt that is very well bred, and showed signs of trotting fast. I broke him to harness last spring, but he hurt his leg, so I let him run this summer and have done nothing with him since. A large lump, about twice the size of a goose egg, has come on his breast, just where the bottom of the collar comes, and it keeps getting larger by degrees. I have rubbed on different oils and liniments till I have taken all the hair off his breast. Can you tell me what it is and what to do to remove it? ANS.—It is a tumour of some kind, probably an aneurism of one of the arteries of the chest. No matter what it is, you will have to have it cut out, and to have it done properly take him to a good qualified veterinary surgeon.

G. W.—Will you kindly give me your opinion on the following cases:—1st. I have a well bred cow that has a large hard lump on her lower jaw; it is getting larger every day. Is there any cure for it? 2nd. A horse that has a very offensive discharge from his left nostril. The smell that comes from it is so bad that no one likes to go near him. My neighbors say that he has got the glanders. ANS.—1st. Your cow has got osteosarcoma. You might try a blister, composed of biniodide of mercury, two drachms; lard or vasoline, two ounces; clip the hair off, and rub on a little twice a week. If that does not stop the growth you had better fatten and kill her. 2nd. The horse has not got glanders. The discharge is caused by a decayed molar, or the bones of the upper jaw are injured; it is most likely the former. Consult a veterinary surgeon, and have the offending tooth extracted.

Live Stock & Kindred Markets.

OFFICE OF THE CANADIAN BREEDER
AND AGRICULTURAL REVIEW.

TORONTO, Dec. 16th, 1885.

The better tone noted in the British live stock trade for several weeks back has been more than sustained since the date of our last cables, and to-day cattle are cabled half a cent higher than on last Monday, with the demand weak, however, at the advance. The cold weather prevailing for the past week has materially strengthened the meat markets, which are cabled considerably higher, but the sudden change to mild weather to-day may check the improvement. The advance, however, has helped

the trade in live cattle. Receipts of Canadians have been light and have met a good steady demand at higher prices. The supplies from other quarters, however, have been much larger; in fact, are actually heavy, which imparted an unsteady tone to the markets to-day, and caused buyers to hold off. The offerings at Liverpool, Monday, were in excess of demand, which was weak and uncertain, owing to the mild weather and the larger receipts, despite which the advance was maintained, and prime Canadian steers were quoted at 13½c.—an advance of 3½c. per lb. since October 26. Dressed beef in Liverpool is cabled higher at 5¼d. Another Liverpool cable quotes refrigerated beef at 6¼d. for hindquarters, and 4½d. for forequarters. A London cable quotes refrigerated beef higher at 4s. 8d. for hindquarters, and 3s. 2d. for forequarters, per 8 lbs. by the carcass.

Quotations at Liverpool on Monday, being calculated at \$4.80 in the £, were:

Cattle—	\$ c.	\$ c.	per lb.
Prime Canadian steers	0 13½	to 0 00	
Fair to choice grades	0 13	to 0 00	
Poor to medium	0 12	to 0 00	
Inferior and bulls	0 09	to 0 10½	

TORONTO MARKET.

Receipts of live stock this week have been more liberal. Yesterday about 50 loads were offered; nearly all were butchers' cattle. There was, however, quite enough small stock to supply the demand. Trade on the whole was rather sluggish, buyers and sellers being apart in their views. Still a considerable amount of business was transacted, although everything was not cleared out.

CATTLE.—Yesterday shipping cattle were nominal; among the offerings were a few that would have done for export, but buyers are waiting until the latter part of this or next week before buying for the next steamer. Butchers' cattle were in liberal supply, they formed the bulk of the offerings; while there were a good many choice heifers and steers offered, there was also a large number of inferior animals. The latter might sell well enough on ordinary occasions, but when everyone is looking for Christmas cattle, other grades are left in the shade. This being the case yesterday many common cattle were unsold; good Christmas stock sold fairly well at 4½ to 5c. per lb.; fairish beasts averaged 4c. and common from 3 to 3½c.; many of the loads were broken into and sold in small lots. The best sale reported was three choice heifers averaging 1,450 lbs., at \$75.50. Among the other sales were 20 averaging 1,000 lbs., at \$38 each; 22 do 1,175 lbs., at \$51; 14 do. 1,350, at \$68; 38 do. 975 lbs., at \$35; 21 do. 1,150 lbs., at \$46; 15 do. 1,100 lbs., at \$48; 22 do. 1,150 lbs., at \$54.50; 8 do. 1,150 lbs., at \$53; 22 do 900 lbs., at \$27; 14 do. 1,100 lbs. at 4c. per lb.; 20 do. 1,200 lbs., at 4½c. per lb.; 13 do. 1,150 lbs., at 4¾c. per lb.; 21 do. 1,050 lbs., at 5c. per lb.; 16 do. 1,300 lbs., at 5c. Milch cows were quiet, only a few being offered; sales were made at \$36 to \$48 per head, with two springers at \$35 each. A few feeders were picked out, but the demand for them was only nominal.

SHEEP.—Were in fairly liberal supply for this time of the year; exports were in fair demand and steady at 3¼ to 3½c. per lb, there being sales at these figures; on Saturday a load sold at 3½c. A good many butchers' sheep sold in lots with lambs and are quoted below.

LAMBS.—Supply liberal and quite equal to the demand, which, excepting for extra choice, is limited; these last were scarce; best picked were worth about \$3.75 per head; about the best sale was 114 head, averaging 85 lbs. each, at \$3.50 per head—a bunch of culls sold at \$2.25 each, the average weight being about 50 lbs; a mixed bunch composed of 95 sheep and lambs sold at \$3.37½, and a similar bunch numbering 93 head at \$3.50.

HOGS.—Did not offer as freely as a week ago; however, they found a good steady market; a large bunch of light, averaging 180 lbs., sold at \$4.30 per cwt., 3 bunches of mixed at 4c. and 1 of heavy at 3¾c.; stores were scarce and wanted at 4 to 4½c. per lb.

POULTRY.—Quiet; turkeys firm at 9c.; geese unchanged at 6c. per lb.

Quotations are:

Cattle, export, 1,200 lbs. and upwards, heifers and steers, choice	4	to 4½	per lb.
" Mixed	3½	to 4	"
" Butchers' choice Christmas	4½	to 5	"
" " good	3¾	to 4	"
" " inferior to common	2½	to 3½	"
" Milch cows, per head		\$25 to \$50	
" Stockers, heavy	2¾	to 3½	per lb.
" " light	2	to 2½	"
" Bulls	2	to 3	"
" Springers, per head		\$25 to \$45	

Sheep, export, choice	3¼	to 3½	per lb.
" inferior and rams	2¼	to 3	"
" Butchers' per head		\$2.50 to \$3.50	
" Lambs, choice, per head		\$3.25 to \$3.75	
" " inferior to common per head		\$2.25 to \$3.00	
Hogs, heavy fat, weighed off the car	3½	to 3¾	per lb.
" Light fat	4	to 4¾	"
" Store	4	to 4¼	"
Calves, per head, choice		\$5.00 to \$8.00	
" Common		\$2.00 upwards.	

The receipts of live stock at the Western market here for the week ending last Saturday, with comparisons, were as follows:

	Cattle.	Sheep and Lambs.	Hogs
Week ending Dec. 12	1,059	1,291	837
Week ending Dec. 5	1,153	1,789	529
Cor. week 1884	681	619	306
Cor. week 1883	929	278	1,059

Total to date	55,770	62,500	18,001
To same date 1884	49,719	59,186	13,707
To same date 1883	34,149	48,176	10,252

MONTREAL.

Dec. 14.—The trade in export cattle continues light, and the market consequently quiet, with little enquiry. Prime heaves may be quoted at 4½c. per lb. live weight, against 5c. a year ago. The first arrivals of store-fed cattle were offered this morning, and a few were taken by the butchers to make Christmas beef at 4½ to 5c. per lb. There was a good demand for butchers' cattle, of which offerings were fair, with sales at 3 to 4c., as to quality. Receipts of sheep were larger, and there was a good trade done at higher prices, some round lots being taken at 3½c. per lb. There was a good demand for live hogs, prices of which were a shade higher at 4¾c., owing to the small supply. Calves sold at \$4 to \$8 each, as to quality.

EAST BUFFALO.

