

The Farming World

A Paper for Farmers and Stockmen

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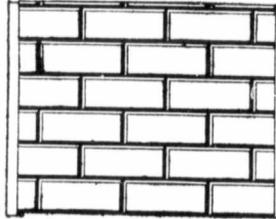
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THE FARMING WORLD
CONFEDERATION LIFE BUILDING - - - TORONTO

The Farming World

For Farmers and Stockmen

Vol. XVIII

OCTOBER 9th, 1900.

No. 6

Individuality in Live Stock

IN these days when so much is being written and said, and rightly so, about pure-bred stock, the farmer must not place too much reliance upon the pedigree of the animals he purchases or intends purchasing. Pedigree is of very great importance and a necessary thing in maintaining pure blood and good stock. But it is not everything. The purchaser must not overlook the individuality of the animal he buys. Very often farmers not specially versed in good stock make purchases, depending wholly upon the pedigree of the animal, only to be sadly disappointed after a year or two of experience in this line. Every pure bred animal should have the quality to back up the pedigree and where this is the case no better investment could be made on the average farm to-day than this.

Of course we understand that pedigree is of very great importance. There are strains of various breeds such as the Cruickshank Shorthorns, which have been developed and brought to the front by repeated selections of the individual animals for breeding purposes that one may purchase an animal whose pedigree traces back to this strain and be tolerably sure of securing an animal with quality all right. But it might not work in every case and to make sure the individual qualities of the animal as well as his pedigree should be specifically noted. The individuality of the animal is recognized by all breeders. In fact it would be impossible to maintain our large herds at a high standard of excellence unless quality in the animal itself as well as pedigree were recognized.

Farmers therefore in purchasing pure-bred stock should not be guided altogether by pedigree. If the animal has the quality as well as the pedigree so much the better. While the animal whose pedigree traces back to a certain notable family may be worth a great deal more than another animal whose pedigree is not so good, still the quality in the animal itself must not be lost sight of.

Demand for Military Horses

As has been shown in these columns on several former occasions, the events of the past year or two have created a new demand for horses that is likely to develop into somewhat large proportions. The Boer war has clearly demonstrated the importance of the horse as a factor in successful warfare. This has had its effect upon the other countries of Europe as well as upon Great Britain, the one more directly interested, with the result that there is now, and has been for some months back, an almost unprecedented demand for horses for military purposes.

During the summer we have had in Canada a representative of the British army in the person of Major Dent, sent here for the purpose of procuring horses as army remounts in South Africa. He purchased something like 3,000 horses for this purpose.

While here Major Dent made a careful study of the situation in this country, which resulted in his recommendation to the British Government the advisability of establishing a remount station in Canada for permanently supplying the army with horses. We understand that the Government has requested him to make a report, and, considering the high opinion he has of our resources in this line, there is a probability of his recommendation being acted upon.

A point worthy of notice in this connection is that when Major Dent arrived in Canada he had to select his horses from the ordinary stock to be found in the country. No special methods of breeding had been followed in Canada with a view to procuring horses suitable for army purposes. From the ordinary stock Major Dent made his selection, and the results were so satisfactory that within a few months he was able to secure several thousand horses well adapted for remounts, and which compared favorably in every way with horses sent to South Africa from other countries. If our farmers were to take up breeding and fitting horses specially suited to this trade there is no doubt the quality could be greatly improved upon and a much larger number produced from which selections could be made. There is then an excellent opportunity before the Canadian farmer for greatly increasing the annual revenue for the sale of horses.

But this army remount business has reached other countries which are making every effort to secure as much of the trade as possible. Particularly is this the case in the United States where a very large number of horses have been secured during the past few months for army purposes. During August and September more than 5,000 horses were shipped from the Pacific Coast to the Philippines and China by the United States. From New Orleans a few weeks ago, about 3,000, bought by the British Government for military service in South Africa, were shipped. At Chicago this season the British Government has purchased 15,000 horses and over 40,000 mules for army purposes at a cost of about \$10,000,000. Agents of the German Government are now in America buying horses for the German cavalry, and although the buyers are holding out for a high standard it is said that 10,000 horses will be bought if animals coming up to the specifications can be secured. So the movement goes on, and the country that makes a specialty of producing horses for this purpose will get the trade.

Judging at Plowing Matches

The annual fall plowing match is not so much in evidence in many localities as it used to be. It would perhaps be better for the community and for the condition of soil tillage in many sections if there were more of them. Such a contest properly conducted cannot but be of decided advantage in inducing more careful and better methods of soil tillage. Besides, a match where the skill of the farmer or farmer's son in handling that most essential farm implement is put to the test should be beneficial in inculcating exactness and care in other branches of farm work. It should also tend to create a greater love for the farm and its work and to counteract the tendency of many farmers to get through with the plowing and cultivation of the soil as quickly as possible, no matter how the work is performed. For these and other reasons we would like to see more plowing matches conducted throughout the country. This is something that our local Farmer's Institutes might expend their surplus cash upon.

But when a plowing match is conducted, the method of awarding the prizes should be after the most approved plan. We decidedly favor the use of a score card in judging of any kind at fairs and elsewhere where it is possible to do so. It gives a fairer distribution of the prize money and makes the contest, whatever it may be, of greater educational value. In a plowing match a score card should be of very great advantage. In fact, in our opinion it is about the only way of judging fairly as between the work of one plowman and another. True, there are no doubt capable men who could make the awards fairly and accurately without a score card so that the proper individual would receive the prize but the difficulty would be that no candidate would know in what particular point or points he failed. The great beauty of the score card in awarding prizes of any kind is that the exhibitor or contestant knows exactly wherein he has failed. He knows what his strong and weak points are and consequently can govern himself accordingly another year, which in itself is worth trying for even if one does not come out on top.

In an interesting letter published in these columns on April 17 last, Mr. A. S. Milne, Leaskdale, Ont., dealt with this subject very effectively, and produced strong reasons why a score card should be used in judging at a plowing match. A strong reason given by him in favor of this plan was that there would be no room for favoritism. Then there would be an ideal for plowmen to work up to, and a guide for the judges in distributing the prizes. In that letter Mr. Milne outlined a score card which seemed to fill the bill all right. We reproduce it here for the benefit of our readers, and with the hope that it may induce the promoters of plowing matches to adopt something of this kind. If there are any who would like to suggest changes we would be pleased to hear from them:

Number on Ridges.	1	2	3	4	5	6	7	8	9	10	11	12
Possible points.												
Shoot or scratches.....	15	0	5	3	8	10						
Crown of furrows.....	15	0	2	5	8	7			4	5		
Straightness.....	15	2	5	8	10	12			10	7		
Finish.....	15	3	0	2	10	12			7	8		
Uniformity.....	15	0	0	1	10	12			6	4		
Grass put away.....	15	0	5	4	9	10			12	5		
Solid plowing.....	15	2	6	7	10	13			7	8		
Points deducted.												
Plowman helped.....	10									10		
Gauges attached to plows.....	10											
Staked or out of time.....	10											
		8	23		30	65	76			50	29	
					4h	2d	11			3d		

In a letter received from Mr. Milne last week dealing with this subject he says:

"By the use of a score card any plowing society could secure judges at home who would give good satisfaction because of having only to take one point into consideration at one time, while the public could follow them so

closely that they would have to give justice. Under the old system nothing but an expert in the art could give the same satisfaction. For instance, when a society is selecting judges they endeavor to secure a change of men so as to keep down favoritism as much as possible. A man is proposed from another neighborhood who is known as being able to plow straight, or as having on some former occasion taken a prize. When he begins to judge he doesn't know where to start because he can't fully size up his work. If he were handed a score card it is quite possible that he would be out of trouble right at the start."

The Farm Cream Separator

We have had occasion more than once to refer to the farm separator system now so largely practised in many of the Western States. This system, properly speaking, is a plan by which each patron of a creamery has a hand or small separator and separates his own milk at home, sending only the cream to the factory. As contrasted with the whole milk plan, where the whole milk is hauled to the creamery and the skim-milk returned, this system has many advantages. There is a great saving in the cost of hauling. This is figured out very nicely by a Nebraska creamery man. His weekly make of butter was 98 tubs. To have hauled the whole milk to make this quantity per week would have cost not less than \$220. By each patron having a separator and sending only the cream, it cost but \$68 to gather this, a saving of \$152, or between \$6 and \$7 per patron for the season.

Another distinct advantage claimed for this plan is that the quality of the butter is improved. It is reasonable to suppose that this would be the case. Where the cream is separated from the milk as soon as taken from the cow, there is not so much danger from bad flavors. A small quantity of cream can be taken better care of than a large quantity of milk by the average patron, and therefore the maker gets the cream at the factory in a much better condition than the milk would be from which the cream is taken.

Then the farmer has the skim-milk in perfectly sweet condition both morning and evening for his calves or other animals on the farm. This is a very great advantage, and in itself, where a comparison is made with the whole milk plan, is sufficient to enable the patron to pay the cost of a separator in a very short while.

This farm separator system is splendidly adapted for Manitoba and the Territories, where milk has to be hauled long distances to the factories, and we understand that a great many separators are being sold in the Canadian West for this purpose. It is in our opinion about the only plan that could be successfully followed in connection with creamery work in that part of Canada. But it should work well in the Eastern provinces also. Though there would not be such a great advantage as in the West in the cost of haulage it would be beneficial in other ways in producing a better quality of product and in leaving the farmer his skim-milk perfectly sweet and clean for whatever purpose he might care to use it.

The farm separator is also of great value in the farm dairy. Where a farmer has, say ten cows, and is not supplying his milk to a cheese factory or creamery it will pay well to purchase a cream separator. With that number of cows a separator will about pay for itself in one season in the extra quantity and better quality of butter that can be made from the milk, let alone the increased value of the skim-milk by being fed in a sweet condition. The centrifugal as compared with the gravitation method of creaming milk has been tested over and over again by our experimental stations with the results decidedly in favor of the former or cream separator method.

In speaking of farm separators we do not wish to be understood as countenancing in any way the use of what are known as dilution cream separators. These are a delusion and a snare as was very well shown in these columns about a year ago by Mr. T. C. Rogers and other thor-

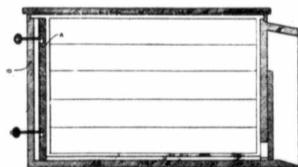
oughly competent persons. The dilution separator gives nothing that we cannot get in the ordinary gravitation method. In more than one respect it is not as good as the old shallow pan or shot gun can plan. Unless the water added is of the purest kind there is danger of milk taking on bad flavors while being separated. The adding of the water lessens very materially the value of the skim-milk for feeding purposes, and then the separation as shown by repeated and careful tests is very little, if any, more rapid than the ordinary gravitation method, and no more cream is gotten out of the milk. Therefore, when purchasing a separator for the farm or dairy, be sure and get some good centrifugal machine. Though the first cost may seem large, in the long run the regular cream separator is by far the cheapest and best.

Bee Culture Simplified

By B. J. Chrysostom, Notre Dame, Ind.

This industry can be made more successful and profitable to farmers and bee-keepers when the hives remain summer and winter on the same stand. The hives must be so constructed and protected as to insure safe and comfortable wintering, early, rapid and continuous brood rearing, thus enabling the bees to have a force sufficiently strong to store surplus honey from the early sources, viz., dandelion, willow, poplar, fruit bloom, raspberry, blackberry, etc.

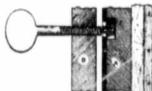
All the foregoing conditions have been obtained in the apiary at the University of Notre Dame, Indiana, U.S.A.



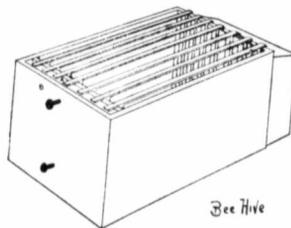
Section of Bee Hive



Part of Right Side View of Notre Dame Portable Device



Detailed View of Screws Working of Notre Dame Device



Bee Hive

The system adopted in this apiary involves a complete change from the ordinary methods now in practice. The first and most essential change is in the hive. The second, the house in connection with the solving of the difficult problem of safe wintering. The third,

THE HIVE MANAGEMENT.

The Notre Dame Device for bee hives (cuts of which are shown above) is simply the application of the vice to a new purpose. It effects so many notable advantages, both in regard to handling hives and frames, and in the comfortable and safe wintering of bees, that its introduction and use is a matter of the greatest importance to persons engaged in bee culture.

It is not a question of a new style of hive, but only a tested means of correcting the only defect in the loose frame hive, which defect, I may add, is a serious one when not only the comfort and health, but often the life of the honey bee, too, are in question. It is also for the benefit of the bee-keeper when the present expensive and inconvenient methods of wintering bees are taken into consideration.

Those that may be interested in the manufacture and application of the Notre Dame Device to bee hives will note that the cost per hive is very small. The $\frac{5}{8}$ in. x 3 in. coach screws are the best adapted for the purpose, but if they are made at the factory for this particular work they may be improved. It will be also of great advantage to have the frames very exact in size, and the bottom strip made heavier than usual, and be nailed inside of the end strips instead of on the ends. This will insure tighted

joints, prevent the frames from bulging, and the lifting out and replacing of them will be greatly facilitated.

We have found the eight-frame Langstroth Simplicity hive well adapted to our purpose. This hive may be improved by a simple little device known as the "Notre Dame Device" for bee hives. It consists of a board about half-an-inch thick, cut to fit in the rear end of hive, two thumbscrews to work in three little strips of wood, about one-quarter of an inch in thickness and half-an-inch in width, and a strip of strong cloth.

The board should be smooth and of material that would not warp, or made so that it would not warp.

THUMBSCREWS.

They are so made as to fit in slots punched in the iron strip and will force the board forward or draw it backward as desired. In case, however, these screws cannot be easily obtained, take the ordinary wood screws and put a little plate of iron on the board or device for the points of the screws to work against. Then use the screw-driver. This will force the board forward and hold the frames, and thus change the loose frame hive into a tight frame hive. When it is desirable to lift out the frames turn back the screws a little, about a bee space, and insert the point of the screw-driver between the board and end of frame. If the board or device and the front end of hive have been smeared with tallow before putting the frames in they will lift out easily and smoothly without any danger of killing bees. The same plan is to be observed in putting the device in the super or the second story or body, with this difference, however, that a thin strip is to be nailed on each side of the super for the board or device to rest on,

and a little of the lower corner of the board be cut out and then two strips of cloth are required, one above and one below, so that the bees may not get in between the board and end of hive. While this will do for a trial it is not so convenient as the thumbscrews.

It is quite possible if this device was made to work in chaff hives that all, or nearly all, the desirable results stated above might be proximately obtained without the bee house, but not all the conveniences which such a house affords.

THE HOUSE.

