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Farmers and Stockmen

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FIRST PRIZES

Were awarded to 8 exhibitors at the Industrial Fair, Toronto, and Western Fair, London, 1897, who used Windsor Special Cheese Salt in curing cheese exhibited, and to 9 exhibitors at the same exhibitions who used Windsor Special Butter Salt in salting butter exhibited.

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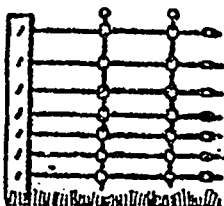


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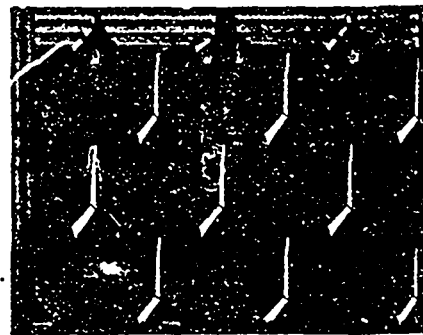
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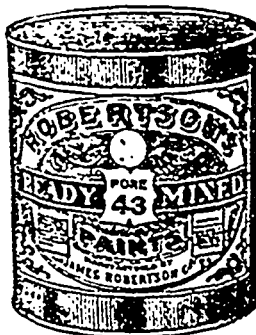


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Barred Plymouth Rock Eggs
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Twenty Cows and Heifers, served by imported
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Dentonia Jersey Herd

Two handsome young bulls for sale, fit for
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splendid type of the St. Lambert family.
Prices and particulars on application.

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Poultry department in charge of Frank R.
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Handsome Pens of White and Brown S.C.
Leghorns, Barred P. Rocks, Black Javas,
White Langshans, Pekin Ducks. Eggs in
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sale. Also Embden Geese or Turkeys.

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This year's fry in fine healthy condition ready
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supplied to the trade.

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Thoroughbred Clydesdale and Roadster HORSES

Jersey and Ayrshire CATTLE

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CLYDESDALE HORSES, JERSEYS and AYRSHIRE COWS from
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Full stock of A.J.C.C. cows, heifers, heifer calves
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**J. H. SMITH & SON, Willow Grove Farm, High-
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Cattle. Price herd at the Industrial.

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Breeders Ayrshire Cattle, Silver Grey Dorkings.

**J. YUILL & SONS, Meadows Farm, Carleton
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IMPROVED LARGE YORKSHIRES.

Boars fit for service,
young sows in farrow,
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bred boars for sale.

Write for prices.

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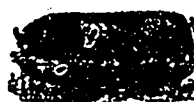
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Large English Berkshires.

BOARS for Service.
Sows in farrow, and
Young Stock, both sexes.
Special reduction in prices
for April and May.
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Choice stock of either
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3 months up. Bred from
the best strains known
to the breeder.
Write for prices.

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Pigs, pairs and trios
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my prices before buy-
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**SHORTHORN CATTLE
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Popular St. Lambert blood 12-year-old bull ready for service to offer, also a number of extra fine bull calves for sale. Some choice heifers 2 years old and milking for sale. Large improved Yorkshires. A large number of pigs ready to ship at of April. No better to be had.

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Some grand lengthy young sows in tarrow. Prices right. Also spring pigs. All from imported stock.

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In my herd there is such blood as BARON LEE, DORSET CHIEFTAIN and WINDSOR SUPREME and other noted strains. Choice stock for sale at reasonable prices. Write for particulars.

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Berkshire Boar, Prince Lee Sired by Baron Lee, imported; dam Premier Bell, imported. This is a grand stock hog with good long b and depth. Also

YORKSHIRES and TAMWORTHES

of both sexes, all bred from prize-winning stock. Write for prices or, better still, come and see stock.

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Maple Grove. Bowmanville, Ont.

Hermanville Tamworths**PIGS**

Ready to wean.

1 Pig, \$10.00

2 Pigs, \$18.00

3 Pigs, \$25.00

Express Prepaid.

Grand bacon stock.

Address HERMANVILLE FARM, P.E.I., CAN.

CHOICE BERKSHIRES

2 good young BOARS, 10 months old, weighing about 220 lbs. each, at \$18. Must go to make room for young pigs. 4 choice SOWS, about same age, due to farrow in April and May. Bred to a grand young boar from Imported Sire and Dam. Price \$18. Also fine lot of Boars and Sows 4 months old

E. E. MARTIN,
Paris Station, G.T.R. Canning P.O., Ont.**The Old Pioneer Chester White Stock Farm.**

Our Great Specialty—Stock for sale, all ages, both sexes, from home-bred and imported stock; pairs not akin; every hog up to date; prices right. Also eggs from pens of fowl—Partridge and Buff Cochins, P. Rock, S.G. Dorking, Cornish Indian Game and Pit Game, Golden Wyandottes, White and Brown Leghorns 13 eggs for \$1; also Mammoth Pekin, Rouen and Aylesbury Ducks, \$1.00 per 9 eggs.