Dec. 14.—Cattle—To-day fresh arrivals of sale cattle numbered 170 loads, while 16 held over from Saturday. Market ruled very dull and slow, except for a few droves of fancy Christmas and export steers, which sold at about former prices, but for all other kinds from 1,425 lbs. average, down, values are fully 25c. per cwt. lower than the opening prices of last week, or 10c. lower than at the close last Saturday. Butchers' stock, and fair to medium steers, are altogether in too liberal supply, and from an early hour the market was at a standstill on these grades, while old cows, thin heifers, half-fat oxen, etc., were the worst of the season, selling all the way from \$2 to \$2.75 per cwt., and some old cows and light fairish heifers at \$16 to \$23 per head. Stockers were in slight supply, only 3 or 4 loads being here from Canada and very few from the West. But the supply was fully equal to the demand, only one Pennsylvania buyer and a few State feeders being in want of this kind, which sold at \$2.50 to \$3; good yearlings, \$2.25 to \$2.40; fat bulls dull at \$2.40 to \$3, an occasional fancy one bringing more; stock bulls slow at sale, \$2 to \$2.30; milch cows, slow at a decline noted last week; sales at \$30 to \$48 per head for good to choice; Canadas sold out at \$2.25 to \$3.50, the latter for good stockers averaging 1,000 lbs. Sheep and lambs—Arrivals of sale sheep liberal, although not heavy; about 85 loads, of which 17 loads were Canada lambs; market barely steady; sales better than for several days past; regular buyers not doing anything to speak of, and the outlook was no better than for some time past; fair to good 80 to 90 lb. butchers' sheep at \$2.50 to \$3; choice, 95 to 100 lbs., \$3.15 to \$3.35; choice feeding wethers, 90 to 100 lbs., \$3.50 to \$4; extra, 110 to 120 lbs., \$4.10 to \$4.40; while one drove of extra fancy Christmas sheep, taken for the Philadelphia trade, brought \$4.75. Lambs were a shade stronger for good ones; common dull as ever; Western common to choice, \$3 to \$5; Canada do., \$5 to \$5.50; sales included two cars Canada lambs, averaging 86 lbs., at \$5.50; one car of ewes, averaging 112 lbs., at \$3.25; one car of sheep, averaging 141 lbs., at \$3.50; market closed with a good many held over.

PRODUCE.

There was a slight improvement in this market since our last, in the wheat line; but this must be regarded as very small and short lived. Prices, however, have been generally fairly well maintained for grain, and there has been no inclination manifested to push sales of anything. Stocks in store have been on the increase and stood on Monday morning as follows: Flour, 500 barrels; fall wheat, 126,336 bu.; spring wheat, 72,128 bu.; mixed wheat, 2,994 bu.; oats, nil; barley, 121,314 bu.; peas, 14,014 bu.; rye, nil; corn, 8,985 bu. Wheat in transit for England had increased on the 10th inst. to 1,750,000 quarters, against 1,600,000 in the preceding week. Outside markets have been generally weak. In the States the visible supply of wheat stood at 58,149,000 bushels on the 12th inst., against 36,995,000 in the preceding week.

PRICES AT LIVERPOOL ON DATES INDICATED.

	Dec. 8.	Dec. 15.
Flour	os. od.	os. od.
R. Wheat	7s. 4d.	7s. 3d.
R. Winter	7s. 4d.	7s. 3d.
No. 1 Cal	7s. 4d.	7s. 4d.
No. 2 Cal	7s. 1d.	7s. od.
Corn	4s. 10½d.	4s. 9½d.
Barley	os. od.	os. od.
Oats	os. od.	os. od.
Peas	5s. 7d.	5s. 6d.
Pork	50s. od.	49s. od.
Lard	32s. od.	32s. od.
Bacon	30s. od.	30s. od.
Tallow	26s. 6d.	26s. 3d.
Cheese	45s. od.	45s. 6d.

FLOUR.—The chronic dullness and inactivity of the last few weeks has been maintained; scarcely any demand has been heard from any quarter. Superior extra has been offered all week at \$3.75 but no sales reported; extra sold at equal to \$3.65 last week and since then offered at same price with no demand.

BRAN.—Scarce and firm at about \$11.50.

OATMEAL.—Cars quiet and much as before at \$3.75 to \$3.85 for average and up to \$4 for choice; small lots \$4 to \$4.25.

WHEAT.—There was some slight show of firmness displayed towards the close of the week, when No. 2 fall sold at 85½c. f.o.c. and for May delivery at 92¼ and 92½c., and red winter changed hands at 87c. f.o.c., but this continued only a couple of days, and this week No. 2 fall has been offered at 86c. with 83c. the best bid for it at the close. Spring has seemed not wanted all through; No. 2 was last week offered at 87c. with no buyers and at close seemed nominal at about 84 to 85c. if pressed to a sale. On street fall sold at 84 to 85c.; spring at 80 to 85c. and goose at 73 to 76c. at close.

OATS.—Generally steady and in good demand but with a wide range of prices as well as of qualities. Cars sold last week at 33 and 34c. on track and bagged to arrive at 34½c.; this week cars on track sold at 33 and 34c. and to arrive at 33½c.; while milling oats brought 35c. Street prices closed at 33 to 35c.

BARLEY.—The feeling, save in the higher grades, has been easier; and any sales made generally on p.t. or of ungraded lots. No. 3 has been offered nearly all week at 58c. without buyers. At close uninspected, about equal to No. 3 choice, sold at 64c. on track; and some more, probably something below extra No. 3, at 68c. on track but 71½c. was paid for this grade last week; No. 2 fairly steady at 80 to 81c. and No. 1 scarce and firm with 92½c. f.o.b. paid at close. On street prices have stood as before at 60 to 92c.

PEAS.—Values of car lots unchanged at about 61c.; street receipts have sold at 60 to 62c. but total trade small.

RYE.—Quiet at from 60 to 62c.

HAY.—Pressed has continued quiet with prices easy at \$12 to \$13. Market receipts have varied but all taken at fairly steady prices, closing at \$10 to \$13 for clover and \$14 to \$15 for timothy.

STRAW.—Receipts increased but all wanted; prices steady at \$8 to \$8.50 for loose and \$12 to \$13.50 for sheaf.

POTATOES.—Cars have been moving, but at rather unsettled prices, sales being reported at 47 and 50c. on track or equal to these prices. Street receipts have sold much as before at 60 to 65c.

APPLES.—No car lots moving; street receipts fairly good and prices ranging from \$1.25 for low grade to \$1.75 for choice with a very few touching \$2.

POULTRY.—Abundant last week; since then rather scarce; prices closing firm at 9 to 11c. per lb. for turkeys and 6 to 6½c. for geese, with ducks worth 50 to 65c. and fowl 25 to 40c. per pair.

TORONTO MARKETS.

Flour, p. brl., f.o.c., Sup. extra	\$ 3 75	to \$ 0 00
" " Extra	3 65	to 0 00
" " Strong Bakers'	0 00	to 0 00
" " S. W. Extra	0 00	to 0 00
" " Superfine	0 00	to 0 00
Oatmeal	3 75	to 3 85
Cornmeal	0 00	to 0 00
Bran, per ton	11 00	to 11 50
Fall wheat, No. 1	0 00	to 0 00
" No. 2	0 83	to 0 84
" No. 3	0 00	to 0 00
Spring wheat, No. 1	0 00	to 0 00
" No. 2	0 85	to 0 87
" No. 3	0 00	to 0 00
Barley, No. 1	0 90	to 0 92
" No. 2	0 80	to 0 81
" No. 3 Extra	0 70	to 0 71
" No. 3	0 58	to 0 00
Oats	0 33	to 0 34
Peas	0 61	to 0 00
Rye	0 60	to 0 00
Corn	0 00	to 0 00
Timothy seed, per bush	0 00	to 0 00
Clover	0 00	to 0 00
Flax, screened, 100 lbs	0 00	to 0 00

PROVISIONS.

BUTTER.—There has been one small purchase made for shipment at prices ranging from 10 to 12c., the latter being for dairy with white thrown out. But with this exception the situation has remained as before, really choice firm at 15 to 16c. and all else neglected and accumulating. Rolls more abundant and easier; one mixed lot of about two tons sold at 11c. but good to choice steady at 13 to 15c. On street pound rolls have brought 22 to 25c. and tubs and crocks 14 to 17c. for dairy.

EGGS.—Substantially unchanged at 20c. for round lots of fresh and 16c. for round lots of pickled. On street 22 to 26c. has been paid for fresh to new-laid.

CHEESE.—Seems quiet at 9 to 9½c. for choice in small lots and 6½ to 8c. for inferior to medium.

PORK.—Small lots have sold quiet but firm at \$13.

BACON.—The demand has been slack and the movement very limited. Long clear in case lots 7c. with Cumberland nominal. Rolls from \$1½ to 9½c. and bellies from 10½ to 11c. with boneless 11½c.; with hogs firm meat seems likely to be the same.

HAMS.—Much as before at 11 to 11½c. for smoked, the former figure being for lots of not less than fifty.

LARD.—All the newly made offering has continued to go off readily at 9 to 9½c. for pails, these being the only sort offered.

HOGS.—Firm with all offered readily taken at \$5.37 to \$5.50 for rail lots; and \$5.50 to \$6.25 for farmers' lots, few of the latter going over \$6.

SALT.—No Liverpool coarse on hand and cars to arrive held at 65c.; fine selling slowly at \$1.45 and dairy in 50 lb. bags at 40c. Canadian inactive at 80c. for car lots and 55c. for small lots.

DRIED APPLES.—Trade lots dull at about 4c.; dealers selling at 4½ to 5c., and for evaporated at 8½c.

WHITE BEANS.—Scarce and wanted at \$1.15 to \$1.20 for hand-picked in lots; with dealers selling at \$1.25 to \$1.35.

HOPS.—Nothing doing beyond a few single bales occasionally at 7 to 10c.; trade lots neither offered nor wanted.

TORONTO MARKETS.