The house may be almost any kind of a cheap building. We have one that consists of two tight board fences running parallel about eight feet apart and roofed in with boards, with a window about 20 x 36 inches to every three hives, which afford light while working in the hives. It is best to have the hives facing south and to have not more than three hives close together, then a space of about two feet. It would be still better if something like bay windows were built at intervals so as to allow three hives facing, say S.E., S. and S.W. I know by experience that this is a good plan.

Or, again, a house may be so built as to afford room for a workshop and extracting room all in one. From personal observation I know that bees readily accommodate themselves to their surroundings, and they are not disturbed by noise. At the beginning of last September I put a frame of brood with adhering bees into a glass hive about two inches wide and high enough to admit three full-depth frames one above the other. The glass sides measure 20 x 29 inches, so the entire comb surface is in

full view. I placed this hive in the window of my room, in the place of another hive the field bees of which took up their abode in the crystal palace prepared for them. It was interesting to note with what facility they accommodated themselves in their new home and with what reasonable judgment they began to prepare their new quarters for the fast-approaching winter. The upper frame they built out to the glass, leaving only a bee space between. The centre one they reserved for brood, and for the cluster, but built a rim on the ends of this frame. In due time the young queen had her young bees out, and thus they went into winter quarters on the summer stand. Now as for noise, these bees had a full share. Every morning a large handbell was rung at five o'clock for rising, and often during the day for other purposes. Three times daily, Sunday excepted, they had vocal and instrumental music. When eighteen or twenty young men chime in a chorus they make quite a racket—yet the bees worked on without interruption. There was also in the window, beside the hive, a music box. When this was wound up it gave out some lively Scotch airs, which appeared to enliven the bees very much. One day some visitors were looking at the bees while the box was giving out its music. One of them remarked: "Do you mind her, she is beating time with her left foot!" When the cold blasts of winter began to sweep around the house the entrance to the hive was made smaller and shaded so as to exclude the currents of cold air, and the hive was wrapped in a heavy woollen blanket. The coldest air the bees experienced was one morning when the mercury indicated 21 deg. below zero. Some time in April they were put into an ordinary hive, and are now, July 25, a fine colony of twenty-four full depth frames.

Frames about six inches deep, the exact size of the portico of the hive, should be put in the walls of the house, about a foot from the ground on the outside of building. The hive, or rather the board that the hive rests on, ought to have a pitch of about two inches, so that any moisture that may collect in the hive can run easily out.

The house affords so many advantages in handling bees that I shall not attempt to enumerate them all in this article. In the first place it is a protection from sudden and extreme changes in the weather. Secondly, it affords facilities for packing and unpacking, which could not otherwise be obtained. The whole secret of safe and comfortable wintering, early, continuous and rapid brood rearing is involved in the keeping or retaining the heat of the cluster in the walls of the hives and the packing. It is necessary, then, to have a hive box tight with summer entrance contracted and protected with a screen door or some other means by which strong currents of cold air are prevented from entering. The same may be said of the packing. All chinks and holes should be closed, so as to exclude the cold wind from entering the packing. Success sometimes depends on little things.

Another great advantage is that a hive may be opened at any time without the usual annoyance from robber bees. It has also the tendency of making the bees more gentle, so that with careful handling a smoker will not be required.

Those who keep bees in the old-fashioned box hives may derive all the advantages stated in this article by putting frames in the wall on a level with the floor, about twelve inches wide, eight inches high, and deep enough to allow the hive when set against it to be about two inches or more from the wall, so as to afford room for packing.

Let us suppose the colonies were numerically strong in the fall, with plenty of stores and warmly packed in chaff and left so till fruit bloom, at which time swarms may be expected. As soon as the swarm is hived remove the parent hive and set the swarm on the old stand. When the combs are built near to the bottom lift it and put a rim or another hive without a top under it, and keep putting them as the combs are built down nearer the bottom. This method will prevent swarming and give good results. If these supers or additions are set under the hives early enough in the spring it is just possible that there would not be one prime swarm at all. Prime or first swarms

issue when the hive is filled with brood, honey and bees. But as the tight frame hive is superior to the box it is at the same time more convenient.

MANAGEMENT.

When bees have wintered well they fly out the first warm day in spring as lively as crickets, and the exhalations from the hives will fill the yard with a very pleasant and agreeable odor. The absence of dead bees will be noticeable. This is the time to observe colonies that have lost their queens. In the evening they will be much excited, running about and making a noise. This will be noticeable every time they fly out. There will be also found a number of dead bees about the entrance of other hives showing no signs of disease of any kind. This number is made up of bees from queenless colonies seeking a home government, and having been cast out. About the third flight in spring have wintering troughs prepared for them in a warm, sunny corner near the hives. In the morning give them hot water sweetened. This will attract them to the place. Continue to give them hot water sweetened on chilly mornings. On no account allow the bees to go far for cold water on such mornings—many will be lost, which is most detrimental so early in the season. Have cornmeal in the same place as the water. The bees will work on this till they can get pollen from the natural sources. All this may appear small—yet it pays. This will be evident when the first honey is present in the flowers and blooms.

This is the time to put on half depth supers with full built-out combs on the strongest colonies that had plenty of winter stores; a small patch of drone comb may be in the centre of the super, especially those put on colonies from which you wish to breed.

How to put them on. Have the frames properly spaced, with a cloth on them; remove the packing; have someone to take hold of both corners of the cloth, jerk it off quickly, and the person with super in hand will set it on. If this is done properly not so much as one bee will get out. Then replace the packing, and about the time that the fruit trees are in bloom you may find your half super filled with honey. This has been my experience.

When a large cluster of bees appears in the portico on warm evenings it is time to add supers, or remove the brood or part of it. This precaution will prevent swarming, and perhaps the loss of good queens, which may fly to the forest with their swarms. However, these and such like technicalities may be worked out by each individual according to time, place and circumstances.

In conclusion, I may remark that since we have made a complete change from the ordinary methods in bee culture, and have given the bees a hive with a brood nest of sixteen frames in which they can live comfortably winter and summer, and a house to protect their hives from extreme heat and cold, they have wintered without loss and have stored honey in the supers before fruit bloom from the willow, poplar and other early sources. All this is accomplished with less care and expense, and the bees have, moreover, become so gentle that the smoker has not up to this date (Aug. 2) been used. Some may ask how to get the bees off the end of the frames when putting on supers. When they collect there I take a cloth or sponge, from which I squeeze a few drops of tar soapsuds, and they quickly disappear.

Simplicity, profit, the saving of labor and expense are the leading features of this method.

NOTE.—This article applies only to tight frame, box and the old straw hives kept in a house and packed in chaff or other suitable material, so as to retain the heat of the cluster in the walls of hives and packing, which is simply impossible with bees in a loose frame hive. It is not, I think, advisable to attempt to keep this kind of hives in a house.

There is quality, variety and good value in every premium offered this season. Splendid inducements to parties sending in new subscribers. We give from now till January, 1901, for \$1.00 to new subscribers.

Artificial Incubation

By A. G. Gilbert, Poultry Manager, Central Experimental Farm, Ottawa

Experiments in artificial incubation and rearing, carried on by means of incubators and brooders, showed:

1. The necessity of having the laying stock in robust condition.

2. That they be properly fed and treated so as to avoid an overfat condition.

3. That eggs laid in early January seemed to hatch a greater percentage of strong chicks, with fewer dead in the shell, than eggs laid in March and April.

It seemed difficult to get a satisfactory percentage of strong germs, later in the season, from hens which had laid all winter. There were too many fully-developed chicks dead in the shell.

In many cases the eggs were fertilized, but a large percentage of the germs seemed too weak to make progress beyond 7th, 11th, or 15th days.

The whole subject is being made a matter of scientific investigation in both Canada and the United States.

One feature in connection with artificial incubation worthy of note is the number of farmers and others who have bought incubators and brooders during the past year. In two instances, I know of farmers' wives who have successfully managed their incubators that machines of 220 egg capacity have been ordered to take the place of smaller ones. By means of incubators and brooders the farmer is able to get out his chickens at an early date, of the same age and in larger numbers. It is important to have early pullets for their certainty make early layers. How early should they be hatched? Experience has shown that late April and May chicks do better than others hatched at other periods. This applies to both incubator and hen-hatched chickens. My remarks do not apply to the specialist in poultry raising, who has all the necessary plant and facilities in the shape of incubator room, brooding house, and outside runs to permit of his beginning operations at the end of December and continuing them all winter. Mr. A. S. McBean, of Thornhill Farm, Lancaster, is a farmer who has so successfully managed certain departments of his farm that he has become a specialist, and a very successful one in vegetable, fruit, and poultry raising. He has telephonic communication with Montreal, and so is in direct and constant communication with his customers in that large market. All farmers are not so favorably situated, it may be said. But there are many farmers situated in the neighborhood of cities and large towns throughout the Dominion who are not alive to their opportunities. It was a farmer who said so and he spoke truly.

Thinning Fruit

A bulletin from the Utah Experiment Station on thinning fruit, after using the usual arguments in favor of so doing, gives facts to prove what it claims that are so much more convincing than arguments that we quote them entirely:

"Experiments have shown that one year's thinning may influence the two following crops. In the writer's work with plums and apricots this was very noticeable. Trees which were thinned in 1897 gave from two to eight times as much fruit in 1898 as did unthinned trees of the same varieties. It should be remarked that there was a light set of fruit in 1898, not enough, in fact, to require thinning. The trees thinned in 1897 did not set as much fruit in 1899 as did the unthinned trees, but it was more evenly distributed, and a portion had to be removed. With apricots in 1897 the trees thinned early and severely produced fruit of such size that 17 weighed a pound. With the unthinned trees of the same varieties 28½ fruits were required for one pound. During the season of 1898 and 1899 the trees thinned early and severely in 1897 could readily be picked out by their larger and more evenly distributed fruit."

Consider the difference. In one case an eight pound basket would hold 136 apricots, and in the other 227. Which would look best to the buyer or sell for the best price to the consumer? The time required to pick and pack those extra 91 fruits would have been more than would have been spent in thinning out 91 when they were small. And, as is said, the whole of the gain was not in that one crop, but could be seen for two successive crops. And we believe that as much gain might be made with peaches as with apricots or plums, but perhaps not as much with apples and pears as with stone fruit, yet it will pay to thin them because of the better demand for large fruit, and the fact that unless near a cider mill there is little demand for small apples.

Points for Judging Fruit

The Ohio State University has adopted the following scale of points for judging fruits, and if something of the kind were to be used at our agricultural and horticultural exhibitions, and score cards placed at the exhibits, it would give both the owners and the visitors a chance to see why one lot gets the highest premiums and others none. On apples they give skin and surface 20 points, keeping quality 15 points, color, richness, flavor, texture and cooking quality 10 points each, shape, size and core with seeds 5 points each. For grapes the flavor is thought of most value, and this is allowed 15 points, while size of bunch, size and uniformity of berry, skin with bloom, richness, texture of pulp, seeds and keeping quality are given 10 points each, and the form of bunch, adherence to stem and color have but 5 points each. In tomatoes the texture or solidity ranks first with 25 points, and shape next with 15 points, while size, color, skin or surface, flavor, seeds and cooking quality have 10 points. A fruit that is defective in any one particular is so much below the 100 points which are supposed to be absolute perfection.

CORRESPONDENCE

Great Benefit to Stock Owners

EDITOR THE FARMING WORLD:

In regard to auction sales of live stock, I may say that I have personally attended some of these sales across the water, and I think without doubt that they are of great benefit to stock owners of any breed of live stock. The cost of thoroughly advertising the best stock of our country could be greatly lessened. It is certainly very expensive for small breeders to advertise sales as they should be, which has to be done extensively to keep up with the times now.

ALEX. INNES.

Clinton, Ont.

Live Stock at the Pan-American

EDITOR THE FARMING WORLD:

It may be of interest to you and your readers to know that the dates of the live stock exhibits at the Pan-American Exposition have been somewhat changed, in order that more breeders may be accommodated than was the case in the dates sent out three months ago.

The final arrangements for the exhibits in the various classes of live stock will be as follows:

Cattle	.....	Aug. 26	to	Sept. 7
Sheep	.....	Sept. 9	"	" 21
Swine	.....	" 23	"	Oct. 5
Horses	.....	Oct. 7	"	" 19
Poultry	.....	" 21	"	" 31
Pet stock	....	" 21	"	" 31

Matters have already advanced far enough with reference to the live stock exhibit at the Pan-American to show that the representation in all of the various classes will be extremely large. Individual breeders by the hundreds are inquiring by letters as to the accommodations, classifications,

etc., regarding this exhibit. This is true from nearly every State, as well as several provinces in the Dominion of Canada.

A complete premium list, containing the premiums offered by the Exposition Company, also the special premiums offered by very many of the different live stock associations, will soon be ready for distribution, and can be had by making application to the office of

F. A. CONVERSE,
Superintendent.

735 Ellicott square, Buffalo, N.Y.,
September 29, 1900.

Cannot Grow Clover

Editor THE FARMING WORLD:

You recently published an interesting article on Peter's idea of improving a worn-out farm. The idea given there was that clover was all right to keep up the fertility of the farm if the soil was already in a good state of fertility, but no use on a farm that was run down, as it would not likely grow anyway, and, possibly, would be lacking in something to balance it. We have a large stock farm here, composed largely of clay loam and fairly well under-drained. We can raise good crops of grain, but have of late years had much difficulty in getting a catch of clover.

Is it possible that our soil is deficient in some particular substance which clover needs that it cannot get out of the air? The article I read stated that in order that Peter would get the clover, he used some fertilizer. What kind of fertilizer would it be? Does clover increase the richness of the soil by adding other substances to the soil besides what it gets from the air? What is meant by a phosphate fertilizer?

If you can kindly answer the above questions you will greatly oblige,
D. BENNETT.
Russelton, Ont., Oct. 1, 1900.

Michigan State Fair

Editor THE FARMING WORLD:

The Exhibition held this week at the live city of Grand Rapids was a pronounced success. Commencing on Monday the 24th it was in full swing until Friday evening. Canadians have so long been accustomed to the huge proportions of "the only Industrial" that they would regard lightly many of the State fairs this side of the line. Nevertheless Michigan puts up a good showing in many classes. The entire absence of Canadian exhibitors, of whom there has often been a fair sprinkling, was noticeable this year. There were, however, a number of competitors from adjoining States.

In many respects the Shorthorns made the best showing. The famous "Grey Tower Herd" owned by Mr. W. A. Boland of Grass Lake, this State, bred by the famous Aaron Barber, of New York, was a great centre of attraction. The herd is noted for the wonderful scale and substance which has been obtained. The names of Sharon Marshall and Mary Abbotsum are household words in every Shorthorn breeder's home. In the other beef breeds there was only a fair showing. Red Polls, one of our most popular dual-purpose breeds, were well represented. The Hartline herd which have been winners this year in their home State of Ohio and at several adjoining fairs, were easily in the front. Some of these possessed the best breed type the writer has yet seen. This is not a strong dairy State as was seen in the two herds of Jerseys and the single herd of Guernseys making up this class.