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Importers and exporters of Pure-bred Live Stock. Breeders of Guernsey cattle, Chester White and Duroc Jersey Swine. Stock delivered free in carload lots to any part of Canada. Write for circulars, calendars, etc.

**SUMMERHILL HERD OF YORKSHIRE HOGS****The Lengthy English Type**

Largest herd of imported Yorkshires in America. Purchased from the most noted breeders in England. Also 300 Canadian-bred pigs of all ages for sale. Stock guaranteed as described. All trains met at Hamilton by appointment.

D. C. FLATT, Millgrove, Ont.

.. HIGHEST TYPE OF BACON HOGS.**Oak Lodge Herd of Large Yorkshires**

The Largest Herd of Pure-Bred Yorkshires in America.

This herd has won the best prizes offered for the breed during the last ten years. Only one breed kept, but the choicest of its kind. Three imported stock boars and several sows that have all been winners at the largest shows in England, also winners at prominent Canadian and United States shows. Pigs of all ages for sale.

J. E. BRETHOUR, Burford, Ont.

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Stock Notes

HON. M. H. COCHRANE has recently imported from Scotland three valuable Short-horns for the Hillhurst herd from Mr. W. Duthie, Collynie, the dark roan yearling bull, "Scottish Hero," and the beautiful red cow, "Vain Belle 2nd"; and from Mr. J. L. Reid, Cromley Bank, the red yearling heifer, "Consuelo 2nd." Scottish Hero is by Scottish Archer, out of Missie 134th by William of Orange, and is, therefore, rather more than half brother to Mr. Mills' Royal Champion Marengo, as he is by Marengo's sire, and his dam is half sister to Marengo's dam; his two full sisters at Collynie are excellent cows, and nearly all the Uppermill Missies are excellent milkers. Vain Belle 2nd is in calf to Silver Plate, and is the dam of Mr. Malcolm's prize bull, Vain Beau. This family has produced Mr. Willis' Challenge Cup, Mr. Harrison's Bright Archer, Mr. Thorley's Kingdale Belta, and other prize winners.

Books and Bulletins Received.

Thirteenth Annual Report of the Fruit Growers' Association of Ontario (1898). It contains a verbatim report of the last annual convention, and should be of interest to fruit growers.

Twenty Ninth Annual Report of the Entomological Society of Ontario (1898). This is a valuable report, and should be in the hands of every farmer.

Twentieth Annual Report of the Ontario Agricultural and Experimental Union (1898). This volume contains a complete report of the work carried on by this valuable organization. Every farmer should have one. Copies of this as well as the former two can be obtained free by writing the Department of Agriculture, Parliament Buildings, Toronto.

Herd Register, American Guernsey Cattle Club. Vol. 9, part 38. Containing registry bulls Nos. 5600 to 5738, and cows Nos. 10959 to 11181.

The Clydesdale Stud Book. Vol. 21. Containing mares Nos. 13335 to 13677, and stallions Nos. 10484 to 10664, published by the Clydesdale Horse Society of Great Britain and Ireland.

Report of the Kansas State Board of Agriculture for the quarter ending March, 1899, devoted specially to the modern sheep.

Year Book of the United States Department of Agriculture for 1898. Containing special articles on a variety of subjects of special interest to farmers, profusely illustrated.

Journal of the Royal Agricultural Society of England for the quarter ending March 31st, 1899. Devoted chiefly to flower and fruit growing in England, hedges and hedge making, fattening and marketing of poultry, and insect pests of fruit trees.

SCHOOLS.

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Young Man! Young Woman!