Butter, choice dairy	\$ 0 14	to \$ 0 16
“ good shipping lots	0 10	to 0 12
“ inferior, etc.	0 03½	to 0 04
Cheese, in small lots	0 06½	to 0 09½
Pork, mess, per brl.	13 00	to 00 00
Bacon, long clear	0 07	to 00 00
“ Cumberland cut	0 07	to 00 00
“ smoked	0 00	to 00 00
Hams, smoked	0 11	to 0 11½
“ cured and canvassed	0 07	to 0 10
“ in pickle	0 00	to 00 00
Lard, in tinnets and pails	0 09	to 0 09½
“ in tierces	0 00	to 00 00
Eggs	0 16	to 0 20
Dressed hogs	5 37	to 5 50
Hops	0 07	to 0 09
Dried apples	0 04	to 0 05
White beans	1 10	to 1 35
Liverpool coarse salt	0 00	to 00 00
“ dairy, per bag 50 lbs.	0 40	to 00 00
“ fine	1 50	to 00 00
Goderich, per barrel	0 85	to 00 90
“ per car lot	0 80	to 00 00

HIDES, SKINS AND WOOL.

HIDES.—Green unchanged in price; all offered, and a few more, wanted; cured have been in active demand and scarce, with the previous advance fully maintained; sales at 9½c., one of them being a car lot.

CALFSKINS.—Still inactive and nominally unchanged.
SHEEPSKINS.—Prices of city green have risen five cents and \$1 is now paid for the best of them; country lots have ranged from 75 to 90c., and all of all sorts offered have found ready sale.

WOOL.—There has been so little fleece obtainable that it may be regarded as almost nominal; values, however, firm, at 21 to 21½c. for choice and 18 to 19c. for mixed lots; pulled in good demand with sales at 22 to 23c. for super; at 26 to 27c. for extra and 18 to 19c. for combing. The demand from the mills steady.

TALLOW.—Exceedingly dull for all sorts; prices unchanged.

Hides and Skins—		
No. 1 steers	\$ 0 09½	to \$ 0 09¾
Cows, No. 2 and No. 1	0 07½	to 0 08½
Cured and inspected	0 09½	to 0 09½
Calfskins, green	0 11	to 0 13
“ cured	0 13	to 0 15
Sheepskins	0 65	to 1 00
Lambskins	0 00	to 0 00
Pelts	0 00	to 0 00
Tallow, rough	0 03	to 0 00
“ rendered	0 06	to 0 00
Wool—		
Fleece, comb'g ord.	0 19	to 0 21½
“ Southdown	0 22	to 0 23
Pulled combing	0 18	to 0 19
“ super	0 22	to 0 23
Extra	0 26	to 0 27

THE HORSE MARKET.

TORONTO.

The demand for horses of all classes is on the decrease as is usual at this time of the year. Only about twenty horses were sold at Grand's on Tuesday, and all were cheap workers. Prices ranged from \$50 to \$125 each. A good many first-class drivers are being offered, but no special sales have been reported.

BOSTON.

Sales during the week have been light, while receipts are fully up to the average. The arrivals are largely western horses. Sales on Saturday were mostly at \$100 to \$200 per head. Geo. C. Hooker sold one fancy pair of well-matched carriage greys, 16 hands high, weighing 2,100lbs., of extra style, at \$1,200. The purchaser was John Wells, of Longwood, Brookline; one pair of dapple greys, a very nice team, at \$900. O. F. Kern, of Indiana, had 19 head, mostly draught, for single drive, at \$125 to \$225. A. K. Wilson had 18 head, a mixed load of good chunks, at \$150 to \$175. Hodges & Morse, of Michigan, and Berry Bros., of Ohio, arrived on Sunday with about twenty head each, and had not sold.

CHICAGO.

The first week of the winter season brought very light receipts of horses and a correspondingly light trade. There is no revival in the trade to be expected for some weeks to come, certainly not till after the holiday season.

MONTREAL.

The horse market has ruled quiet during the past week, owing to the great scarcity of horses. There is a good enquiry for drivers, saddle horses and cheap shanty animals. At Mr. Jas. Maguire's stables, on College Street, the following sales were made: One bay horse, 6 years, weighing 1,200lbs., at \$130; one bay mare, 8 years, at \$125 and one bay cob at \$60.



WELLAND CANAL ENLARGEMENT.

NOTICE TO CONTRACTORS.

Sealed tenders addressed to the undersigned and endorsed "Tender for the Welland Canal," will be received at this office until the arrival of the Eastern and Western mails on MONDAY, the 25th day of JANUARY next (1886), for raising the walls of the locks, weirs, etc., and increasing the height of the banks of that part of the Welland Canal between Port Dalhousie and Thorold, and for deepening the Summit Level between Thorold and Ramey's Bend, near Humberston.

The works throughout will be let in sections. Maps of the several localities, together with plans and descriptive specifications, can be seen at this office on and after MONDAY, the 11th day of JANUARY next (1886), where printed forms of tender can be obtained. A like class of information relative to the works north of Allanburg will be furnished at the Resident Engineer's office, Thorold; and for works south of Allanburg, plans, specifications, etc., may be seen at the Resident Engineer's office, Welland.

Contractors are requested to bear in mind that tenders will not be considered unless made strictly in accordance with the printed forms, and, in the case of firms, except there are attached the actual signatures, the nature of the occupation and place of residence of each member of the same; and further, an accepted bank cheque for the sum of Two Thousand Dollars or more—according to the extent of the work on the section—must accompany the respective tenders, which sum shall be forfeited if the party tendering declines entering into contract for the works, at the rates stated in the offer submitted.

The amount required in each case will be stated on the form of tender.

The cheque or money thus sent in will be returned to the respective parties whose tenders are not accepted.

This Department does not, however, bind itself to accept the lowest or any tender.

By order,

A. P. BRADLEY,

Secretary.

Dept. of Railways and Canals,
Ottawa, December 9, 1885.



NOTICE TO CONTRACTORS.

Sealed tenders addressed to the undersigned, and endorsed "Tender for Engine House, Toronto, Ont.," will be received at this office until MONDAY, 28th instant, for the erection and completion of

AN ENGINE HOUSE,
AT THE EXAMINING WAREHOUSE, TORONTO, ONT.

Plans and specifications can be seen at the Department of Public Works, Ottawa, and at the office of D. B. Dick, Architect, Toronto, on and after WEDNESDAY, 9th instant.

Persons tendering are notified that tenders will not be considered unless made on the printed forms supplied, and signed with their actual signatures.

Each tender must be accompanied by an accepted bank cheque, made payable to the order of the Honorable the Minister of Public Works, equal to five per cent. of the amount of the tender, which will be forfeited if the party declines to enter into a contract when called upon to do so, or if he fails to complete the work contracted for. If the tender be not accepted the cheque will be returned.

The Department does not bind itself to accept the lowest or any tender.

By order,

A. GOBEIL,

Secretary.

Department of Public Works,
Ottawa, 9th December, 1885.

"TUBMAN" FOR SALE.

The Thoroughbred Stallion "TUBMAN" will be sold for below his value.

Tubman, by War Dance, dam Lass of Sidney. For further pedigree see American Stud Book.

F. A. CAMPBELL, V.S.,

32 Richmond St.,

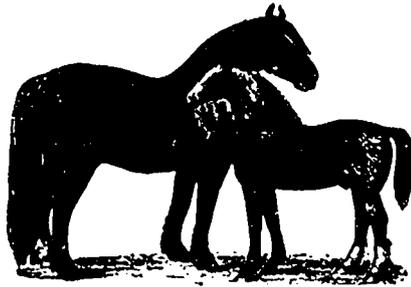
TORONTO.

SEDGWICK STEEL WIRE FENCE



Is the best general purpose wire fence in use. It is a strong net-work without barbs. Don't injure stock. It will turn dogs, pigs, sheep and poultry, as well as horses and cattle. The best fence for Farms, Gardens, Stock Ranges and Railroads. Very neat, pretty styles for Lawns, Parks, School-lots and Cemeteries. Covered with rust-proof paint, or made of galvanized wire, as preferred. It will last a life-time. It is better than boards or barbed wire in every respect. Give it a fair trial: it will wear itself into favor. The Sedgwick Gates made of wrought-iron pipe and steel wire, defy all competition in lightness, neatness, strength and durability. We make the best, cheapest and easiest working all-iron automatic or self-opening gate, and the neatest cheap iron fences now made. The best Wire Stretcher, Cutting Pliers and Post Augers. For prices and particulars ask Hardware Dealers, or address, mentioning paper.

SEDGWICK BROS., Richmond, Ind.



GRAHAM BROS.,

BREEDERS AND DEALERS IN
Clydesdale Horses,
STALLIONS & MARES,

OWNERS OF
Manfred, Cheviot, and Doubtnot,
All First Prize Winners.

Have always on hand, Stallions of the now
most fashionable breeds for sale.
Correspondence solicited. Address,

GRAHAM BROS.,

Clydesdale Horse Importers,
CLAREMONT, Ontario, Canada.

"CHANCELLOR,"
THE CELEBRATED STALLION,
FOR SALE CHEAP.