Sheep classes were well filled, the different varieties of Merinos being strongly in evidence. The O-at-Ka Shrops, of New York, were here in all their glory and they were certainly right types, modelled very closely after the Southdown form. We expect to hear from this flock at Chicago in December. Aside from a few professionals the flocks did not have the form and finish characteristic of Ontario show pens. Swine were few in numbers and indifferent in quality.

Here the implement manufacturers seem to think it worth while to show the farmers what they are doing, each providing a tent for housing his exhibit. Unfortunately, at this fair the side-show feature is carried to an extreme. You paid your money and took your choice of anything between a look at the midget horse and the "couchy-couchy" from Chicago, the manager of the latter openly and brazenly proclaiming it the "hottest thing on earth, gentlemen." The exhibit of fruits from our college stations and the State at large was magnificent. Niagara must take second place with western Michigan.

The State Fair labors under the same disadvantage that has lately attended the Provincial Winter Show; it is not a permanent fixture, hence we find the exhibition structures temporary in character and not modern in their conveniences.

Superintendent of Ontario Institutes G. C. Creelman was an interested visitor during two days of the fair. The pointers he picked up from the Yankees will mean millions to your people. He spent Monday at our State Agricultural College, and was deeply impressed with the great work that M.A.C. is doing for the farmers of the Wolverine State. Incidentally, we have started work with an enrollment of over five hundred students in our regular courses.

J. J. FERGUSON.

Agricultural College, Mich., Sept. 29, 1900.

Orchard Cultivation

Editor THE FARMING WORLD:

In the recent discussion in THE FARMING WORLD on cultivation of orchards so far as it involved important principles in soil, chemistry and physics, it was shown that there was no unanimous opinion that surface tillage is either the best for the fruit or most economical for the resources of the soil. The tillage advocates rest their case on the simple fact that it is best for the fruit, but no one seemed to indicate any advantage in maintaining that balanced condition of the soil which the clover or grass method, properly carried out, can always maintain.

The principle of humus as the best chemical and physical basis for a high state of fertility for any crop is being growingly recognized by leading investigators everywhere. Simple mechanical cultivation is very destructive of soil humus, especially of its nitrogen contents. Recent experiments have been made in the United States showing that for every 25 pounds of nitrogen taken up by a crop 146 pounds were lost from the soil, resulting from oxidation of the humus. A waste of over 550 per cent. caused by cultivation is food for thought when applied to the most expensive element of soil fertility. Then again the availability of the phosphate and potash must thereby be remarkably decreased. But these chemical considerations are not all.

From a physical standpoint keeping the orchard in grass has a great importance. The Grimsby district, as a representative fruit-growing section, is getting notorious for its constant subjectiveness to drouth. The writer, from personal observations and enquiries, learned that the soils were too largely devoid of humus. The result is found to be stiffness in the clay soil and too much brittleness in the sandy soil. Extremes of soil temperature under such conditions undoubtedly result. The retentive power for moisture is largely decreased, hence the many complaints the writer heard that fertilizers did not pay. In this connection my own experience in handling considerable fruit land, and all lands for crop purposes, has shown that no matter how rich the soil is from a chemical standpoint without this richness being organized in the form of humus, and thus having the soil balanced physically as well as chemically, that cultivation would often be done at a loss in many ways.

I might yet point out to the tillage advocates that about all of them seemed to have no other idea of an orchard in grass but one that is associated with neglect and ignorance of important principles in maintaining an all-round state of increasing fertility.

W. J. THOMPSON, B.S.A.

Barrie, Oct. 2, 1900.

The Agricultural Gazette

The Official Bulletin of the Dominion Cattle, Sheep, and Swine Breeders' Associations, and of the Farmers' Institute System of the Province of Ontario.

THE DOMINION CATTLE, SHEEP, AND SWINE BREEDERS' ASSOCIATIONS.

Annual Membership Fees:—Cattle Breeders', \$1; Sheep Breeders', \$1; Swine Breeders', \$1

BENEFITS OF MEMBERSHIP.

Each member receives a free copy of each publication issued by the Association to which he belongs, during the year in which he is a member. In the case of the Swine Breeders' Association this includes a copy of the Swine Record.

A member of the Swine Breeders' Association is allowed to register pigs at 50c. per head; non-members are charged \$1.00 per head.

A member of the Sheep Breeders' Association is allowed to register sheep at 50c. per head, while non-members are charged \$1.00.

The name and address of each member, and the stock he has for sale, are published once a month. Over 2,000 copies of this directory are mailed monthly. Copies are sent to each Agricultural College and each Experiment Station in Canada and the United States, also to prominent breeders and probable buyers resident in Canada, the United States and elsewhere.

A member of an Association will only be allowed to advertise stock corresponding to the Association to which he belongs; that is, to advertise cattle he must be a member of the Dominion Cattle Breeders' Association, to advertise sheep he must be a member of the Dominion Sheep Breeders' Association, and to advertise swine he must be a member of the Dominion Swine Breeders' Association.

The list of cattle, sheep, and swine for sale will be published in the third issue of each month. Members having stock for sale, in order that they may be included in the Gazette, are required to notify the undersigned by letter on or before the 9th of each month, of the number, breed, age, and sex of the animals. Should a member fail to do this his name will not appear in that issue. The data will be published in the most condensed form.

A. P. WESTERVELT, Secretary,
Parliament Buildings, Toronto, Ont.

The Institutes will be Well Represented at the Provincial Winter Fair.

Under date of May 18 the Superintendent of Farmers' Institutes addressed the following letter to each Institute in the Province of Ontario: "The Provincial Winter Fair is now permanently located in the City of Guelph, where special buildings are being erected on the Market Square for its accommodation. The show which is held early in December of each year, is largely patronized on account of its educational features. Last year the delegates and many officers and members were present, and all were more than pleased. This year some of the Institutes talk of running excursions to Guelph at that time, and to this I give my hearty approval. The Experimental Union will hold its annual meeting at the college during the same week, and the indications are that this year there will be congregated in Guelph the greatest gathering of agriculturists ever assembled at one place in the Dominion of Canada. At the last meeting of the Winter Fair Board, the Directors decided to allow any Institute that would make a grant of five dollars to the exhibition, free admission to the show for all its members during any and every day of its continuance. With this concession it will be easier to get members to attend, and with cheap rates on the railroads and special advertising matter which we will send to your Secretary for distribution, success is assured. The block tests with cattle, sheep and swine, the expert judging and the addresses by the judges, telling why they awarded the prizes, the live and dressed poultry exhibits, the dairy tests and the lectures and addresses by prominent men from Canada and the

United States, will make up a week's entertainment that should prove a valuable lesson to each and every member of the Farmers' Institute in the province."

Up to the present time the response has been very encouraging. Fourteen Institutes have signified their intention of taking advantage of the cheap admission fee of five dollars, which admits all the members of each Institute contributing that sum to the exhibition, at any time during every day of the Fair. A great many other Institutes are considering the matter, and, of these, a number are sure to attend.

There is really no reason why any of the Institutes should be unrepresented at the Fair. The admission fee is practically abolished in their case, especially when many members attend. The railroad rates are very cheap and the Winter Fair takes place at a time when farm operations, with the exception of the care of life stock, are at a standstill. All who attend with the object of learning will receive lessons in the breeding, feeding and rearing of live stock, which they cannot get in any other way. No pains are being spared to make the Fair of the greatest possible practical value to all concerned. The prizes are large enough to induce breeders and feeders to bring out their best stock. Of these, selected animals will be used as illustrations during the lectures given by experts. Those in attendance will have the opportunity of seeing the same exhibit shown alive and as a dressed carcass. This will enable a breeder or feeder to see not only what sort of an animal is required for the market, but what sort of animal is required to make such a carcass, what special conformation, what proportion of fat and lean, what weight is required, so that the demands of the best markets may be supplied, and the

highest price procured for the product. Lectures on these points will be given from time to time by experts in their several lines, in a lecture-room comfortably fitted and warmed. The lecture room adjoins the carcass room, and an overhead track, such as is used in packing and slaughter houses, will be used to bring in the carcasses of the cattle, sheep and swine, as they are required by the lecturers to illustrate good points, or demonstrate wherein the carcasses are deficient.

Every department of the show will have its points of interest. The dairy cattle will have a specially heated stable, where they will be quite as comfortable as in their own stables. They should, therefore, be in a position to do their best.

Those interested in poultry will find plenty to interest them in the poultry show held under the joint auspices of the Ontario Poultry Association and the Provincial Winter Fair. A space of 15,000 square feet has been provided in the second story of the building for the poultry exhibit. It is likely to be the largest and best show ever held.

The Farm Help Column Appreciated.

The following letter is a sample of many others received at this office, showing how the "help wanted" column is bringing employers of farm labor and those in search of situations into satisfactory communication with one another:

Willow Bank Stock Farm,

Caledonia, Ont.,

Sept. 26, 1900.

A. P. Westervelt, Esq.,
Toronto, Ont.

DEAR SIR,—I am writing to thank you for the kind and prompt help you have rendered both myself and my employer (Mr. James Douglas), by having obtained for me the first situation that you wrote me of.

I commence with the first of the month, and I think, through your kind help, I have obtained just the work that I wished—that of stockman. I also received a letter from you as regards Mr. Wakefield Howard's offer, and have written him stating I have obtained a position.

I feel sure that many will derive help, and employer and employees brought into communication with one another through your help. Thanking you for myself, I remain, yours respectfully,
ALF. J. LEAVER.

FARM HELP EXCHANGE.

The Farm Help Exchange has been started with the object of bringing together employers of farm and domestic labor and the employees. Any person wishing to obtain a position on a farm or dairy, or any person wishing to employ help for farm or dairy, is requested to forward his or her name and full particulars to A. P. Westervelt, Secretary, Live Stock Associations. In the case of persons wishing to employ help, the following should be given: particulars as to the kind of work to be done, probable length of engagement, wages, etc. In the case of persons wishing employment, the following should be given: experience and references, age, particular department of farm work in which a position is desired, wages expected, and where last employed.

These names when received together with particulars will be published FREE in the two following issues of the "Agricultural Gazette" and will afterwards be kept on file. Upon a request being received the particulars only will be published, the names being kept on file.

Every effort will be made to give all possible assistance to the end that suitable workers, male or female, may be obtained. Unemployed persons wishing to engage in farm or dairy work is invited to take advantage of this opportunity.

Help Wanted.

Wanted, thoroughly practical, thrifty, energetic, unmarried man, who is a good plowman, and careful and painstaking with horses. Must be a good milker and willing to milk when occasion requires, but his chief duties will be the care of the horses and the general farm work. To the right kind of man will be paid at the start \$180 to \$200 a year, with board and lodging. A permanent place and a good home to one who does his best. Must have good recommendations. No. 595. a

Man wanted on a farm by the year or month. Must be a good stockman. Work in winter principally looking after stock. An extra hand also wanted at once for a while. No. 596. a

Wanted, a young man for a farm on the shore of Muskoka Lake. Would be required to do general farm work, look after cattle, and milk. Wages \$14 and board until April 1, and \$18 per month for the balance of the year. Wages paid monthly. Man must be sober and industrious. No. 600. a

Wanted, good man for the management of a large fruit farm in the Niagara District. Must be competent. 602.

Wanted, steady, reliable man by the year, one who is willing to milk. Farm consists of 140 acres, on which stock are raised and fruit and grain grown. Liberal wages to good man. No. 589. b

Man, who is a good milker and can plow, can obtain employment on a farm near Napanee. Will hire by year or month and will pay the highest wages. No. 590. b

Strong lad wanted to help milk and deliver milk occasionally. Must be used to horses and general farm work and willing to put his hand to anything. No. 591. b

Wanted, man capable of taking care of stock. Must be a good milker. Permanent position to right man. Farm is situated in Minto Township, Wellington Co. No. 592. b

Young or middle-aged man wanted

to work on a farm in Kent Co. Must understand the care of stock and general farm work. Chores and cutting firewood constitute the winter's work. Wages, \$150 a year, or will hire for part of a year. English Home boys need not apply. Address Box 66, Duart, Ont.

Vacant, a good position on a farm for a man and his wife the year round, near a small town with churches, etc. Good wages to a suitable couple. Also a young man wanted for general farm work. Must be a good milker and quiet with cattle. Good wages to a steady man. No. 593. b

Domestic Help Wanted.

Good general servant of the better class wanted in the city of Ottawa. A good home to a good girl, who must bring good references. Wages \$8 to \$10 a month, according to ability and desire to please. No. 597. a

Housekeeper needed on a farm immediately. Family consists of 4 children, and 2 or 3 cows are kept. References required. State wages when writing. No. 598. a

Wanted on a farm near Fredericton, N.B., housekeeper to do housework and cook. Work light. Good wages given to the right kind of person. Middle-aged person preferred. Give references. Mrs. C. H. Giles, Brooklands, Fredericton, N.B.

Housekeeper required on a farm near Paris, Ont. State wages asked. No. 599. a

Wanted, a domestic, at once, on a farm near London. Good place for a suitable person. No. 601. a

Housekeeper wanted on a farm near Owen Sound. References required. No. 594. b

Situations Wanted.

Married man, who has worked on a farm for over 20 years and can do all kinds of farm work, wants a place at once. No. 448. a

Married man with three small children, a good milker, and who understands farming, wants a place on a farm. No. 446. b

Married man, aged 33, wishes yearly employment. Is used to all branches of farm work. Salary wanted, \$200 a year, with free house, garden and wood. No. 447. b

N.B.—Where no name is mentioned in the advertisement, apply to A. P. Westervelt, Parliament Buildings, Toronto, giving number of advertisement.

When writing to advertisers please mention The FARMING WORLD.

Farmers' Institutes.

Under this head the Superintendent of Farmers' Institutes will each week publish matter relating to Institute work. This will include instruction to Secretaries and other officers, general information about Institutes and Institute work, suggestions to delegates, etc. He will also from time to time review some of the published results of experiments conducted at the various Agricultural Colleges and Experiment Stations of Canada and the United States. In this way he hopes to give Institute members some valuable agricultural information which they might not otherwise receive, on account of not having access to the original publications. If any member at any time desires further information along any of the lines discussed, by applying to us he will be put in direct communication with the Institution that has carried on the work.

G. C. CREELMAN,
Superintendent Farmers' Institutes.

A Women's Institute Started in Grey County.