Dark Brown Horse Foaled in 1878; Sired by "Ter-
ror," Dam, Nellie Lyall, by Luther. Chancellor stands
fully sixteen hands and one inch—a very handsome
horse of great substance, weighed, at end of a very
successful season, 1,205 pounds. As a race-horse, was
very fast at all distances. His colts, from mares of all
descriptions, are very promising. For particulars
apply to

GEO. W. TORRANCE,
Cooksville, Ont.
Or to "CANADIAN BREEDER" Office, Toronto, Ont.

E. & A. STANFORD,
STEYNING, SUSSEX, ENGLAND,

AND
MARKHAM, CANADA,
Breeders and Importers

OF
CLYDESDALE HORSES, PONIES,

Sussex Cattle, Southdown Sheep,
Sussex Pigs, Game and
Dorking Chicken.

A good selection of either now for sale.

Enquire of
E. STANFORD,
Markham, Ont., Can.

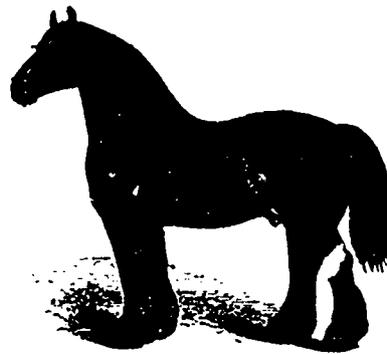
J. & W. B. WATT,

BREEDERS OF
Shorthorn Cattle, Clydesdale Horses,
Southdown Sheep, and
Berkshire Pigs.

"Barmpton Hero," 278-53813, and Imported "Lord
Lansdowne" at head of herd.

Herd numbers 60 head of choice animals.

Address
J. & W. B. WATT,
Salem P. O., Ontario.



JAMES FORSHAW,

BREEDER AND DEALER

—IN—
English Shire Horses,

STALLIONS AND MARES,

OWNER OF
"What's Wanted," "Bar None," "London
Tom," "St. Ives," all Islington Winners.

Has always on hand Stallions and Mares of
the now most fashionable breed, suitable for
exportation.

Correspondence solicited. Address,

JAMES FORSHAW,

SHIRE HORSE STUD FARM,
BLYTH, near Worksop,
ENGLAND.



Jas. F. Crowther,

BREEDER AND DEALER

—IN—
ENGLISH SHIRE

—AND—

Cleveland Bay Horses,

STALLIONS & MARES.

During the last twenty years, has won over
\$00 prizes, at all the leading Agricultural Shows
in England.

Has always on hand, STALLIONS, MARES
and FILLIES, selected with great care from
the best strains in England.

Mirfield is on the direct line between Liver-
pool and Leeds. Address,

SHIRE HORSE STUD FARM

MIRFIELD,

Yorkshire, England.

N.B.—Five minutes walk from the station.

NOAH'S ARK

A FOR-SALE

REGISTER

OF ALL ANIMALS

THAT

ON EARTH DO DWELL.

Every Reading-room in the World
Will Have It.

Messrs. Bowden & Co.,

PROPRIETORS.

UTTOXETER, ENGLAND,

IMPORTERS OF

Corn, Frozen Wheat,

AMERICAN,

AUSTRALIAN

& NEW ZEALAND

PRODUCE,

IN EXCHANGE FOR

SHIRE CART HORSES,

AND ALL OTHER BREEDS DOWN TO A SHET-
LAND PONY.

**Pedigree Stock, Sheep, Pigs,
Poultry and Dogs.**

ALL CORRESPONDENCE ANSWERED.

REFERENCES ON APPLICATION ON BOTH SIDES.

FREE TRADE.

Stud Books and Herd Books all kept at this office.

Commission 5 per cent. on business. Pedigree re-
search, 2/6.



F. A. FLEMING

IMPORTER AND BREEDER OF

HEREFORD CATTLE

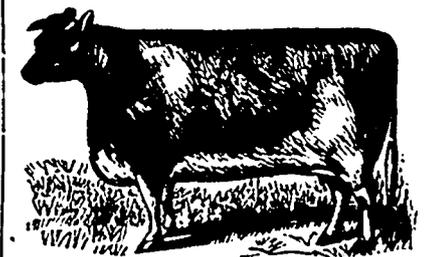
And Shropshire Down Sheep.

Herd headed by the Imported Bulls Corporal, 4175
and Earl Downton, 12797.

Choice Herefords and Shropshire Sheep for sale.
Address,

THE PARK, WESTON, ONTARIO.

Ten minutes' walk from Grand Trunk and Can-
ada Pacific R'y Stations. Eight miles from Toronto.



BOW PARK.

Thos. Nelson & Sons

Have always on hand a very fine
selection of

BULLS and BULL CALVES.

*PARTIES ON BUSINESS WILL BE
MET AT THE DEPOT.*

For further information apply to
JOHN HOPE,
Bow Park, BRANTFORD, Ont.

Jersey Bulls For Sale.

American Jersey Cattle Club

Herd Register.

ACTOR, \$250.

First prize two-year old class, and Silver Medal best
Jersey Bull any age, Toronto, 1884.

CARLO, OF GLEN STUART, \$150.

First Prize Toronto, 1885, eleven animals in the
ring.

BULL CALF, \$40; 9 months old.

For full particulars as to pedigree, etc., apply to

A. McLEAN HOWARD, Jr.,
Toronto, Ont.

J. G. WRIGHT,

BREEDER OF

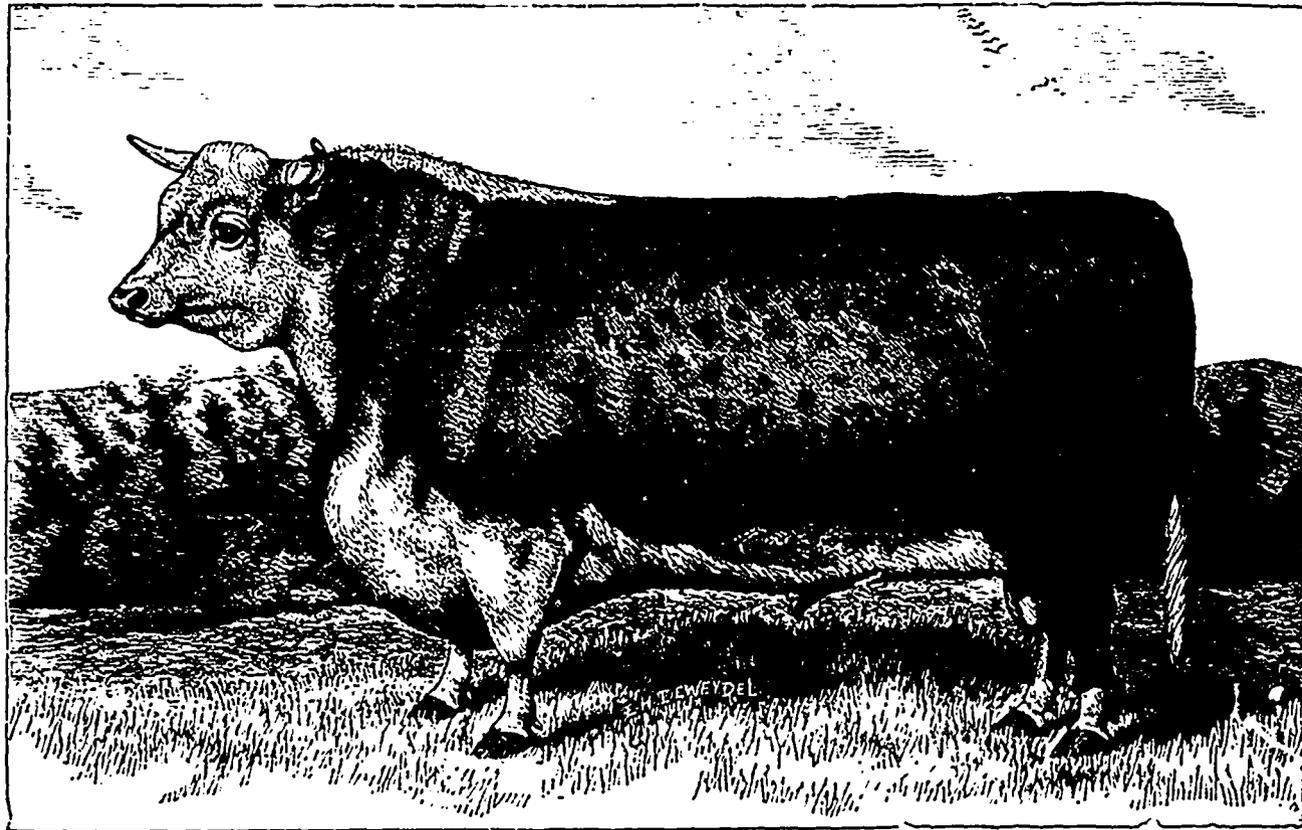
Pure-Bred Shorthorn Cattle.

SENATOR, 1783, at head of herd. Has always a
few choice animals of both sexes for sale.

Address
J. G. WRIGHT, Shorthorn Breeder,
GUELPH, ONT

THE PARK HEREFORD HERD.

PRIZE HEREFORDS.



PRIZE HEREFORDS.

PRIZE HEREFORDS.

I have still for sale a few young HEREFORD BULLS from recently imported stock, all eligible for or already entered in the American Hereford Record. Stock Bulls in use now are CORPORAL, 4175 (A.H.R.), 1st prize Ontario Provincial Exhibition, Ottawa, 1884, and my last importation EARL DOWNTON, bred by Mr. Thomas Fenn, Stonebrook House, Ludlow, Herefordshire, England, and sired by his grand bull "Auctioneer."

FRANK A. FLEMING, Importer and Breeder,

THE PARK, WESTON, ONT., NEAR TORONTO, CAN.

In replying to this advertisement mention the *Canadian Breeder*.

W. HERON & SON, JERSEY CATTLE.

Breeders and Importers of
SHORTHORNS, CLYDESDALES
AND
SHROPSHIRE SHEEP.
A NUMBER OF RAMS AND EWES FOR SALE.
Correspondence Solicited.
DALMORE FARM
ASHBURN, ONTARIO.

FRANK L. GASTON
Breeder and Importer
OF
JERSEY CATTLE.
NORMAL, Illinois.

CANADIAN BREEDER AND AGRICULTURAL REVIEW—WEEKLY.
TWO DOLLARS A YEAR.
POSTAGE FREE.

BEST STRAINS
BRED AT
Elm Park Farm, Markham, Ontario,
Breeding Farm established by the Hon.
D. REESOR.
Young animals of both sexes for sale.

FRED. LEATHERS,
FARM MANAGER.

THE
ALLODIAL ARGUS.
Giving valuable information to intending purchasers of lands and houses.
R. W. PRITTE & CO.,
Real Estate Agents, Commissioners, Valuers, Trustees and Financial Agents,
Room C, Arcade, Yonge Street,
TORONTO.
Send 3 cent Stamp for a Copy of the above Paper.

Harness at Wholesale Prices!

WE CARRY THE LARGEST AND BEST ASSORTED STOCK IN THE DOMINION.

Look at our Prices--		
Maud S. Harness,	\$23.00	worth \$45.00
Blue Ribbon do.	18.00	" 35.00
Single Strap	18.00	" 35.00
Blue Rib'n Double	36.00	" 45.00
No. 2	11.50	" 20.00
No. 2 Double	25.00	" 35.00
No. 3	9.00	" 15.00

All Hand Stitched No. 1 Stock used. Call in and examine or send for catalogue.

CANADIAN HARNESS CO.,
104 FRONT STREET,
Opposite Hay Market, Toronto.

HARNESS! HARNESS

40 years in the country is the test that tells.
No Cheap Yankee or Auction Work.
Send for a set of our \$12.50 Nickle Harness on trial. Privilege of inspection.
Harness at all prices. Send for price list.
Stevenson Manuf. Co.,
No 55 Jarvis Street



NOTICE TO CONTRACTORS.

Sealed tenders addressed to the undersigned and endorsed "Tender for Public Buildings, at Peterborough, Ont.," will be received until **TUESDAY**, the 20th day of January next, inclusive, for the erection of Public Buildings, for the
POST OFFICE, AND THE CUSTOMS AND INLAND REVENUE OFFICES, AT PETERBOROUGH, ONT.

Plans and specifications can be seen at the Department of Public Works, Ottawa, and at the office of J. E. Belcher, Architect, Peterborough, on and after **FRIDAY**, the 15th day of December next.

Persons tendering are notified that tenders will not be considered unless made on the printed forms supplied, and signed with their actual signatures. Tender for each building to be separate, and forms will be supplied for each.

Each tender must be accompanied by an accepted bank cheque, made payable to the order of the Honorable the Minister of Public Works, equal to five per cent. of the amount of the tender, which will be forfeited if the party decline to enter into a contract when called upon to do so, or if he fail to complete the work contracted for. If the tender be not accepted the cheque will be returned.

The Department does not bind itself to accept the lowest or any tender.

By order,
A. GOBEIL,
Secretary.
Department of Public Works, }
Ottawa, 7th December, 1885. }

Sibley's Tested Seeds
Catalogue free on application. Send for it.
HIRAM SIBLEY & CO.,
ROCHESTER, N. Y. AND CHICAGO, ILL.

High Grade Jersey Cows FOR SALE. FROM THE CELEBRATED OAKLANDS JERSEY STOCK FARM

We have a few Choice HIGH GRADE JERSEY COWS, Fresh in Milk, of good individual merits, which we can offer for sale to those anxious to improve their dairy stock.

PRICE \$100 EACH.

The Jersey is the great Cream and Butter Cow.

Apply to

H. H. FULLER,

Manager of Oaklands Jersey Dairy,

131, Yonge St., Toronto.



J. R. BOURCHIER,

BREEDER OF

Shorthorn Cattle & Berkshire Pigs.

A FEW YOUNG BULLS FOR SALE.

Pedigrees on application.

SUTTON WEST, ONTARIO, CAN.

H. SORBY,

Breeder and Importer of

BERKSHIRE PIGS,

Cotswold Sheep,

AND

Plymouth Rock Fowls,

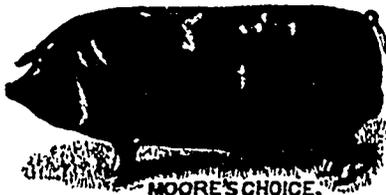
From the herds of Stewart and Swanswick, several R.A.S.E. Prize winners in stock.

A good yearling Short Horn Bull and a few Heifers of Bates' Blood for sale. Also, a superior yearling Jersey Bull.

Correspondence solicited.

Address,

H. SORBY, Gourock P. O., Ont.



MOORE'S CHOICE.

THOROUGHbred POLAND-CHINAS,

As produced and bred by A. C. Moore & Sons, Canton, Ill. The best hog in the world. We have made a specialty of this breed for 38 years. We are the largest breeders of thoroughbred Poland-Chinas in the world. Shipped over 750 pigs in 1884 and could not supply the demand. We are raising 1000 pigs for this season's trade. We have 160 sows and 10 males we are breeding from. Our breeders are all recorded in American P. C. Record. Photo card of 43 breeders free. Swine Journal, 25 cents, in 2-cent stamps. Come and see our stock; if not as represented we will pay your expense. Special rates by Express.



SUFFOLK PIGS.

Bred from imported stock—the boar in use was bred by the Earl of Ellesmere, and won first prize in his class at the chief shows in Canada this Year.

SEVERAL PRIZE WINNERS

in stock. Address:

GEORGE BUNBURY, SUFFOLK LODGE, OAKVILLE, Ontario, Canada.

FAIRVIEW HERD

OF

POLAND CHINA HOGS,

BENSON & WIKOFF, Proprietors.

Groves, Fayette Co., Ind.

All stock recorded in C.P.C.R. Our Motto: Individual Merit and Gilt-Edge Pedigrees. All stock guaranteed to be as represented. Low rates by Express. Send for Illustrated Catalogue.

BENSON & WIKOFF.

LOOK! LOOK!! LOOK!!!

Look at these Bargains!



O. E. COZZENS,

Breeder of all kinds of

Fancy Poultry, Geese, Ducks and Turkeys.

All Stock of the Very Best and Most Fashionable Strains.

Offers the following bargains till February 15th:—8 trios Brown Leghorns, \$5.00 a trio; 5 trios White Leghorns, \$5.00 a trio; 10 trios Plymouth Rocks, \$5.00 a trio; 3 trios Houdans, \$4.00 a trio; 4 trios each, Light and Dark Braumas, \$6.00 a trio; 5 trios Wyandottes, \$6.00 a trio; 2 trios Rose Comb Brown Leghorns, \$8.00 a trio. Orders for Eggs of any of the above varieties booked now at \$2.50 and \$3.00 a sitting; also 6 Bronze Turkey Gobblers and 24 Hens, at \$3.50 each for the Gobblers, and \$2.50 for the Hens; also 6 trios of Pekin Ducks at \$3.50 a trio.

Send for what you want. Remember these prices are only good till the 15th of February. Address,

O. E. COZZENS.

72 & 74 W. Monroe Street, Chicago, Ill.

P.S.—Send 50 cents for sample of my Folding Shipping Coop, and you will use no other.

WHEN I SAY I WILL INSURE YOUR HOGS,

I MEAN WHAT I SAY AND SAY WHAT I MEAN.

THE ONLY SCIENTIFIC SWINE REMEDY IS

DR. JOS. HAAS' HOG & POULTRY REMEDY.

Sold by all respectable Druggists and General Storekeepers.



WHAT THE REMEDY WILL DO.

It will put your hogs in fine condition. It will increase their appetite. It will expel the poison from their system. It is the only remedy that relieves a hog when smut poisoned. It will stop cough among your hogs. It regulates the bowels.

It will arrest disease in every instance.

Those getting it (whether diseased or not) will gain more than double the pounds of pork while others are gaining one.

Beware of Imitations claiming to be the same as Haas' Remedies, enclosed in wrappers of same color, size and directions of my well known Remedies.

WHAT THE REMEDY HAS DONE.

HANNIBAL, Mo., June 20, 1884.