At Kemble, in the County of Grey, a public meeting was held on September 15, for the purpose of organizing a Women's Institute. More than twenty ladies were present and a lively interest was manifested. Mrs. J. L. Smith, of Whitby, explained the nature of the work and then proceeded with the organization according to the rules and regulations governing Institute work. The Institute will be known as the Women's Institute of North Grey. The following officers and directors were elected:

Hon. President—Mrs. J. L. Smith, Whitby. President—Mrs. James Gardner, Kemble. Vice-President—Mrs. D. Davidson. Secretary—Mrs. F. J. Willcox, Kemble. Treasurer—Mrs. G. Beckett. Directors—Mrs. J. Gardner, Kemble; Mrs. W. McGregor, Kemble; Mrs. W. J. Saunders, Owen Sound; Miss J. Muir, Kemble; Mrs. J. Smith, Inglis Falls; Mrs. Alex. McDonald, Kilsyth; Mrs. Josiah Totten, Owen Sound; Mrs. C. McLeod, Owen Sound; Mrs. A. J. Taylor, Annan; Mrs. T. J. Harkness, Annan; Mrs. J. Cleland, Meaford; Mrs. Wm. Gardner, Meaford; Mrs. Jno. Clark, Meaford; Mrs. A. Gifford, Meaford; Mrs. J. Beattie, Desboro; Mrs. Alex. Pringle, Chatsworth.

Mrs. Smith, writing to the Superintendent, says of the meeting: "From the hearty manner in which all seemed to take hold of the work I am sanguine that this will prove a successful Institute."

IN WEST DURHAM.

A meeting of the ladies of West Durham has been called to meet in Bowmanville on October 3, for the purpose of organizing a Women's Institute.

Now that the harvest is over and the ladies on the farm have more time for outside work, a number of the Institutes are calling meetings for the purpose of organizing Women's Institutes. The Bulletin issued by the Superintendent last spring seems to have been appreciated by the ladies of the province, for we have received many complimentary notices in reference to it, and, what is more practical, many of the Institutes are adopting the suggestions made there and starting Women's Institutes in the different ridings.

A New Forage Crop for Ontario.

What red clover is to Canada, what alfalfa is to the Southern States, so is the cow pea to the South. Throughout the Southern States there is scarcely a planter who does not know this valuable crop and who does not use it for either hay, for plowing under as a green manure, or as a covering for the ground after the last cultivation of corn and cotton. This plant, however, does not stand the severe climate of the North, and repeated experiments at the College Farm at Guelph have proven that cow peas cannot be successfully grown there.

In the *Niagara peninsula*. We were somewhat surprised, therefore, while visiting the great section about Hamilton on Sept. 11, to find on the farm of Mr. Erland Lee, Stony Creek, a most luxuriant crop of cow peas. They had been planted in rows and had made such growth that he was then cutting and feeding them to his cows. He said that the cows ate them eagerly and that though they did not look to be a heavy crop, still the vines spread so much that he actually got more feed off of a given area than he did with his best silage corn. The pods though not ripe were in, probably, the best stage for feeding. They cracked open readily and the seeds were as plump and so well-matured as to leave no doubt in our mind that they could be successfully grown to maturity in this climate. This may be the very plant our fruit growers are looking for to sow in their orchards and vineyards after they have finished cultivating. Like all other leguminous plants they take free nitrogen from the atmosphere and store it in the soil; they also by the decay of their long tap-roots improve the mechanical condition of the soil and also add to its humus.

If any of our fruit growers have any knowledge of this plant I would be glad to hear from them. I will also make enquiries as to where the seed can be obtained, what varieties have been successfully grown under similar conditions, the best time of planting, etc.

A Yankee's Trip to Canada.

Mr. J. S. Woodward, a member of the Ontario Farmer's Institute staff last year, writes to the *Rural New Yorker* under this caption:

"We Yankees are apt to think of Canada as a cold, inhospitable country with nine months winter and the rest early in spring and late in fall. No greater mistake can be imagined. I was employed over there in Institute work for three months last winter, and have travelled quite extensively and mingled freely with the people. I have been much over our own country and seen the farmers and how farming

is done in many of the States, and can truthfully say that the farmers' houses in Canada will average better than in any part of the United States. They are quite largely of brick and have a look of stability and comfort about them that is very commendable to the good sense and thrift of the farming community. There is also a very much larger proportion of barns with good basement stables than can be found in any like area of the United States.

"The school-houses, as a rule, are good, substantial brick buildings, far better as a class than they will average in any of our communities. The teachers are employed permanently and not as with us by the single term, and, of course, have the incentive to keep up with the times. The farmer is a bright, wide-awake, hard-working fellow, and has sense enough to know it won't pay to put bogus things into the market. He grows a good deal at Uncle Sam for shutting him out of our market for barley, but it was the greatest blessing that could have come to him, as he now feeds his barley, peas and oats to his cows and other stock, and, having a government with sense and honesty enough not to allow the making of skim cheese or oleomargarine, he is getting more money out of the product in cheese and butter, and is not rubbing his hands. In no country in which I have ever been is the Government doing so much for the farmer as in Canada. Hon. Sydney Fisher and Hon. John Dryden, the Dominion and Provincial Ministers of Agriculture, are always out among the farmers at breeders' meetings, at Institutes and all gatherings of farmers generally, alert to their wants and seeing how they can benefit them.

THE MINISTERS OF AGRICULTURE AND THE LIVE STOCK ASSOCIATIONS WORK FOR THE BREEDERS' INTERESTS.

"Each branch or breed of live stock has its association, and these are all combined in a general live stock breeders' association with which the Ministers are always working in harmony. So powerful has this become that they have been able to secure a rate on pure-bred animals used for breeding purposes of less than half rate on common stock. The Government assists in putting all dairy products in the Old Country markets in the best form; they will not under any circumstances permit the making of skim cheese or bogus butter or oleomargarine, even to be sold as such, and in case any shipment of butter or cheese is not up to the desired mark, an instructor is at once sent to the factory in which it was made, and he stays until the trouble is discovered and remedied. It also employs several dairy inspectors whose duties are constantly to go from factory to factory to see that all are kept up to the highest excellence.

"Just now much attention is given to producing bacon suitable for export trade. The Government provided suitable photographs and charts showing the kind of bacon demanded by the market, the kind of pigs to produce it, and insisted on the farmer being instructed in the best way to feed and handle the pig to make the most desirable bacon at the maximum profit. A fat stock, dairy and poultry show was held last December at London, Ont., under direction of the Government, and at which it insisted every Institute worker should be present to see the animals judged, killed and cut up, and to listen to experts who lectured on each point. The Government is also very liberal in its support of the college and experiment stations, and it has now in hand what is called an experimental union, in which 3,000 or 4,000 separate experiments are conducted by as many persons all over the Province of Ontario, the results of which are collected by the college for the benefit of the farmers.

"In Institute work no country is doing more, or as much, with the same money. In each 'Riding,' equivalent to our Assembly districts, at least four must be held each year. Many hold up to eight and ten, and the farmers make it a point to drop all business and go to the Institute, and we be to the poor fellow who attempts to lecture on a subject on which he is not thoroughly well posted. Altogether our Canadian cousin is a wide-awake, progressive, hospitable, up-to-date farmer, and the more we mingle among them and learn that honesty pays in dairy matters the better it will be for us."

American Pork in British Markets.

Can Its Sale be Increased?

The pains taken to put meat up attractively is carried far beyond anything in at all common practice in the States. At Leith, the port of Edinburgh, an importer of pork from several countries, including the United States, took me into the rear part of his establishment, where he had a set of rooms in which experts were at work preparing pork for the British trade. A dressed pig received by the firm is first dismembered into head, sides, hams, shoulders and feet. The hams, shoulders and sides are trimmed as may be necessary, and the two latter then have the bones removed by skilful manipulation of the knife and hands. The side is then rolled lengthwise into the shape of a sausage, when it is neatly tied together with twine. The shoulder is skinned and then tied up in attractive shape. A large amount of bacon sold to-day in Britain is rendered boneless in this way, and I was told that nine out of ten shoulders were thus treated. While all hams are not generally boned, this Scotch dealer stated that the bulk of American

hams have their bones taken out, are skinned, rolled and tied. Where Canadian hams were compared in price with those from the States, early in July, the former were quoted at 58 shillings per cwt., while the latter were 50. Twice I noticed signs in conspicuous places, that I noted down as of interest. Covering the front of a building in London, painted in large letters, was this sign, preceded by the name of the advertiser:

ENGLISH AND SCOTCH MEAT
FOR THE EPICURE.
NEW ZEALAND AND AMERICAN
FOR THE THRIFTY.

Along by the railway going out of London was this sign in the form of a placard on good-sized tin painted sheets, so that more of the same sort must have been tacked up elsewhere:

DAVIES' PEA-FED
BREAKFAST BACON.

These advertisements in themselves are noteworthy as showing that the people are taught to see the difference in meat, as to the region produced in, and food fed the pigs producing the meat.

How much should our feeders and breeders be influenced by the demands of the export trade? That all depends. The natural enquiry would be, will it pay? If one looks simply to the immediate profit on the feeding of a lot of pigs with more expensive food than corn, I doubt it. However, the man who will feed his pigs more nitrogenous food, in which shorts, middlings, bran, ground oats, wheat or pea-meal play a prominent part, will, I feel sure, produce a stronger, leaner, better boned and thus more exportable pig than one mainly corn fed. He will also develop pigs that will probably be more prolific, and perhaps less subject to disease than those raised on almost exclusively fattening foods. These in themselves are important considerations, and really have an important bearing on the final profit in swine raising and feeding.

PIGS OF A BETTER BACON TYPE
REQUIRED.

Without taking extreme grounds at all on the subject it is my belief that our swine interests would be well served if more pigs were produced of a leaner, deeper type, such as the leaner form of Berkshires or the best of Yorkshires, or what is known in England as either Large or Middle Whites. Such pigs are of the prolific sort, and produce a pork of unexcelled quality. The simple fact alone of ability to reproduce has much to do with the profits in swine raising, and there is sufficient evidence to demonstrate that the very fat type is the least prolific, and makes the poorest

mothers. British meat dealers do not think the Americans, as they call them, will change their methods very much. One bright and fair-spoken Englishman said to me: "The Americans are too independent to do what the English people want. The Canadians come over here to study the market, listen to our criticisms, and say: 'We will go home and act on your suggestions.' The American says: 'I will see, but if you don't take our goods there are others that will.'" That, perhaps, expresses a prevalent sentiment. Nevertheless, one thing is true, and that is, if the United States desires a strong market for her products in Britain, she must cater to the desires of the buyers.

Some may perhaps think that the English trade discriminates against the American. I rather doubt this. To-day no people are as popular in Great Britain as the Yankees, who are generally given a cordial welcome by their trans-Atlantic cousins who talk freely about our mutual interests, etc. Yet Danish, French and Dutch bacon command high prices in England. It is simply because we do not deliver the kind of goods wanted. Do we wish to?—C. S. Plumb, in *Rural New Yorker*.

Milk Inspection in Leipzig.

In transmitting to the department a translation of the new rules and regulations governing the inspection and trade in milk, as adopted by the city council in Leipzig, U.S. Consul Warner, under date of July 24, 1900, reports that the old regulations were abolished at the instance of the advisory board of the Saxon Agricultural Department for the reason, chiefly, that their requirement of 3 per cent. of fat in the milk could not always, even with the best intentions on the part of the farmers, be complied with. The present regulations reduce the fat requirement in the milk from 3 per cent. to 2.7 per cent.

The amount of fat in milk can be increased by artificial fodder, such as cotton seed oil meal, cocoa meal, and other foods containing high percentages of oil; but the milk thus produced could not be used in a raw state. Such milk would be very unhealthy for children, and could only be used for butter-making, and every mother would be obliged to return to milk containing less fat, but which would be perfectly healthy.

The new standard of 2.7 per cent. of fat in milk is the prevailing one throughout Saxony. Of 95 cities and towns, only 59 contain any articles in their regulations concerning the lowest allowable percentage of fat. The following gives the percentages of fat required by these 59 cities: Forty-five, 2.7 per cent.; four, 2.6 per cent.; three, 2.5 per cent.; three, 2.4 per cent.; two, 2.8 per cent.; and two, 3 per cent.

The rules and regulations govern-

ing the milk question in Leipzig cover the appointment of officials, the places of milk inspection, testing the amount of fat in the milk, its specific weight, the milk books of the officials, guarding against irregularities, analyses in chemical laboratory, guarding the public against the sale of unhealthy or adulterated milk, etc., and are too extended and too technical for publication in detail. The part relating to milk for children is, however, given as likely to be of special interest to the officials and philanthropists having the same interests in charge in our towns and cities:

MILK FOR CHILDREN.

Milk for the use of children, infants, invalids, etc., must be full milk, of one quality, and can only be sold by those dealers who have received special permission from the city council. A person who wishes to keep cows for the purpose of producing milk for children, etc., has to report his intention to the city council and request permission to do so.

The requirements for such permission are as follows:

1. The applicant must be a reliable person who has had experience in the milk trade or who has some experienced persons in his employ.

2. The stables in which cows are to be kept must not only be large enough, but must fulfill the hygienic conditions as well.

3. Only such cows are allowed to be kept in these stables as give milk for children; each cow must be so marked or branded that it will be impossible to mistake. The council is to be immediately notified whenever any new cow is added to the stable.

4. All cows must be healthy, and show no reaction after the customary injection of tuberculosis lymph. Each cow must receive the lymph injection before being placed in the stable; and any time thereafter such injection can be repeated, at the discretion of the council.

5. The sickness of any cow must be immediately reported (by the veterinary surgeon having superintendence of the stable to which it belongs) to the council. Any such cow can be removed from the stable at the discretion of said veterinary.

6. The cows are to be fed, cleaned and cared for in a proper way. All food which, in the opinion of the veterinary, is inappropriate must be dispensed with.

7. Every person employed in milking, feeding or otherwise looking after the cows must submit a certificate from a physician certifying that he or she is free from infectious or nouseous diseases (especially tuberculosis). These certificates must be submitted by the proprietor of the establishment or to the supervising veterinary at least once in six months.

8. Stables, cows, and all utensils and cans used in milking, storing and

transporting the milk are to be kept in a scrupulously clean condition.

9. The well-strained or centrifugally-purified milk is to be well cooled, and delivered to the consumers as soon as possible. When the milk is not delivered direct to the consumers, but, instead, goes through the hands of milk dealers, it is to be sold only in bottles provided with patent stoppers, and closed with the private seal of the producer, or insured in a similar manner.

10. Stables and every establishment in the city of Leipzig are under the control of the district physician; in the suburbs they are under the supervision of an official veterinary surgeon, no matter where the stables or stores may be located.

The veterinary must make an inspection, etc.

Cosul Warner adds that cows which give milk for children are not allowed to feed in pastures, but are confined to stables and fed dry food, such as hay and meal.

British Butter, Cheese and Egg Market.

By MARSHAL HALSTEAD, United States Consul at Birmingham.