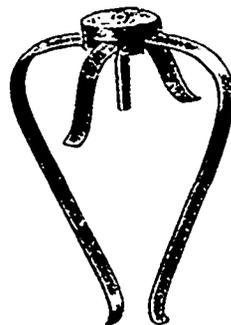
I have used Dr. Jos. Haas' Hog Remedy, and can recommend it as a sure cure for Hog Cholera. I lost eight hundred dollars (\$800) worth of hogs last spring out of a herd of over three hundred head. I began feeding the Remedy while they were dying at the rate of two or three a day, and from the first day of feeding the Haas' Remedy, I have not lost a hog, in fact, they have improved right along, and it has only cost me \$27.50, and I am sure it has saved me from \$800 to \$1,000.

FRANK LEE.

PRICES, 50c., \$1.25 and \$2.50 per box, according to size, 25 lb. can, \$12.50.

JOS. HAAS, V.S., Indianapolis, Ind.

For sale by HUGH MILLER & CO., Toronto, Ont.



THE STUNNER,

OR

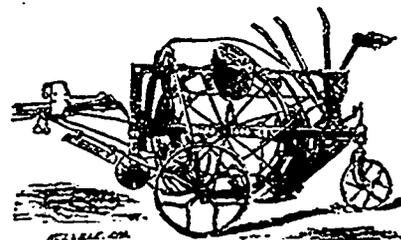
Instantaneous and Painless Slaughterer of Cattle, Pigs, etc.

By using this instrument the animal is instantly and painlessly deprived of sensibility to pain, owing to the brain being pierced. To deprive animals of life in the speediest way is surely humane and economical, as well as a moral duty; for while the Creator has given to man the power of life and death over the inferior animals, it must be wrong to exercise it otherwise than in the most humane manner.

A sample, with full instructions, will be sent, carriage paid, for 75 cents, by the makers

STRATTON BROS., 401 Gerrard St. East, Toronto.

A liberal discount will be allowed to agents.



ELEVATOR DITCHING MACHINE FOR UNDERDRAINING.

One man with The Elevator Ditching Machine can do more work than thirty men with spades. Manufactured by WM. RENNIE, TORONTO

N.B.—Machines delivered now will be sold on next spring's terms

CANADIAN BREEDER AND AGRICULTURAL REVIEW—Dairy.

CANADIAN BREEDER AND AGRICULTURAL REVIEW—Pigs and Poultry.

CANADIAN BREEDER AND AGRICULTURAL REVIEW—Farm.

CANADIAN BREEDER AND AGRICULTURAL REVIEW—Manures.

Ontario Veterinary College, 40 Temperance St., Toronto.

PRINCIPAL, - PROF. SMITH, V.S.

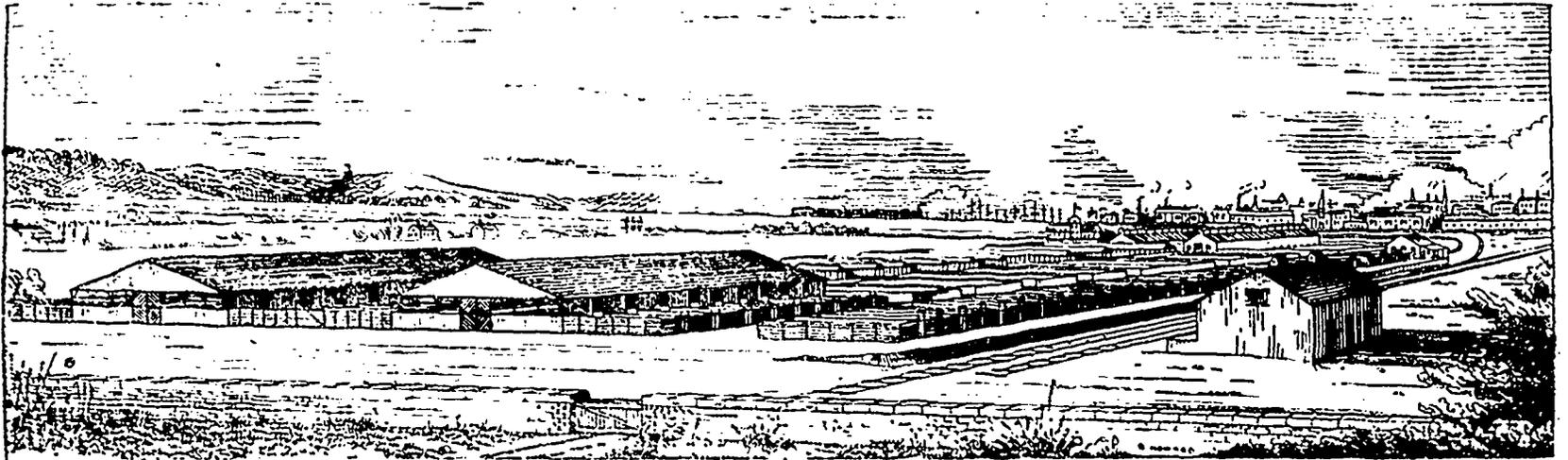
CHATHAM, August 31st, 1885.

Thorley Condition Powder Co.

SIRS,—This is to certify that having used DR. VON STROMBERG'S HORSE-WORM KILLER

in our stables, we find it the MOST EFFECTUAL REMEDY for expelling Worms and Bots that we have ever tried, and we can confidently recommend it to all owners of horses, as being the best as well as the cheapest worm medicine in existence—costing only about 6 1/2 cents a dose. CHARLES CRAW, JOHN ETCHES, SHELDON BROS., JOHN HALES, D. MCKELLAR and ORVILLE DOLSEN.

Canadian Pacific Railway. STOCK YARDS AT MONTREAL.



High Ground, well drained.
Most Modern arrangements for Feeding
and Watering Cattle.

Convenient to City Markets and Shipping
Excelled by no Yards in the World.

Large Easy-riding Stock Cars, Fast Trains, Best Facilities for Loading and Unloading, No extra Charges for Food and Prompt Attention at the Yards.
For the Convenience of Shippers an Hotel, with all modern improvements, will be built at the Yards so as to be ready for use about July 1st.
For Information about Rates, etc., apply to

G. M. BOSWORTH,
General Freight Agent (East'n Div'n),

E. TIFFIN,
Gen'l Freight Agent (Ont. Div'n),

MONTREAL.

TORONTO.

J. & J. TAYLOR, Toronto Safe Works,

ESTABLISHED 1855.

Patentees and Sole Manufacturers of

TAYLOR'S PATENT FIRE-PROOF SAFES,

WITH NON-CONDUCTING STEEL FLANGE DOOR.

We are now making

FIRE AND BURGLAR-PROOF SAFES.

Specially adapted for Jewellers' use, having a complete lining of steel throughout, and inside Steel Door.

Catalogue and Prices on Application.

117 AND 119 FRONT STREET EAST, TORONTO.

SKETCHES MADE FROM LIFE,
AND ESTIMATES GIVEN.

ROLPH, SMITH & Co
WOOD ENGRAVERS,
LIVE STOCK ARTISTS & ENGRAVERS
FOR THE
ONTARIO AGRICULTURAL COLLEGE
AND
CANADIAN BREEDER,
AND
AGRICULTURAL REVIEW.
TORONTO.

CATARRH.

A NEW TREATMENT

CATARRH.
A new treatment has been discovered whereby a permanent cure of this hitherto incurable disease is absolutely effected in from one to three applications, no matter whether standing one year or forty years. This remedy is only applied once in twelve days, and does not interfere with business. Descriptive pamphlet sent free on receipt of stamp by
A. H. DIXON & SON, 305 KING ST. WEST,
TORONTO, CANADA.

Produce.

W. L. KAVANACH,

DAIRY PRODUCTS,
Pork Packer & Commission Merchant,
22 1/2 CHURCH STREET,
TORONTO.

Correspondence with factories solicited.

W. H. KNOWLTON,

27 Church St., Toronto,

FLOUR AND PRODUCE DEALER,

and

COMMISSION MERCHANT.

Feed of all kinds, Cotton Seed and Linseed Meal,
Chopped and Ground Corn and Oats, Pea Meal and
Oflal, Hay, &c., &c., at Lowest Cash Prices.

All orders and consignments will receive prompt
attention.

Prices for large or small lots quoted by wire or letter
on application.

C. I. DOUGLAS,

Late of TORONTO, CANADA,

Begs to announce to Breeders and Importers
of all kinds of Farm Stock that, having taken
up his residence in LIVERPOOL, ENG-
LAND, he is now prepared to purchase and
sell on commission all kinds of Farm Stock.

From over twenty years' experience in the
Canadian import and export trade of horses,
he is in a position to offer unusual advantages
both in purchasing and shipping.

Parties wishing to dispose of Canadian horses in Eng-
land can have them disposed of to the very
best advantage. Shipping rates can be now
had on the most favorable terms. Corres-
pondence solicited.

Address in Canada, BREEDER Office, To-
ronto, and in England,

23 Catherine St., Liverpool.

What is Catarrh?

Catarrh is a mucous purulent discharge caused by the
presence and development of the vegetable parasite
ameba in the internal lining membrane of the nose.
This parasite is only developed under favorable cir-
cumstances, and these are: Morbid state of the
blood, as the blighted corpuscle of tubercle, the germ
poison of syphilis, mercury, toxæmia, from the reten-
tion of the effete matter of the skin, suppressed pers-
piration, badly ventilated sleeping apartments, and
other poisons that are germinated in the blood. These
poisons keep the internal lining membrane of the nose
in a constant state of irritation, over ready for the
seeds of these germs, which spread up the nostrils and
down the fauces or back of the throat, causing ulcer-
ation of the throat up the eustachian tubes causing
deafness, burrowing in the vocal cords, causing hoarse-
ness; usurping the proper structure of the bronchial
tubes, ending in pulmonary consumption and death.

Many attempts have been made to discover a cure
for this distressing disease by the use of inhalations
and other ingenious devices, but none of those treat-
ments can do a particle of good until the parasites are
either destroyed or removed from the mucous tissue.

Sometimes since a well known physician of forty
years' standing, after much experience, succeeded in
discovering the necessary combination of ingredients,
which never fails in absolutely and permanently cra-
dicating this horrible disease, whether standing for
one year or for forty years. Those who may be suffer-
ing from the above disease should, without delay,
communicate with the business manager of MESSRS.
A. H. DIXON & SON, 305 King Street West, Toronto,
and get full particulars and treatise free by enclosing
stamp.—Mail (Canada).

CANADIAN BREEDER AND AGRICULTURAL
REVIEW. The duty of a paper devoted to the
all-important interests of Horse and Cattle Breeding
and Farming is not without its responsibilities and
obligations. It must at all times yield to the over-
whelming influence of right, and present a stern, un-
compromising resistance against wrong.

Insurance.

WESTERN
Assurance Company.

HEAD OFFICES: TORONTO, CAN.

INCORPORATED 1851.

CASH ASSETS, - - - \$1,166,000.
ANNUAL INCOME OVER - \$1,500,000.

DIRECTORS:

A. M. SMITH, Esq., President.
Wm. GOODERHAM, Esq., Vice-President.
Hon. S. C. WOOD. JOHN FISKEN, Esq.
ROBT. BRATY, Esq. A. T. FULTON, Esq.
GEO. A. COX, Esq. GEO. McMURRICH, Esq.
J. J. KENNY, Managing Director.

Fire and Marine Insurance effected
at moderate rates on all classes of property.

Agencies in all the principal Cities and
Towns in Canada and the United States.

BRITISH EMPIRE
Life Assurance Co.

ESTABLISHED - - - 1847.
ASSETS NEARLY - \$5,000,000.

New Policies issued in Canada for 1883:
520 Policies for \$1,159,000.

GENERAL AGENTS IN TORONTO:

J. E. & A. W. SMITH
Special Agent: JNO. DENNIS.

THE
Agricultural Insurance Co.
OF WATERTOWN, N.Y.,

Have removed their Canadian Head Office
from Cobourg to this City,

NO. 26 VICTORIA STREET,
ARCADE BUILDING.

This Company insure nothing more hazardous
than dwellings with their outbuildings, churches,
convents, and educational institutions, take no
commercial nor manufacturing risks, and are,
therefore, not subject to sweeping fires, making
a safe security for the home. Having done
business for thirty-two years, they can point to
an honorable and successful career, having now
nearly two million of assets. ARE WRITING
70,000 POLICIES PER ANNUM, with a yearly in-
come of over \$500,000. Capital, \$500,000 all
paid up, and a deposit with the Dominion
Government of \$100,000. Parties desiring to
insure their city houses and contents will find
this company a safe one, and the rates reason-
able. Agents wanted in all unrepresented
towns, and five good men required as city can-
vassers. LIVE STOCK A SPECIALTY AT REDUCED
RATES.
J. FLYNN, Chief Agent.

Farms for Sale.

Mexico, the Coming Country.

Mexican Agricultural, Fruit, Tim-
ber and Grazing Lands.

Having more land than I can well do with, I will

SELL ABOUT 20,000 ACRES

of my Haciends, consisting of agricultural, fruit,
coffee, sugar, India rubber, fibre and grazing lands,
well watered. Delightful and healthy climate; no
winters; first-class markets; excellent hunting and
fishing

This valuable property is situated in the very heart
of the garden of Mexico. To be sold very cheap and
on easy terms. Titles perfect. Apply to

B. N. E. FLETCHER,
Woodstock, Ont.

FARM FOR SALE!

Within ten minutes' walk of the City Hall of
one of the best Cities in Ontario. Splendid
residence, barns, stables, etc.
This property will be sold cheap and on easy
terms.

For particulars address

Office "CANADIAN BREEDER,"
Toronto.

FARM FOR SALE.

100 ACRES.

Stone Dwelling, Barns, Stables, Sheep
Sheds.

Soil, clay loam. Water good and abundant.
All in good order.

This farm is in one of the best counties in
Ontario, near the city of Guelph.

Address
Office "CANADIAN BREEDER,"
Toronto.

The Horse and Cattle Exchange

13th & WABASH AVE,
CHICAGO.

COMBINATION SALE OF PEDIGREE
HOLSTEIN CATTLE,

Friday, January 15th, 1886.

COMBINATION SALE OF PEDIGREE
JERSEY CATTLE,

Friday, January 29th, 1885.

COMBINATION SALE OF PEDIGREE
HEREFORD CATTLE,

Friday, February 12th, 1886.

Early entries are solicited for these sales in order
that a complete catalogue may be issued to buyers.

For terms, references, &c., apply to
W. GILPIN,
Manager.

FOR SALE.

Lot 32, 12th Con. of Dawn,
COUNTY OF LAMBTON,
Near Sarnia, and two lines of railway.

CHOICE WILD LAND

heavily timbered with hard wood. Timber can
be made to pay for land. Price \$3,000.

Would take some good farm stock in part
payment, balance could remain on mortgage as
long as purchaser would want.

Address,
"BREEDER" OFFICE,
Toronto.

THOROUGHbred AND
- HALF-BRED -
HORSES FOR SALE.

MIDLOTHIAN.—Dark bay Stallion, 11 years, by
Rataplan or Strathconan, out of Lufra (dam of
Lowlander and Austerlitz) by Windhound, the sire
of Thormanby; one of the best bred horses ever
brought to Canada.

DIRECTION.—Bay gelding, 6 years, by Disturbance
out of Nettle, by Luther, very fast up to three-
quarters of a mile.

KENNESAW.—Bay horse, aged, by Glengarry, out
of Kathleen (dam of George Kinney) by Lexington.

MISS ARCHIBALD.—Bay mare, 8 years, by Sir
Archibald, in foal to Scalper, by War Dance, Ella
Breckenridge.

WILDWOOD.—Chestnut gelding, 2 years, by Attila,
out of Wild Briar, by Wild Idlo.

All the above horses are in good health and
condition.

Can be seen at CHARLES BOYLE'S Stables,
Woodstock, to whom application must be made,
or to DR. SMITH, Veterinary College, Toronto.

"DRESSMAKERS' MAGIC SCALE."

The most simple and perfect tailor system
cutting, taught in 3 or 4 days for \$5; board for
pupils from a distance, 50c. a day. Miss E.
CHUBB, 170 King street west, two doors
from St. Andrew's Church.

T. H. GOFF,
ARCHITECT Toronto.

Had ten years' experience planning and
superintending the erection of Farm Build-
ings, and has visited many of the best Farm-
steads in New York, New Jersey, Kentucky,
and other States. Correspondence invited.

REFERENCES:

GEO. LAIDLAW, Esq., 28 Brock St., Toronto.
JOHN HOPE, Esq., Bow Park, Brantford.

J. H. BONNELL & CO.
BLACK AND COLORED

Printing Ink Manufacturers,
7 Spruce St., Tribune Building,
NEW YORK CITY.

Factory: Long Island City.
JOHN S. WILSON,
General Agent.

Shorthorn Bulls for Sale

"MOUNTAIN CHIEF,"

Rising 4 years. Got by Gauntlet 3rd (he by 4th Duke
of Clarence) out of Florence. This is a very fine bull,
and is warranted a safe and good stockgetter.

"LORD HASTINGS,"

By imp. Lord Glamis (Cruckshank), out of Fanny
by imported Lancaster Royal; color, dark roan; age,
29 months. Both bulls registered in B.A.S.H. books,
and will be sold very cheap.

Apply—
GEORGE HUNBURY,
Suffolk Lodge, Oakville, Ont.



NERVOUS
DEBILITATED MEN.

You are allowed a free trial of thirty days of the
use of Dr. Dye's Celebrated Voltaic Belt with
Electric Suspensory Appliances for the speedy
relief and permanent cure of Nervous Debility, loss
of Vitality and Manhood, and all kindred troubles.
Also for many other diseases. Complete restora-
tion to health, vigor and manhood guaranteed.
No risk incurred. Illustrated pamphlet in sealed
envelope mailed free, by addressing
VOLTAIC BELT CO., Marshall, Mich.

INTERCOLONIAL RAILWAY.

The Direct Route from the West for all points in New Brunswick, Nova Scotia, Cape Breton, and Newfoundland.