I inclose an extract from the *London Times* which deals with the butter and cheese importations, and shows that the Australasian butter imports into Great Britain this year exceeded by 10,200 tons the previous highest annual import and was an increase of 11,000 tons over that of last year—nearly double the increase in a single year that any country in the world has previously made. There has, however, been a decrease in prices since the beginning of October, and a noteworthy point is the decrease as compared with Danish butter. The act which limits the amount of butter to 10 per cent. in margarine mixtures has had the effect that competition is now between pure margarine and pure butter, high-class margarine mixtures no longer competing with butter.

The importation of cheese into this country is decreasing, there being less general consumption, owing to the prosperity of the working classes and the cheapness of imported meat. Canada has the import field here to itself. France and the United States are losing hold of the British market, France being supplanted by Belgium and the United States by Canada. United States consuls have for many years pointed out that the shipment of filled cheeses from the United States would kill the demand for cheese from that country, and this prediction now seems to have come true.

From the *London Times*, August 21, 1900.

Two records were established during the recent Australasian butter season and both must be regarded as complimentary to dairy farmers in the

antipodes. In the first place, during the eight months that ended on April 30 last, nearly 25,000 tons of Australasian butter were discharged at ports of the United Kingdom, an excess over the previous highest annual import of 10,200 tons. In the second place, the increase of the season 1899-1900, as compared with its immediate predecessor, was no less than 11,000 tons, which is nearly double the increase in a single year that any country has ever previously made. Messrs. Weddel & Co., in their annual report, do well to call attention to these facts, as also to the circumstance that the Australasian butter season began earlier and continued later than on any previous occasion. There was, however, a continuous decline in prices, as at the beginning of October "choicest" Australasian brand made 126s. (\$30.66) per cwt. (112 pounds), when there set in a gradual fall to 94s. (\$22.87) at the end of April, the decline amounting to 32s. (\$7.78.) To the total import, Australasia contributed 17,207 tons and New Zealand 7,465 tons, these being increases of 7,550 tons and 3,398 tons, respectively, on the preceding season. Canada, like New Zealand, exhibits, season by season, a steady increase, without that periodical retrogression which unfortunately has been one of the characteristics of the dairy business in every colony of Australia, as a consequence mainly of drought. The average price of Australasian butter in 1899-1900 works out at about the same as in the previous season—103s. 6d. (25.05) per cwt. (112 pounds)—but the most noteworthy point is the decreasing value as compared with Danish butter. Thus, in 1895-96, Danish averaged only 5s. 4d. (\$1.30) per cwt. more than Australasian, whereas last season the difference amounted to 13s. 3d. (\$3.22).

Among the reasons advanced by agents for this expanding difference is that the colonial butter is not so good as it was, while Danish is getting better. Such, however, is not the case; for Australasian butter improves year by year, and is now so close in its intrinsic merits to Danish that large quantities of it are retailed at the same price. That some of the Australian brands suffered from fishiness is true; but fishiness is almost unknown in New Zealand butters, which are pressing Danish very hard in the matter of quality. The principal reasons for the greater disparity in prices in the recent season were the diminished supply of Danish and the greatly-increased quantity of Australasian butter on the market. The Sale of Food and Drugs Act, which came into operation on January 1 and limits the amount of butter to 10 per cent. in margarine mixtures, is having a beneficial effect, and in the future the competition will be mostly between pure margarine and pure butter. High-class margarine mixtures can no longer compete with butter, and this is as it

should be. After Easter, instead of the prices of butter declining, as has been the experience in recent years, they actually advanced all through May and June, a fact easily accounted for by the lessened competition of margarine mixtures. It is during the midwinter months that the colonial butter from Australasia arrives on our markets, while that from Canada begins to arrive in July and virtually ceases in the following January. The bulk of the Canadian butter thus reaches us during August, September, and October; the bulk of the Australasian in December, January, and February. Our growing imports of butter find no parallel in the case of cheese, which is becoming year by year less an article of general consumption, owing to the prosperity of the working classes and the cheapness of imported meat. During the last decade our imports of cheese have grown only by 24,500 tons, while those of butter have increased by 71,000 tons. In the season of 1899-1900, our imports of cheese were 53,903 tons of foreign and 74,702 tons of colonial, as much as 70,549 tons of the latter being Canadian. Indeed, in colonial imported cheese Canada virtually has the field to itself, but even the imports from the Dominion have declined during the last year by nearly 5,000 tons, apparently because the Canadian dairymen—as was mentioned in the *Times* some weeks since—have turned their attention more particularly to the export of butter, which has simultaneously increased by nearly 6,000 tons. From foreign countries the decline in our imports of cheese mainly affects the United States. France is also losing its hold on the British market and is being supplanted by Belgium. As regards the coming season, there is every prospect that Australasia will again send us larger quantities of butter, though it is hardly probable that the increase will equal that of the season of 1899-1900. The Canadian supply may also be expected to show an increase, but it is unlikely that the United States will send us more butter than in the past season. Larger imports are almost certain to come from Europe, while a moderate increase in the home production may likewise be anticipated.

Use Boiled or Distilled Water Only if Necessary.

Boiled water or distilled water should not be used either by grown people or children unless there is danger from contamination from the water in ordinary use. Pure cold water is preferable. A child may be given a glass of cool, never ice, water the first thing in the morning—say half an hour before breakfast; and may also take a glass on retiring.—*Ladies' Home Journal*.

The Farm Home

The Township Show.

These are the days when the farmer's boy
Cuis the taters from out of the row,
And washes them up in a basket clean
To take to the annual township show.

These are the days when the sorrel colt
Is combed and brushed and taught to "go,"
When the buggy's washed, the harness oiled,
To make a shine at the township show.

These are the days when the farmer's girl
Works till her face is all aglow,
And churns her butter and works it up
To take a prize at the township show.

These are the days when the hired man
Looks for a holiday, I trow,
And gets "a ten" from the farmer boss
To whoop her up at the township show.

These are the days when the fakirs thiel:
Out in the country travelling go,
And make their pile at tent and stand,
And bless the annual township show.

—*—
The Khan.

Cooking in the Public Schools of New York City.

Cookery was introduced experimentally into the public schools of New York City in 1888, two teachers being engaged to conduct classes in five schools. One of these teachers was Mrs. Ida Hope, an enthusiastic and broad-minded woman who did much to make the experiment a success. Up to the time of her death she also conducted a normal class in domestic science, one of her pupils being the present Supervisor of Cookery, Mrs. Mary E. Williams. In 1896 between 1,000 and 1,100 girls in seven schools were receiving instruction in cookery from five teachers. At this time the work was quite unorganized, each teacher being independent of the others and practically under no supervision.

In October, 1896, as a result of the reorganization of the school system under the provision of the new city charter, Mrs. Mary E. Williams, who had served for six years as one of these teachers, was appointed Supervisor of Cookery in the Boroughs of Manhattan and the Bronx.

During the school year 1899-1900 about 7,500 girls in thirty-one schools were instructed in cookery by a staff of twenty-two teachers. The work, so greatly extended, has also been unified, as far as the different conditions prevailing in different schools permit, by the adoption of a course of study planned by the supervisor, and by teachers' conferences, held monthly, at each of which a topic assigned by the supervisor is demonstrated by one teacher and discussed by the others.

The girls in the elementary schools where cookery has been introduced receive one lesson a week during the last year and a half of the school course. Cookery is taught also in the Girls' Normal College and in six evening schools. Proving a most

successful experiment in the vacation schools last year, it will be continued and probably extended this summer. Application for its introduction into the new training-school for teachers and into the two high schools attended by girls has been made by the principals and the supervisor, the girls graduating from the elementary schools signifying, almost without exception, their wish to go on with the work. Ten new kitchens were equipped during 1899, three of which have been opened; and about a dozen new ones are provided for in buildings now erecting or soon to be erected.

Whenever possible, the kitchens are on the top floor. Each is fitted with two gas ranges, a stone sink, and water-heater, and is provided with cooking-table, dresser, chairs, cabinet for specimens of foods, fuels and the like, chemical apparatus, and a microscope, besides dishes and cooking utensils. This equipment, exclusive of the last two items, costs about \$350.

A lesson period is officially one and one-half hours long, but in many schools the principal adds to this time, thirty minutes of the time that the regulations permit her to use as she sees fit. The method employed is the one found best adapted to this limited time and to classes of from thirty to fifty pupils. The girls take turns in doing the practical work, four serving as cooks and four as housekeepers at each lesson. The rest take notes and observe, coming forward in groups to watch what is being done at stove or cooking table. A grade teacher is often in attendance as a listener during a cookery lesson, but the domestic science teacher is wholly responsible for the discipline, which is excellent.

An examination of the course in "cookery," as it is officially termed, shows it to be more properly a course in household science. In connection with the theory and practice of cookery, it treats of house sanitation, personal hygiene, the feeding of infants, the care of the sick, the planning and serving of meals, and the nutritive value and digestibility of foods, including special study of the diet proper for school children. By correlating with these topics, the teachers of cookery aim to bring the class room subjects, particularly in the natural science, to bear upon the problems of home life.

The success of their efforts is testified to by the following selections from a large number of similar expressions of appreciation from pupils, parents and teachers. One principal writes of the course in cookery: "In its moral aspect, I find it an educational element of much value. It inculcates the dignity of labor, cultivates habits of industry, and opens to girls new

avenues of self-support. Parents of the pupils express themselves heartily in favor of the course, and the results generally are so favorable that your committee may feel repaid for the great labor and expense incurred." Another reports: "The cooking has been enthusiastically received by the pupils, and never have I seen more thoroughly interested workers than there are in that branch of the course.

... Many report from week to week the results of home work ... and parents are constantly signifying their gratification at its introduction.

... Its educational advantage is manifested in the gradual development of self-reliance and judgment in pupils who are particularly weak in these respects, and in corresponding improvement in those naturally stronger."

A former pupil writes:

"My dear Mrs. Williams,

"I have wished many, many times since I left school to be able to meet you again to thank you for the invaluable lessons you taught me in cooking. I have found them very useful, not only in my own home, but in many other ways. ... One of my school friends, now studying to become a trained nurse, often says that the lessons taken in cooking and chemistry while at school have saved her many hours of hard study since."

Another graduate told her former cooking teacher of the surprise and pleasure of the high school instructor in chemistry at finding many of the girls in his class already familiar with the basic principles of chemistry, and of his cordial endorsement of the cookery course when he discovered that all of these were from schools where cookery was taught, none of those from other schools having their knowledge.

An equally strong endorsement for the practical side of the work was the action of a workman in coming to thank the principal of a down-town school for making his little girl such a good cook.

The qualifications demanded of special teachers of cookery in the schools of Manhattan and the Bronx (the only two of the five boroughs in which cookery is taught) are as follows:

"(a) Must give evidence of good general education and culture, and must have graduated from a course of professional training of at least one year, or must have had two years' experience in teaching the subject.

"(b) Must be examined in (1) chemistry and physiology of foods; (2) cooking; (3) hygiene; and (4) methods of teaching the subject, especially as shown by a practical demonstration lesson."—*American Kitchen Magazine.*

Bread and Skim-milk.

The Maine Experiment Station has been doing some excellent work in investigating the digestibility and nutritive value of bread and the value of skim-milk for cooking purposes. At the dairy meeting of the Maine Board of Agriculture in 1897, a paper was read setting forth the value of skim-milk as food. The admission is made that taken by itself it is rather thin and does not "stand by," but this is accounted for by the fact of its being so readily assimilated as not to satisfy the sense of hunger. When eaten, however, with bread, or used in cooking, it has a value not at all appreciated by the farmer. Five pints of skim-milk contain about the same amount of nutrition as a pound of round steak, and a quart of skim-milk is more nutritious than a quart of oysters. The paper goes on to enumerate a large number of dishes that can be prepared with skim-milk, stating that as a general rule, for all cooking purposes, it is practically as valuable as whole milk.

Owing to a belief in this value of skim-milk, and especially in bread making, some interesting experiments have since been conducted at the Maine Station along this line. Loaves of water bread and skim-milk bread were baked by a practical bread maker, being mixed in the early evening and baked the next morning. On each occasion the skim-milk bread rose slowly, requiring two or three hours more than the water bread. The water bread gave a whiter and lighter loaf, but the analysis showed the greater nutritive value of the milk bread. The difference in the carbohydrates, or fat-forming constituents of the bread was slight, but in the protein, or muscle-forming constituents, the milk bread showed a decided advantage. The average of the three experiments showed for the water bread 14.75 per cent. of protein and 16.06 per cent. for the skim-milk bread. Bread or cake made with skim-milk dries out less rapidly than when water is used in mixing the dough.

Hints by May Manton.

Ladies' Night Gown, No. 3616.

The night gown that can be made open at the throat and that is comfortably loose and ample without being over voluminous has advantages that every woman recognizes. Dainty home-made underwear is almost a fad. The excellent model shown includes all essential features, and lends itself to both machine stitching and hand-sewing. As illustrated, the material is nainsook, the trimming fine needle-work, and the gown is made with the open V at the throat. Cambric, long cloth, and soft finished muslin are equally suitable, however, and trimming can be embroidery or lace as preferred. The pattern provides for

a closed neck and high collar to be used when desired.

The back of the gown is in one piece, from the shoulders, the fullness being arranged in groups of tiny tucks, three in each. The front includes a smoothly fitting yoke that can be made high or in V shape. From the yoke falls the full skirt portion, which is hemmed at the lower edge.



3616 Ladies' Night Gown.
32 to 42 in. bust.

Round the yoke is a frill of embroidered edging that can be used or not as preferred. The sleeves are full enough for ease, and are gathered at arm's eyes and wrists. At the wrists are bands finished with frills that fall gracefully over the hands.

To make this gown for a lady of medium size 6 yards of material 36 inches wide will be required with $\frac{1}{4}$ yard of all-over embroidered or inserted tucking 18 inches wide, $2\frac{1}{4}$ yards wide edging, $\frac{1}{2}$ yard of embroidered insertion, and $1\frac{1}{8}$ yards of narrow edging to trim as illustrated.

The pattern 3616 is cut in sizes for a 32, 34, 36, 38, 40 and 42-inch bust measure.

The price of above pattern post-paid is only 10 cents. Send orders to "The Farming World," Confederation Life Building, Toronto, giving size wanted.

Four Ways to Cook Eggs.

1. Put the eggs in boiler, cover with cold water; let it boil up once, and you will find on removing shell that the egg is a palatable jelly from centre of yolk to shell.
2. Omelette.—Beat yolk and white separately. Allow one tablespoon of cream for each egg; season yolk with salt, pepper and a little chopped onion, put in hot buttered frying pan, add

white cut down with spoon, bake in quick oven four (4) minutes, garnish with parsley, serve hot. An excellent breakfast dish.

3. Another breakfast dish.—Break eggs in hot milk, cook from two to four minutes, remove, dip slices of raised bread nicely toasted in milk, butter, place eggs on toast, season to taste.

4. To well-beaten eggs add rolled cracker to make a stiff batter, season with salt, pepper and celery salt, form into balls, fry in hot lard.

Eggs should be at least one day old before being used, and never over one week old.

Something New in Chicken Pies.

It would be difficult to suggest anything new in chicken pies that would be any improvement over the chicken itself, and of course I should not have the hardihood to attempt an innovation of the kind, but it may be that a new idea in the arrangement of the familiar ingredients would be considered an improvement.

Many cooks have found that, notwithstanding all their care and skill, the under crust of their chicken pies went to the table a heavy, sodden mass, and went away again. Then someone suggested omitting the under crust altogether, which was a decided improvement, but it remained for a bright cook near me to attain the perfection of chicken pie-dom by making her crust take the shape of small biscuits; the pie going to the table with a covering of tempting golden brown spheres, from the interstices of which issued the most savory odors. This obviated the necessity of cutting, a task too often poorly performed, and the appearance of the pie was very pretty and novel.

Try it sometime, and you will be charmed with the result.—*What to Eat.*

What a Sigh Means.

Sighing is but another name for oxygen starvation. The cause of sighing is most frequently worry. An interval of several seconds often follows moments of mental disquietude, during which time the chest walls remain rigid until the imperious demand is made for oxygen, thus causing the deep inhalation. It is the expiration following the inspiration that is properly termed the sigh, and this sigh is simply an effort of the organism to obtain the necessary supply of oxygen. The remedy is to cease worrying. One may be anxious but there is no rational reason for worrying. A little philosophy will banish worry at once. Worry will do no good; it will rob one of pleasures when blessings do come, and one will not be in a condition to enjoy them.—*Ladies' Home Journal.*

The Farming World

A PAPER FOR FARMERS AND STOCKMEN.

Managing Director, D. T. McAINSH
Editor, J. W. WHEATON

The Farming World is a paper for farmers and stockmen, published weekly, with illustrations. The subscription price is one dollar a year, payable in advance.

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THE FARMING WORLD,
CONFEDERATION LIFE BUILDING
TORONTO

QUESTIONS AND ANSWERS

Diseased Udder.

A subscriber at Columbus, Ont., writes: "I might just say that I am a subscriber to THE FARMING WORLD, this being my first year. I am well pleased with the paper and as I see you have a space for correspondents I have a few questions to ask."

"Last spring I had two cows, one just calved about two weeks and one about six weeks. They both took what the V. S. called mammitis. The udder swelled up, got very hot, the milk turned to curd and finally dried up, leaving hard lumps in the udder. The cows also became very poor on meal, roots, clover hay and a good warm stable. They have gained up now and the lumps have nearly gone."

"I also have one that has had something like the same thing from the time she calved, but only in one gland at the front. She has been in since the 15th of July and the gland is hard and a kind of scurvy has come out through the hair. During the last few days she has taken it in the other front gland which is swollen up very hard and the substance that comes out smells badly enough to make one sick. Her calf has sucked from the first and is at it yet. She does not get so poor as the others did and seems quite lively, eats and drinks well. They have all had good feed and plenty of the very best water. There was no smell with the first two."

"Now what I want to know is will it be safe to breed them again and what to do for the one that is affected now. They are all young cows. What is likely to cause the trouble?"

This is a clearly a case of mammitis. There are various causes for this trouble. The more common are taking

cold from lying on cold, damp ground, blows or injuries to the udder, irregular milking, not being milked out dry, or not being milked at all. Obstructions in the teats from any cause may bring on this trouble. There are also contagious forms of mammitis, but this does not appear to be one.

The bad odor described is an indication that the case requires some special treatment, and it might be well to call in some person in whom you have confidence. In the earlier stages of this disease a good remedy is to apply a purgative, and wash the udder well with warm water, doing a lot of rubbing.

As to breeding, there would be no danger of the disease being transmitted to the young, and the only danger to the calf would be in taking milk from the affected udder, which should not be allowed if a healthy calf is desired.

As to whether the disease would return when the cow again comes in, it is hard to say. It depends largely upon what changes have taken place in the glands whether the disease will return again or not. After the inflammation has subsided the changes produced may or may not permanently interfere with milk secretion. If the cow is dry and the udder hard, it would probably be better to beef her than run the risk of having the disease return after breeding again, as it is not certain whether the udder will entirely recover its normal condition.



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If you're a paid-up subscriber to THE FARMING WORLD you can have one of our famous four-inch reading glasses, sold regularly at \$2.50, for \$1.00! Carefully packed for mail. Postage paid.



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We give this beautiful Ring-in-a-Box watch for selling only 1 doz. dainty packages of Violet, Rose and Heliotrope Perfume at 10c. each. This Ring-in-a-Box of the wonderful metal Gold Alloy, which looks like real gold and never changes color. It is set with three sparkling opals. Write and we will perfume. Sell it, return money and we will send you a Home Specialty Co., Box F Toronto.



FREE!

We give this reliable Nickel Plated Boy's Watch for selling 2 doz. Dollies at 10c. each; or this dainty and accurate Solid Nickel Lady's Watch for selling 2 doz. Dollies at 10c. each. These Dollies are stamped with prize designs of Carroussels, Roses and Fanals, etc. They sell at sight. Write and we will Dollies. Sell them, return money, and we will send you a beautiful Watch for mail. LINEN DOYLEY CO., Box F Toronto.

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We give this handsome and reliable Watch for selling only 2 dozen packages of Steel Pens at 10c. a package. Each package contains 10 assorted nibs of the best English make. You will find them a remarkably easy seller. Write and we will send you a Home Specialty Co., Box F Toronto.

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Your choice of a magnificent Silver or Gold Finished Brass Rifle for selling only 1 doz. large handsome Stamped Dollies at 10c. each. These Dollies will sell at sight. Write and we will send you a Home Specialty Co., Box F Toronto.

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Toronto Industrial Has a Larger Surplus Than Last Year

At a meeting of the directors of the Industrial Fair held last week a more definite report of the receipts and expenditures for the 1900 Exhibition was presented. This report showed that while the total receipts were some \$4,000 behind those of 1899, the expenditure was not nearly so large, making the surplus from this year's fair some two thousand dollars better than last year. This piece of news will be gratifying to the many friends of the Exhibition throughout the country. This would seem to indicate that not so much money has been expended in special attractions as many critics of the Fair believe to be the case.

Exhibit of Fruit at the Annual Meeting of the N.S. Fruit Growers' Association.

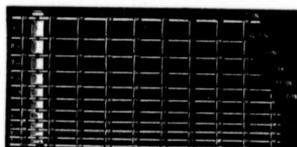
It is proposed at the next annual meeting of the Fruit Growers' Association to hold a winter exhibit of fruit as was done last season. Every one who attended the meetings last year agreed that the fruit show was a most attractive feature, and it ought to be possible to have a much larger exhibit at the coming meeting. Judging from what was shown at Halifax there ought also to be a splendid exhibit from counties outside the Annapolis Valley. Pictou, Colchester, Halifax, Yarmouth and several other counties made most attractive exhibits at the Provincial Exhibition; now let growers from these counties attend the annual meeting and bring some of their fruit with them and they will help to make the winter exhibit a success, and will have an opportunity to join in the discussions and receive a large amount of practical information that will help them to succeed still further in this most important branch of their business. No doubt it is true that there is only one Annapolis Valley in the province, but no one can have watched the development of the fruit industry and have seen the fruit at Halifax without concluding that there are splendid possibilities in other localities.

Orchardists should begin now to select fruit for this winter exhibit while they are picking and packing their crop, as that is the time to select fruit which will show what we can really grow. Further particulars will be given later in regard to awards for exhibits, but let everyone plan to be present with something to show from his orchard. F. C. SEARS,
Chairman Com. on Fruit Exhibit.

Storing Potatoes for Winter.

□ I store my potatoes either by putting into bins in the cellar or in pits out of doors. Of the two methods I prefer putting in bins. With the potatoes thus stored a farmer has them where he can intelligently guard

against frosts. If they are in pits he must use a little guesswork and do the best he can. However, pits have the advantage of keeping the tubers in the very best possible condition through the winter. It seems to be the nearest to nature's way. The potatoes are kept fresher and are not so apt to wilt and soften toward spring as when placed in a cellar. At the same time there is danger. Some years by far the larger percentage of potatoes pitted are spoiled by freezing. To a considerable extent this is probably due to insufficient covering. If



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sheep, fire and water and snow drift proof.
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If you cannot find our local agent write to
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Grand's Repository

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GREAT EXPERIMENTAL SALE 200 Ranch Horses

Friday and Saturday
Oct. 19th and 20th
At 10 o'clock each day.

These horses have been selected from the largest and most reliable ranch of the North-West Territories, and consist of the following classes:—

- 20 Heavy Draught Horses, 5 and 6 years, broken.
- 50 Heavy Draught Horses, 3 and 4 years, unbroken.
- 20 Heavy Draught Horses, yearlings.
- 20 Heavy Draught Horses, sucklings.
- 25 Well-Bred Saddle Horses, 4 and 5 years, broken.
- 65 Good-Sized Ponies, 3, 4, and 5 years, unbroken.

The desirability of these Western ranch-bred horses for liveries or others who require specially hardy horses for any class of work has been proved by previous sales of these horses, which have turned out to be the best wearing animals in this province to-day, and purchasers at former sales will be the most interested buyers at as soon as they are separated from the band. Several experienced ranchmen will accompany the horses and will assist purchasers in every way. Horses will arrive at the Repository about the 13th inst., and may be inspected up to the time of the sale.

WALTER HARLAND SMITH, Auctioneer.

FARMS FOR SALE

Rate—One cent. per word each insertion when ordered for not less than four times. Single insertions two cents a word.

FARM LOT 38, CONCESSION 3, TOWNSHIP of Sarawak, County of Grey, 82½ acres. Frame House and Barn. Excellent Orchard of four to five acres. Convenient to School, Church and Post-office. Nine miles from Owen Sound. Good roads. PRICE, \$1,600. Easy Terms. Ask about this farm. Good At investment.

W. E. LONG,
28 Wellington St. East,
TORONTO.

FARM FOR SALE—ADJOINING CORPORATION of Streetsville, 20 miles west of Toronto; 200 acres in high state of cultivation; well-fenced; 20 acres good timber; well watered by never-failing springs; soil, clay and clay loam; 6 acres orchard; splendid brick house, 14 rooms, 4 roomed cellar; new bank barn, 50x72, cement floor; 2 other barns, tub silo, sheep house, hog pen, and driving house; suitable for dairy or stock farm. Ten minutes' walk from station. This is a rare opportunity to secure a choice farm, as the estate must be sold. Apply JOHN DOUGLAS, Streetsville, Ont.

MONEY-MAKING FARM OF ONE hundred and twenty acres. Only 3 miles from thriving village, station, 3 churches, and near many summer boarding houses. Soil dark loam, quiet level, free from stone, productive and in good state of cultivation; 35 acres of mowing and tillage, cuts 35 tons of hay; farm all fenced, mostly with wire; about 300 trees, sugar house and implements; buildings are in first-class condition, 1½-story house and L, painted and blinded; 4-light windows, nice cement cellar; barn 40 x 60, with basement, connected to L, clapboarded and shingled, has 14 tieups and 2 box stalls; \$1,000 has been expended upon buildings; place is on a fine road, can drive to village in 20 to 25 minutes; has lot young apple trees and fine for milk farm; car runs every morning and takes the milk from station. Price only \$1,600, half cash. Truell's Real Estate Agency, Canaan, N.H., the only agency in N.H. where customers have no expenses from the time they leave the train until they go home; meet all noon trains, others by appointment.

FOR SALE—312-ACRE, CHOICE RED River valley land, one mile from Pembina, the county seat; one mile from Emerson, Manitoba. New driving and machinery house; 8,000 bushel elevator with six-horse engine; large house, stone foundation, new furnace; barn 28x44; plenty shade trees; a pretty place; no better land or location; never had a failure of crop. If you want a good farm you can't do better than buy this one. AMOS B. PURDY, Pembina, N. Dakota.

one watches the weather closely and adds covering according to the frost I do not see any reason why potatoes cannot be taken through a very severe winter when buried.

If I bin my potatoes I generally construct temporary bins in the cellar for that purpose. Almost any quantity can be put together. However, I prefer bins that will hold from 100 to 200 bushels. The main thing to be observed in constructing bins is to keep the potatoes away from the earth or cement floor and the wall. In case one side of a bin comes to the wall it is better to board this up, leaving a two or three-inch space between the side of a bin and the wall. When flooring a bin I never depend on the cellar floor. Invariably I put in a board floor at a height of three or four inches from the cellar floor. I find the potatoes keep much better and are easier handled. These bins can be easily and cheaply made by running studding up to the ceiling or floor above and nailing sides to these. In making the floor, all that will be necessary will be to lay down some two-by-four stuff to rest the floor upon.

In pitting potatoes the first essential is a dry place. If possible select a sandy hillside with an exposure protected from the prevailing winds. If soil be sandy it will be dry and easily dug. Care should be observed that water will not be apt to drain in, either from rain or melting snow. The pit may be any length desirable, and any width for that matter, but it seems to me that one not much wider than three feet can be worked to the best possible advantage. If a long pit, perhaps four feet wide and two feet deep would not be too much.

When the excavation is filled, place the potatoes in carefully, to avoid jamming, and be careful that none save sound tubers are put in. It will be a great advantage if the bottom is covered with three or four inches of straw and the sides lined with straw to protect the potatoes from coming directly into contact with the earth. Round the pile over at the top, and then cover with sufficient straw so that there will be at least six or eight inches when covered with earth. On top of this one may put as much soil as the winter temperature demands. It is safe to say that the more soil the less the danger from frost. I should say from 10 to 12 inches. When the pit is thus covered it can be left until danger of severe freezing, then covered with horse manure to a depth of several inches. If this work be carefully done, a pit ought to keep safely during almost any kind of weather.

Some prefer round pits for potatoes. They are made in exactly the same manner as I have indicated, with the exception of having the excavation round instead of elongated. In all probability potatoes can be housed more snugly in a round pit. For this reason many prefer them, but at the same time they are not quite as convenient.—C. P. Reynolds, in Orange Judd Farmer.

Ravages of Consumption

White Plague on the Increase.

A Cure Now Within the Reach of Every Sufferer.

DR. SLOCUM the famous scientist, whose lectures and demonstrations in New York and London this season have aroused medical circles, has at last perfected his new system of treatment for the absolute cure of tuberculosis and all pulmonary diseases. This triumphant victory over the deadly bacilli is far reaching in its effects, for there is no longer room for doubt that the gifted specialist has given to the world a boon that will save millions of precious lives. Dr. Slocum's system of treatment is both scientific and progressive, going as it does to the very source of the disease and performing the cure step by step.