All the popular sea bathing, fishing and pleasure resorts of Canada are along this line. Pullman cars leave Montreal on Monday, Wednesday, and Friday, run through to Halifax, and on Tuesday, Thursday, and Saturday to St. John, N. B., without change. Close connections made at Point Levis or Chaudiere Junction with the Grand Trunk Railway, and at Point Levis with the Richelieu and Ontario Navigation Company's steamers from Montreal. Elegant first-class, Pullman and smoking cars on all through trains. First-class refreshment rooms at convenient distances.

IMPORTERS & EXPORTERS

Will find it advantageous to use this route, as it is the quickest in point of time, and the rates are as low as by any other. Through freight is forwarded by fast special trains, and experience has proved the Intercolonial route to be the quickest for European freight to and from all points in Canada and the Western States. Tickets may be obtained, and all information about the route and freight and passenger rates, from

ROBERT B. MOODIE,
Western Freight and Passenger Agent.
93 Rossin House Block, York St., Toronto.
D. POTTINGER, - Chief Superintendent
Railway Office, - - - Moncton. N. B.

DOMINION LINE OF STEAMERS



Rates of passage from Toronto:—Cabin, \$57.25, \$67.25. Return, \$100.83 and \$118.88. All outside rooms and comfortably heated by steam. Steerage at very low rates. Prepaid certificates from Great Britain and Ireland at lowest rates.

For passage apply to G. W. TORRANCE, 45 Front Street East, Toronto; or to David TORRANCE & CO., General Agents, Montreal.

WHITE STAR LINE.

Royal Mail Steamers.

As all the steamers of this line are strictly First-Class, and without exception amongst the handsomest and fastest afloat, passengers can take Excursion Tickets with the certainty of having an equally fine ship when returning. The saving effected by this is considerable. No passengers berthed below the saloon deck or near the screw.

Apply early to the local agents of the line, or to

T. W. JONES, General Agent,
23 York Street, Toronto.

SAMO. FURNITURE

IN ALL ITS BRANCHES
Manufactured and sold at lowest rates for best goods.

JAMES H. SAMO,
No. 189 Yonge Street,
TORONTO.

ONTARIO PUMP CO.

(LIMITED)

TORONTO, ONT.,

MANUFACTURERS AND DEALERS IN
WIND MILLS, I X L FEED MILLS,
Hay Carriers, Horse Hay Forks,
TANKS, DOUBLE AND SINGLE ACTING PUMP
(WOOD OR IRON.)



GEARED WIND MILLS.
For Driving Machinery, Pumping Water, etc. From 1 to 40 horse power.



I X L FEED MILLS.
The cheapest, most durable and perfect iron Feed Mill ever invented.

We, the undersigned, are using one of your Geared Wind Mills, and take pleasure in stating that they are fully up to your representations, and meet our most sanguine expectations in every particular. Geo. Laidlaw, Victoria Road, Ont.; John L. Howard, Sutton P. O., Ont.; Thos. Benson, Scarborough, Ont.; J. P. Cass, L'Orignal; J. R. Keyes, St. Catharines; C. Wilson (of Wilson & Young), Seaford; Jno. Row, Belleville; Peter Timmons, Enterprise; R. Ball, Millbrook; John T. Barley, Mitchell; O. T. Smith, Binbrook; W. Jackson, Mono Mills.

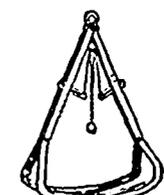
We, the undersigned, are using one of your I X L Feed Mills, and take pleasure in stating that they are all you claim for them. J. T. Barley, Mitchell, Ont.; O. T. Smith, Binbrook; Peter Timmons, Enterprise; R. Ball, Millbrook; J. R. Keyes, St. Catharines; George Laidlaw, Victoria Road; Thomas Benson, Scarborough.



TANKS.
Round or Square.
Capacity from 12 to 2,555 barrels.



PUMPS.
Iron and Wood.
Force or Lift. Deep Well Pumps a specialty.



HAYING TOOLS.
We manufacture three styles of Forks and Carriers.



HALLADAY'S STANDARD WIND MILLS.
26 sizes.

OAKVILLE, March 3rd, 1885.
DEAR SIR, - In regard to the 13-foot Geared Wind Mill, I will say it does good work. I use it for pumping, running a grain crusher, cutting box and roof pulper. The cutting box used to take six horses to run it all day; but the wind mill does the work now, and does not get tired either. I expect to run a cider mill with it next fall, and purpose attaching my grand stone as soon as I can get a pulley. The mill is perfectly self-regulating. The No. 2 I X L Grinder works like a charm. We can grind ten bushels an hour easily. I might also add the Four-Wheel Carrier and Four-Tined Grapple Fork I got from you are giving the best of satisfaction. The Fork is far ahead of anything I have seen. Respectfully yours,
R. G. MOORE.

ONTARIO PUMP COMPANY
Send for our 104 page Illustrated Catalogue fully descriptive of all articles manufactured by the

NEW MAGAZINE.

THE AGRICULTURAL REVIEW AND

Clydesdale Horse-Breeder's Gazette.

A Monthly Periodical devoted to the interests of Farmers and Clydesdale Horse Breeders in Great Britain, America and the British Colonies. Annual Subscription, Post Free, 10s., payable in advance; Price 1s., Post Free, 1s. 2d.

CONTENTS OF NO. 1 (NOVEMBER)

- Introduction.
- 1 The Standards of Ravenswood.
- 2 The Operation of the Agricultural Holdings (Scotland), October, 1883
- 3 Reminiscences of Clydesdale Horse Breeding, by D. Riddell, Blackhall, Paisley
- 4 Agricultural Depression.
- 5 The Law of Horses, by a member of the Faculty of Procurators, Glasgow.
- 6 The English Cart Horse
- 7 Report of the Select Clydesdale Horse Society of Glasgow.
- 8 General Agricultural News.

PUBLISHERS - JAMES MELVILLE & CO.,

191 West George St., GLASGOW,
To whom all applications are to be made.



GRAND Colonial Exhibition in London, Eng., 1886.

FIFTY-FOUR THOUSAND FEET RESERVED FOR CANADA.

First Royal Exhibition Commission Since 1862.

THE COLONIAL AND INDIAN EXHIBITION to be held in LONDON, England, commencing MAY 1st, 1886, is intended to be on a scale of great magnitude, having for object to mark an epoch in the relations of all the parts of the British Empire with each other.

In order to give becoming significance to the event, a Royal Commission is issued for the holding of this Exhibition, for the first time since 1862; and His Royal Highness the Prince of Wales has been appointed President by Her Majesty.

The very large space of 54,000 square feet has been allotted to the Dominion of Canada by command of the President His Royal Highness.

This exhibition is to be purely Colonial and Indian, and no competition from the United Kingdom or from foreign nations will be permitted, the object being to exhibit to the world at large what the Colonies can do.

The grandest opportunity ever offered to Canada is thus afforded to show the distinguished place she occupies, by the progress she has made in AGRICULTURE, in HORTICULTURE, in the INDUSTRIAL and FINE ARTS, in the MANUFACTURING INDUSTRIES, in the NEWEST IMPROVEMENTS in MANUFACTURING MACHINERY and IMPLEMENTS, in PUBLIC WORKS by MODELS and DESIGNS; also in an adequate display of her vast resources in the FISHERIES, and in FOREST and MINERAL wealth, and also in SHIPPING.

All Canadians of all parties and classes are invited to come forward and vie with each other in endeavouring on this great occasion to put Canada in her true place as the premier colony of the British Empire, and to establish her proper position before the world.

Every farmer, every producer, and every manufacturer, has interest in assisting, it having been already demonstrated that extension of trade always follows such efforts.

By order, JOHN LOWE,
Sec. of the Dept. of Agriculture.
Ottawa, Sept. 1st, 1885.

GO TO THE GREAT RUBBER WAREHOUSE,

10 and 12 King Street East,
FOR GENUINE GOODS, such as are sold by an
EXCLUSIVE RUBBER HOUSE.

- Rubber Bolting, Packing and Hose,
- Hydrant Hose, Lawn Sprinklers, Hose Reels
- Rubber Sporting Goods, Lacrosse Shoes,
- Rubber Gossamer Circulars,
- Rubber Clothing of all Kinds.

INDIA RUBBER GOODS OF EVERY DESCRIPTION.

It will be your gain to purchase from us.

The Gutta Percha & Rubber Manufacturing Co'y,

T. McILROY, JR.,

WAREHOUSES - TORONTO, 10 and 12 King St. East; NEW YORK, 33 and 35 Warren St.; CHICAGO, 169 and 161 Lake St.; SAN FRANCISCO, Cal., 501 Market St.; PORTLAND, Oregon, 68 and 70 Front St.
FACTORIES - Toronto, Brooklyn, San Francisco, Cal

J.P. SULLIVAN,

14 & 16 ALICE ST., TORONTO,
Manufacturer of

First-Class Carriages, WAGONS AND SLEIGHS

in the latest styles. All work warranted. Superior material used in all branches.
Call and examine.

"COLD WATER DIP" Manu-

factured and used successfully in England since 1873, awarded Gold Medal, London, England, 1884, The Best and Cheapest Sheep Dip known. Cures all skin diseases on Horses, Sheep and Cattle. Sure cure for scab.

Send stamp for circular to
F. J. PRIOR,
769 CRAIG STREET
MONTREAL,