First Step.—Killing the life destroying germs which invest the body.

Second Step.—Toning the entire system and strengthening the nerves—filling the veins with tingling new life.

Third Step.—Building healthy flesh and fortifying against future attacks.

The Slocum system cures grip and its painful after effects, dangerous whooping coughs and every known form of pulmonary disease.

It makes weak lungs sound, strengthens them against any ordeal, and gives endurance to those who have inherited hollow chests, with their long train of attending dangers. To enable despairing sufferers everywhere to obtain speedy help before too late, Dr. Slocum offers

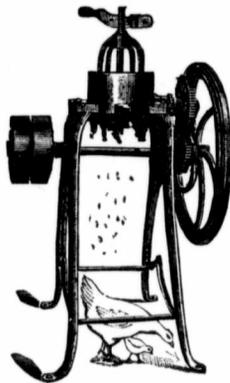
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To every reader of this paper.

Simply write to **THEY. A. SLOCUM CHEMICAL CO.**, 179 King St. West, Toronto, Ont., giving post office and express office address and the free medicine. The Slocum Cure will be promptly sent. Sufferers should take instant advantage of this generous proposition, and when writing for them always mention this paper. Persons in Canada seeing Slocum's free offer in American papers will please send for samples to the Toronto laboratories. Let no previous discouragements prevent your taking advantage of this splendid free offer before it is too late.

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Travellers and Local Agents Wanted.

WILLIAM J. THOMPSON, B.S.A., Supt. of Agencies.

When writing to advertisers kindly mention THE FARMING WORLD.

Sale of Government Horses.

The following list will show the distribution of the thoroughbred horses purchased by the Nova Scotia Government, which were sold at auction at Halifax. Amherst has its share, those enthusiastic breeders and horsemen, Messrs. W. W. Black and A. B. Etter, having purchased several of the finest animals:

- Yorkshire coach stallion, Albert, \$610, R. Danlop, Colchester.
- Clydesdale stallion, Adjutant, \$814, John Glassy, Halifax.
- Clydesdale stallion, Sirius, \$430, Jonathan Adams, Halifax.
- Clydesdale stallion, \$580, J. Armstrong, Hants County.
- Clydesdale stallion, Prince of Annick, \$250, A. R. Etter, Amherst.
- Clydesdale stallion, Bravado, \$705, R. Churchill, Yarmouth.
- Clydesdale stallion, Sir Frank, \$225, A. B. Etter, Amherst.
- Clydesdale mare, Effie, \$220, W. W. Black, Amherst.
- Clydesdale mare, Jean, \$250, W. W. Black, Amherst.
- Hackney stallion, Ryedale Fashion, \$655, John Glassy, Halifax.
- Hackney stallion, Colton Swell, \$300, D. Kirk, Antigonish.
- Hackney stallion, Majestic, \$300, Captain Farquhar, Halifax.
- Hackney stallion, Strathcona, \$120, D. Kirk, Antigonish.
- Hackney mare, Queen Louise, \$200, A. B. Etter, Amherst.
- Hackney mare, Cassandra, \$360, N. & A. Smith, Halifax.
- Hackney mare, Camer, \$310, E. Dickey, Upper Stewiacke.
- Hackney mare, Miss Lynn, \$315, A. B. Etter, Amherst.
- Hackney mare, Nancy, \$160, Peter Innis.
- Hackney filly, Victoria, \$90, A. B. Etter, Amherst.
- Thoroughbred stallion, Ribbonman, \$100, Dr. Ross, Pictou.
- Thoroughbred stallion, Barlby, \$190, H. Wickwire, Kentville.
- Thoroughbred stallion, Cyclist, \$250, A. Drysdale, Halifax.

MAPLE CLIFF DAIRY AND STOCK FARM

FOR SALE:

Breeders of—
Ayrshires—4 yearling bulls; females any age.
Berkshires—3 young boars; a number of sows.
Tamworths—40 boars and sows of different ages.
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Whole herd for sale. 20 head at reduced prices, as I want to sell all out before winter. Parties wanting good stock, write for prices.

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 Chesterfield, Ont.

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Have you a Fence to build?

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It will cost you less than half if you build with the

We challenge competition for speed, ease, quality of work and durability. The **LONDON** is a thoroughly up-to-date machine and stands without a rival for weaving square mesh coiled spring fence.

The best and strongest fence in the world.

The **LONDON** is sold at a price which every farmer can afford and save the price in 40 or 50 rods.

We are leaders in Coiled Steel Spring Wire, also common Soft Galvanized Wire.

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The Association is prepared to undertake the following services on behalf of consignors of apples, eggs, poultry and all kinds of fruit and produce—

1. To recommend a reliable Consignee at each port.
2. To arrange freight contracts and effect insurances upon shipments.
3. To give attention, through its agents at ports of shipment, to the proper storage and prompt transportation of such consignments.
4. To have goods inspected when claims are made by consignees, either for damage in transit, or for alleged non-compliance with contract, and to report thereon.
5. To investigate any complaints and report.

Consignors making small shipments under the auspices of the Association can, by co-operation through the Association, receive all the advantages which can usually be commanded by large shippers only.

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who desire the protection of the Association are requested to write a note to the Head Office of the Association, at Toronto, for list of apple receivers, list of sailing dates and instructions for grading and packing of fruit for export.

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GOOD CHEER ART?



It will Roast or Bake as well as the best cook stove or range, and will often save you the trouble of lighting the kitchen fire.

The Good Cheer Art is a great heater, too; very economical on coal—and most moderate in price—what more could you want?

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Circular on Application.

The James Stewart Mfg. Co., Limited
 WOODSTOCK, ONTARIO

PURE-BRED STOCK

NOTES AND NEWS FROM THE BREEDERS

These columns are set apart exclusively for the use of breeders of pure-bred stock and poultry. Any information as to importations made, the sale and purchase of stock and the condition of herds and flocks that is not in the nature of an advertisement, will be welcomed. Our desire is to make this the medium for conveying information as to the transfer of pure-bred animals and the condition of live stock throughout the country. The co-operation of all breeders is earnestly solicited in making this department as useful and as interesting as possible. The editor reserves the right to eliminate any matter that he may consider better suited to our advertising columns.

Horses.

The triumph of the Hackney was complete at the Paris show on Wednesday, when Sir Walter Gilbey's Hedon Squire won the two championships of the show, namely, the grand prize for the best of all foreign light horse breeds, thoroughbreds excepted and the championship for the best French or foreign horse. These victories mean that the Hackney competing at the greatest show ever held and judged by experts of all the horse-breeding nations has beaten everything, and surely now that this feat has been accomplished and, apparently, judging by appearances, with complete unanimity among the judges the detractors of the king of harness horses must somewhat regret the prejudice they have exhibited in doing their utmost to disparage his merits. The following are the names of the grand jury who awarded the championship prizes and from them it will be seen that the foreign judges are included amongst the great continental authorities, whilst Mr. Wrench's position in the horse world here, and the fact that he is president-elect of the Hackney Horse Society, entitles his opinions to the highest possible respect: President, Count Lendorff, Secretary, M. de Brinon, Baron Harkanyi (Hungary), M. Laurant and Mr. F. Wrench. What the fate of the first-prize Hackney mare might have been in the corresponding mare competitions it is impossible to say, as whatever chances she possessed were extinguished by an accident or a sting, which had raised a lump as big as a boy's head on her near flank, and, as the swelling was extremely tender, it is a wonder that the mare did so well.—*London Live Stock Journal.*

Cattle.

Secretary Frank M. Hearne, Independence, Mo., calls our attention to the fact that the American Galloway Breeders' Association has issued a prize-list for a special show of the Galloways entered in the association's combination sale at Chicago next December. Four cash prizes are offered for each ring. The prize-list and full information about the sale and show may be had on application.

Mr. Thos. A. Peters, Deputy Commissioner of Agriculture for New Brunswick has issued a circular letter to the purchasers of the stock imported by the Government in 1897 in which he offers to assist in the sale or exchange of this breeding stock. This circular reads as follows:

"To the Officers and Members of Agricultural Societies and others who purchased stock of the Government importation of 1897:

"The conditions under which this stock was sold were, that bulls over two years old at date of sale (September 30, 1897) were to be kept in the province for breeding purposes, for three years; bulls under two years old at date of sale, four years.

"The time limit, in the case of the older bulls, expires on October 1, 1900, and it is very desirable that useful animals, just in their prime, should be kept in service for a further period.

"In a great many cases a system of exchange of these animals from one locality to another would be the cheapest and best way to obtain new sires for the herd.

"To assist in this matter the Department of Agriculture desires any one who has an animal which he wishes to sell or exchange, and also any one wanting to purchase, to notify the Department.

"A record of these applications will be kept and list of animals for sale or exchange furnished on application.

"In case of the 1897 imported stock it will only be necessary to give the name of the animal, as a record has been kept of the breeding of every animal, and where located."

Sheep.

Mr. John Rawlings, Ravenswood, Ont., is

offering some splendid Cotswolds for sale, all registered. Among these will be noted 20 shearing ewes, 15 ewes two and three years, three shearing rams and 50 ram lambs.

Henry Arkell, Arkell, Ont., has recently sold a car load of lambs to Mr. P. J. Schaf of Indiana, and has good sales of ewes and fancy rams. The above purchaser also offered Mr. Arkell \$150 for "Bryan's 125," 21467 recently imported but did not get him.

Sheepbreeders will regret to learn of the death of Mr. John G. Springer, Ill., for many years Secretary of the American South-down Breeders' Association, and one of the most active and earnest friends of this breed on either side of the water.

The initial sale of sheep held under the auspices of the American Shropshire Registry Association at Indianapolis last week, during the Indiana State Fair, proved very successful as a breaker of the ice in such enterprises. Some very capital sheep were consigned and likewise some quite common ones. In this feature the event was unfortunate, as the standard sorts not only brought comparatively low prices but also had a tendency to shade prices on the better class of sheep. Contributors to the sale were Dr. G. Howard Davidson, Altamont Stock Farm, Millbrook, N. Y., who carried the honors distinctly both in the prizes awarded the sale sheep and in the prices bid; George Allen, Allerton, Ill.; Richard Gibson, Delaware, Ont.; Follyfarm, Abington, Pa.; Brown Bros., Scottsville, N. Y.; John Milton of Michigan; C. H. Ballinger of Nebraska and Wm. Furry & Son and Wm. Axe & Sons of Indiana.

The sheep were comfortably penned under a tent, and the sale was opened in the driving rain that fell on Wednesday afternoon, by a brief address by Mr. Mortimer Levering, Secretary of the American Shropshire Registry Association. Col. Perry of Ohio was the auctioneer. The top price of the two days' sale was \$170, bid for a yearling ram (bred at Altamont) by A. W. Dolph of Indiana. Another ram bred by Dr. Davidson sold to Mr. Ladd of Oregon at \$101. Many bargains were picked up in imported and home-bred sheep. Buyers were on hand for the cheap stuff and also for the high-priced lots, but the middle-class sheep, that should have brought from \$50 to \$75, failed to command their worth. The sale closed with an average that was probably not far from \$25 on the rams and somewhat lower on the ewes. The latter were largely sold in pens of two or more. Among the notable sales negotiated privately was that of the famous sire imp. Bathbrick, long in service at Altamont, to Mr. Ballinger of Nebraska, along with a three-year-old son of that ram, which was first in the aged ram class among the sale sheep. Bathbrick has achieved a great reputation as a sire and is wonderfully well preserved at six years old—a level, strong-backed, even sheep on the shortest of legs.

The awards on the sale sheep were made by W. H. Beattie of Ontario and were as follows: Aged ram—First and second to Davison, third to Brown Bros. Yearlings—First to Davison, second to Brown Bros., third to Davison. Lambs—All three prizes to Brown Bros. Pen of five aged rams—First to Davison, second to Ballinger, third to Davison. Pen of five yearlings—First to Davison. Pen of five lambs—First to Brown. Pen of five aged ewes—First to Follyfarm, second and third to Davison. Pen of five yearling ewes—First and second to Davison. Pen of five lambs—First to Brown Bros.—*Breeders' Gazette.*

Mr. F. A. Parker, New Germany, N.S., several months ago purchased 20 Dorset-Horned sheep from M. H. Empey, Nanapanee, Ont. This flock won all the first and second prizes at the Halifax Exhibition and attracted much attention.

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NOTICE.

Owing to many fraudulent imitations of our ELASTIC CARBON PAINT, we are compelled to caution our customers against purchasing or using the many so-called paints represented to be "just as good," etc. Such imitations are fraudulent and made to deceive the trade. Don't be deceived by long guarantees and alleged testimonials of concerns who are not in existence. We are the original manufacturers, and all others are worthless imitations. Please your trade by handling only the genuine ELASTIC CARBON PAINT.

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LIMITED
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Market Review and Forecast

Office of THE FARMING WORLD,
Confederation Life Building,
Toronto, Oct. 8, 1900.

A fairly good fall trade is in progress. Advices from the country are more cheerful, excepting from the Northwest, where the poor crops are having a depressing effect upon the general trade. Dairy produce is not moving quite as freely. Money keeps steady at about five per cent. on call.

Wheat.

There is very little material change in the wheat situation though the tone of the past week has been quieter. Speculators report very little money in wheat speculation this year owing to the small fluctuations in prices. The great proportion of news has, however, been of a bullish nature. The unfavorable weather has depreciated the value of the crop in the American and Canadian Northwest very materially. Late reports from Manitoba indicate a somewhat gloomy state of affairs there owing to continued rains. Some authorities claim that the present depression in the market is due to the manipulation of the western elevator ring which is trying to adjust matters so as to keep prices down till the wheat is out of the farmers' hands.

The visible supply in the United States and Canada increased 416,000 bushels to 55,409,000 bushels as compared with 42,132,000 bushels last year, being an increase of 13,277,000 bushels. The visible supply of wheat in the United States and Canada and the amount of wheat and flour now in transit to Europe are equivalent to 82,769,000 bushels, against 86,252,000 bushels a year ago, which shows an increase of 16,517,000 bushels.

No. 1 hard Manitoba is quoted firm at 89 to 90c. afloat Fort William, and Ontario red winter at 76 to 76½c., and No. 2 hard Kansas at 76 to 77c. afloat Montreal. Wheat deliveries are increasing here but the export demand is moderate and the market rather easier. Red winter is selling at a premium over white as it is not so plentiful and is better adapted for milling purposes. Exporters, however, claim that they cannot afford to pay more than 65c. for it west. Sales of white west are reported at 65 to 65½c., and red at 66c. west. Goose is quoted at 65c. north and west, and spring wheat at 67c. east. On Toronto farmers' market red and white bring 69 to 69½c., goose 68½ to 69½c., and spring five 69½ to 70c. per bushel.

Oats and Barley.

The oat market is dull with cable reports showing a decline of 3d. in London. Prices here are 25c. for choice No. 1 east, and 22½ to 23c. west for No. 2. On farmers' market here oats bring 25 to 30c. per bushel.

Choice malting barley will be dear owing to scarcity of good quality. Choice No. 1 is quoted here at 46c. f.o.b. on cars east and 40 to 41c. for No. 2 west. On farmers' market here barley sells for 44 to 48½c. per bushel.

Peas and Corn.

There have been larger offerings of new peas, which has caused an easier feeling. Quotations here are 59c. east, 58c. middle freights and 57c. west. On farmers' market here peas bring 60c. per bushel.

The corn market keeps steady. Old Canadian is quoted here at 42c. and new at 37c. west and No. 3 American yellow at 49c. Toronto.

Bran and Shorts.

Ontario bran is quoted at Montreal at \$15 and shorts at \$16.50 to \$18 in car lots at Montreal. City mills here sell bran at \$13.50 and shorts at \$16.00 f.o.b. Toronto. At points west of here bran is quoted at \$12 and shorts at \$14 low freights.

Eggs and Poultry.

Receipts of eggs keep large and exports much greater than last year. The market rules steady. Montreal quotations are 14½

to 15½c. for round lots of straight fresh gathered Western stock. The market here has been firm because of light offerings. New laid sell freely at 17 to 18c. in large lots. The supply of cheaper eggs is being gradually lessened. On Toronto farmers' market eggs bring 18 to 20c. per dozen.

The export poultry trade has not begun yet. The continued warm weather has had a depressing effect upon the local market. On farmers' market here prime chickens bring 50 to 60c. and ducks 50 to 75c. per pair, and turkeys 10 to 12c. per lb.

Potatoes.

The market is quiet. Montreal quotations are 40 to 45c. per bag in a wholesale way. Some car loads on track have been sold here at 35c. per bag. On Toronto farmers' market potatoes bring 30 to 40c. per bag.

Hay and Straw.

The market for baled hay is active with prices higher at Montreal, quotations being \$10 to \$11 for No. 1 quality; \$8.50 to \$9.50 for No. 2 and \$8 per ton for clover. Buyers are reported to be paying \$8 to \$8.50 for baled hay f.o.b. at country points east for shipment to the Eastern States. Car lots on track are quoted here at \$9 to \$9.50 per ton and baled straw at \$4.75 to \$5. On Toronto farmers' market hay brings \$12.50 to \$14; baled straw, \$11 to \$12 and loose straw, \$4 to \$5.

Seeds.

Prices at Montreal are nominal at \$5.25 to \$6.50 for red clover, \$5.50 to \$6.50 for alsike and \$1.25 to \$1.75 for timothy in large lots. Business here is quiet with very little doing in the export line. Alsike is the chief seed on the market and is worth from \$6 to \$7 per bushel for good to prime and \$7.50 to \$8.25 for fancy. There is no red clover offering and prices are steady at \$5.75 to \$6 per bushel. Timothy is quoted at \$3.75 to \$5 per cwt. with none offering.

Fruit.

Private cables from Glasgow and Liverpool to J. M. Shuttleworth, Brantford, of date Oct. 5, indicate a good demand for good, well-kept apples. The quality of Canadian apples this year is reported to be so good that early Canadian apples have met with an extraordinary demand. On Toronto fruit market apples bring 50c. to \$1 per bbl.

Cheese.

The cheese trade has experienced a week of dullness and prices have dropped from ¼ to ½c. per lb. For the last week or two buyers and sellers have been apart, and consequently very little business has been done. Factory-men have come down a little in their demands though they are not down low enough to suit buyers, yet cable advices are firm with an upward tendency in values. This, with the downward trend in value on this side, should bring buyers and sellers together and result in more business being done. There has been a large September make and if present

favorable weather continues there is likely to be a large output in October. Stocks, however, are not large at any point and everything points to a favorable outcome to the season's trade providing sellers do not hold for too high prices.

Quotations at Montreal last week were 11¼ to 11½c. for finest western, and 10½ to 11½c. for finest eastern. The exports from Montreal and Portland so far this season show an increase of 226,983 boxes as compared with the same period of last year. Values at the local markets have ruled lower, quotations ranging from 10½ to 11c., with 10½c. the ruling figure. Factory men were not inclined to accept these values.

Butter.

While some in the trade are inclined to the view that the market for the export trade has about reached its lowest point, the reports of large make in Australia would indicate a somewhat unsettled market. The make is falling off here, and the decrease in shipments so far this season is 136,428 packages, as compared with the same period of last year. The *Trade Bulletin* sums up the situation as follows: "The export trade is very quiet, owing to the fact that local dealers are paying prices that are above 11c. the export basis. It is true there are cable enquiries for lots of 100 to 500 boxes of creamery, but when shippers answer them they receive no response. Danish butter is cabled 2 kroner lower in Copenhagen, while Canadian in London is quoted 2s. down. The situation is therefore a little unsettled at the moment. The West Shefford creameries sold at 20½ and 20½c., and were taken chiefly by Montreal jobbers for the local trade. In this market sales are reported of 1,300 boxes and tubs of choice creamery at 20 to 20½c., a few extras being reported at 22½c. Western dairy nominal at 16½ to 17½c. as to selection."

The local market here keeps firm for creamery at 21 to 22c. for tubs and 22 to 23c. for prints. In some parts of the country, where pastures are dry, butter is scarce and prices have reached a high point. Choice dairy butter in pound rolls is in good demand here at 18 to 19c., tubs at 18 to 19c., and pails at 17 to 18c. On Toronto farmers' market pound rolls bring 20 to 24c. each.

Cattle.

The cattle trade is experiencing a little dullness, with somewhat lower values all round. Select feeders and stockers have ruled weak at Chicago. At some American points because of lower values more business has been done in the export line. At Toronto Cattle Market on Friday there was a fair run of live stock, consisting of 854 cattle, 2,250 hogs, 981 sheep and 10 calves. 170 of the cattle were American exporters that were unloaded here for a rest. They were pronounced the finest lot ever seen on this market. The quality of fat cattle offered were only medium, there being a large num-

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Confederation Life Building, TORONTO.

ber of inferior cattle offered. Very few shippers are coming forward. Choice picked lots of butchers' cattle are scarce and prices for these are higher than for exporters.

Export Cattle—Choice lots of these are worth \$4.30 to \$4.50 and light ones \$4 to \$4.25 per cwt. Heavy export bulls bring \$4.12½ to \$4.25 and light ones \$3.12½ to \$3.25 per cwt. Loads of good butchers' and exporters' mixed sold at \$3.90 to \$4.10 per cwt.

Butchers' Cattle—Choice picked lots of these, equal in quality to the best exporters', sold at \$4.40 to \$4.60; good cattle at \$4 to \$4.25; medium, \$3.50 to \$3.75, and inferior to common at 2.50 to \$3.25 per cwt.

Feeders—Heavy well-bred steers, weighing 1,000 to 1,150 each, are worth \$3.40 to \$3.75 per cwt. Light steers, 700 to 900 lbs. in weight, sold at \$3.25 to \$3.35 per cwt.

Stockers—Yearling steers, 500 to 600 lbs. in weight, sold at \$2.25 to \$3 per cwt., and other quality at \$2 to \$2.25 per cwt.

Milk Cows—Twelve milk cows and springers sold at \$30 to \$50 each.

Calves—These are worth from \$3 to \$8 each. Calves have been in fair supply at Buffalo with moderate demand. Choice to extra are quoted there at \$7 to \$7.25, and good to choice at \$6.50 to \$7 per cwt.

Sheep and Lambs

On Friday Canadian lambs were in good demand at Buffalo and quotable at \$5.25 to \$5.40 per cwt., with extra choice lots selling a little higher. Prices were easy at Toronto market owing to supply being somewhat large at \$3 to \$3.40 for ewes and \$2.50 to \$2.60 per cwt. for bucks. Spring lambs sold from \$2.50 to \$3.25 each or from \$3.75 to \$4 per cwt.

Hogs

Although the run of hogs was large on Friday prices were firm and signs were not wanting of another advance in prices soon. Best selected bacon hogs, 160 to 200 in weight, sold at \$5.25, and thick and light fats at \$5.50 per cwt. Unculled ear lots sold at \$5 \$6.20 per cwt.

At Montreal prices rule steady at \$6 for light bacon hogs and \$5.75 to \$5.85 for heavier weights. The *Trade Bulletin's* London cable of Oct. 4th re Canadian bacon reads thus:

"The market is firm, and with light stocks holders are conservative in their offerings. No. 1 Canadian is quoted at 58s. to 60s., and No. 2 at 54s. to 57s."

The Apple Market Report.

"Bow Park," Brantford, Oct. 3rd, 1900. Messrs. Simons, Shuttleworth & Co., cable to-day the following quotations for good sound apples:

Gravensteins 14s. 6d. to 17s.; Fillbaskets and Benheim Pippins 15s. to 17s.; Jenetings 10s. to 11s. 6d.; Maiden Blush 13s. to 15s. Cabashaws, 14s. to 16s.; Colverts 14s. to 15s. Holland Pippins 13s. to 14s. 6d. 20 ounces or King Pippins 17s. to 19s. Ribstons 15s. to 16s. 6d. Snows 16s. 6d. to 18s.; Greenings, 12s. to 14s.; Kings 18s. to 20d.; Baldwins 13s. 6d. to 15s. Only the finest fruit brought the highest figures. Lower grades and conditions ruled from 1s. to 3s. less than the lowest. The demand is active and while receipts continue moderate there is every prospect of a paying price being realized. Messrs. Simons, Jacobs & Co., Glasgow, cable: "The market has a stronger feeling and prices have still further hardened."

J. M. SHUTTLEWORTH.

Deafness Cured Scientifically.

The book of testimonial letters sent to all who write to the Wilson Ear Drum Co., Louisville, Kentucky, U.S.A., is full of attestations from users of this wonderful device in all parts of the American continent, that they have been deaf and now hear by its use. Such a multitude of voluntary statements, all to the same purport, should have sufficient weight with all those afflicted with deafness to at least send and secure the free book for themselves. The common sense method of supplying an invisible drum to the ear is both scientific and simple, and the cost is but a trifle even when the benefits are not taken into consideration.

Facts for Investors

Mr. J. F. McLaughlin has recently returned from a visit to the Canada and Dakota Cattle Company's ranch in South Dakota. He reports everything moving satisfactorily in connection with the operations of the company. Two thousand five hundred tons of hay have been bought and housed for winter feeding. The charter of the company has been secured, and prospects are bright.

In a recent interview with a FARMING WORLD representative, Mr. McLaughlin said:

"The organizers of our company are asked frequently why they engaged in ranching in the United States instead of in the Canadian ranching country.

"In addition to the advantages of proximity to the great cattle markets of the United States, and the specially favorable location of their ranch for grass and water, an additional very strong reason is furnished by the following:

"The *Toronto Globe* of September 26 contains the following despatch from Winnipeg: 'Colder weather, with a very heavy fall of snow, is reported from the west. The snow is said to be seven feet deep in places.'

"A telegram from Mr. Montgomery, of Chamberlain, South Dakota, dated October 1 (five days later), says: 'Weather at ranch delightful as summer—no snow—no signs of approaching winter yet.'

"When one considers that Calgary is situated about five hundred miles further west, and about five hundred and fifty miles further north than our ranch, the great difference in climate, so much in favor of their location, is easily understood."

The Horse Market

Demands Sound Horses Only

Lame horses sell at less than half their actual value and are neither desirable for use or sale. The remedy is easy. A few bottles of



will work a permanent cure for Spavins, Ringbones, Splints, Curbs, etc., and all forms of Lameness. It cures thousands of cases annually. Such endorsements as the one following are a guarantee of merit.

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Dear Sir: After using your Spavin Cure for Cuts, Galls, Spavins, etc., I found one of my horses had a Splint. I thought I would try a Cure, which cured it. Since that time I have cured one other Splint and two Spavins. Now I am not afraid to recommend it to all. I remain,
Yours truly,
H. A. LAWRENCE.

Price, 81¢ six for \$5. As a Remedy for Family use it has no equal. Ask your druggist for Kendall's Spavin Cure, also "A Treatise on the Horse," the book free, or address,
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We have eight 14-inch Grain Crushers on hand made by the Estate of T. T. Coleman. They are standard machines, and we will give our personal guarantee that they will do first-class work. We will sell them for what they will bring. If interested write to us.

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95 PER CENT. hatches are often reported by those who use these Incubators. One reason for this record is absolute uniformity of temperature in egg chamber. Correct instructions for operating; has fire-proof lamp. A great mistake it would be to purchase an Incubator or Brooder without first getting a copy of our 148-page Catalogue. Send 6 cents for illustrated Catalogue of Incubator, Brooder, Poultry and Poultry Supplies. THE POULTRY'S GUIDE, New Edition, 15c. O. ROLLAND, Sole Agent for the Dominion. 4 St. Sulpice Street, Montreal.

A A \$10 Smith & Wesson
Model Revolver for only
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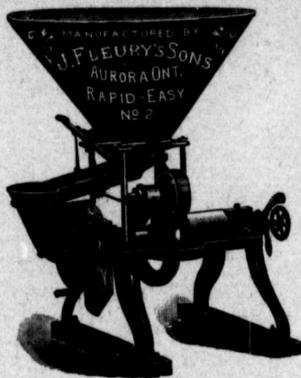
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32 or 38 Calibre

We have secured a lot of U. S. Government model revolvers. While they last we are going to sell them for only \$4.95. These revolvers are made by the celebrated firm of Harrington & Richardson, U. S. Army contractors, and are warranted to kill at 150 yards. Three and a half inch barrel, rubber stock, double action, automatic safety attachment. We warrant these revolvers to shoot as good as any revolver made. We will send one of these revolvers to you on receipt of only \$4.95, or send us 25 cents and we will send the revolver to your express office, where you can examine it and pay the agent balance \$4.70 and charges. Mention what calibre you want. Write for wholesale prices. Address the

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The number of prizes obtained by users of

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at the various exhibitions is conclusive proof that these brands of salt stand unrivalled. For prices, etc., address

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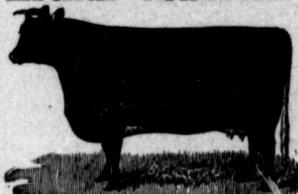
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20 Good Shearling Ewes; 15 Ewes, two and three years old; three Shearling Rams, and 50 Ram Lambs. All registered Cotswolds, and in good condition.

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SHORTHORN CATTLE.

11 imported and home-bred bulls,
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35 home-bred cows and heifers.

Many of the latter from imported cows and by imported bulls. Catalogues on application.

My post-office and telegraph office is Greenwood and my railroad stations are Clearmont, on the Canadian Pacific R. R., and Pickering, on the Grand Trunk R. R., 22 miles East of Toronto.

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