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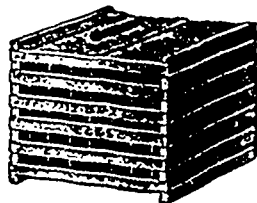
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LIGHT—STRONG

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send to us for
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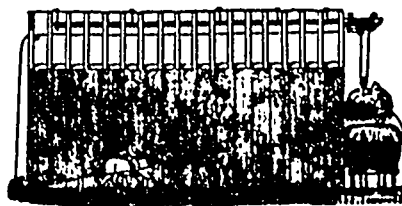
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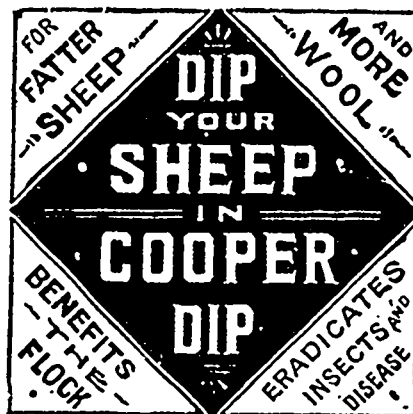
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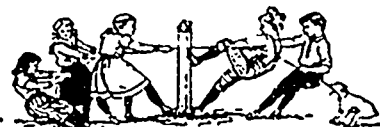
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See their agents before buying for the harvest of
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SPECIAL MANILLA,
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Farmers! Don't be taken in. There is none "just as good." These
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We pack our twine in bags of the size of ordinary grain bags, and we
are not ashamed to put our name upon it. Don't take any other.

CONSUMERS' CORDAGE CO.
LIMITED,
MONTREAL.

FARMING

Vol. XVI.

JUNE 6th, 1899.

No 40

Repair the Fences

The month of June is a good time to repair the fences on the farm. On some farms this is not a very difficult task, as the fences have never been neglected, and consequently only need comparatively little attention; but on other farms, where the fences have been allowed to a certain extent to shift for themselves, the task is not an easy one. When a fence is badly out of repair it would perhaps be much easier to build a new one.

Be this as it may, a few days should be devoted to going over and repairing the fences as soon as the seeding and planting is done. It is poor policy to sow a crop and have it destroyed by the stock breaking into it because of bad fences. But the damage to the crop is not the only loss incurred, as the demoralizing effect such breaking in has upon the stock is about as serious as the injury to the crop. An animal that has once formed the habit of breaking into the grain fields because of bad fences is a nuisance on any farm and the sooner it is got rid of the better. Fences out of repair are incentives to this kind of thing, and many good horses and cattle are rendered totally unfit for pasture life on the farm because of them.

Repairing the fences should be one of the necessary pieces of work on every farm, and if a special effort is made it is surprising how much can be done and how many rods of fence can be gone over in a couple of days. The old style rail fence will soon be a thing of the past, not because it has outlived its usefulness, but because good fencing timber is getting scarce. This old fence is gradually being replaced by the many wire and other fences on the market. But even these modern fences will not last forever without looking over every year. A farm well fenced and with growing crops is as beautiful a sight as one could wish to see, but a farm on which the fences are out of repair and thoroughly dilapidated is a regular eyesore. So we say, keep the fences in repair and make your farm a thing of beauty and a joy forever.

The Export Bacon Trade

The export bacon trade has very much improved during the past few weeks, and a considerable advance in the price of hogs has been the result. Last week choice bacon hogs on Toronto market brought \$5 per cwt., which is an advance of fully 50 cents per cwt. since the middle of the month. This improvement in the export market and the advance in prices has been, to some extent, caused by the extremely low prices for bacon which have prevailed in Great Britain during the past few months. These low prices have tended to greatly increase the consumption of bacon, and to bring about a reaction in values which has resulted in better prices and a better outlook for future business. A month or two ago the exports of bacon from Denmark were very large, but as the price was low it was expected that the supply from that source would soon fall off, as it would not pay the Danish farmer to raise hogs at the price paid. The recent improvement in the situation would seem to show that Danish supplies have been greatly lessened, and that the farmers there have left the field for awhile.

Since the development of the export bacon trade Canadian hog markets have not been so much influenced by the hog situation in the United States as formerly, and

prices here, especially for bacon hogs, are governed by market conditions in Great Britain rather than by the market situation at Chicago and other western hog centres. While this is in a large measure true, still conditions in the Western States, such as a large supply or a shortage of hogs, must have their influence upon the market here. There are evident signs of a shortage of hogs in the west. The *Western Breeders' Journal*, in summing up the situation, after pointing out that the light corn crop last year and the high price of mill feed caused many farmers to unload their hogs as quickly as possible, says:

"Under the aforesaid conditions farmers generally became discouraged or at least indifferent and lost all interest in hogs, those who had no brood sows would not buy any, and those who still owned a bunch sold them off much closer than usual, and the result was that perhaps less than two-thirds the usual number of brood sows were kept over."

The *Iowa Homestead*, in speaking of the pig losses this spring, says:

"The losses this year are quite heavy, owing in part to the severe weather of the late spring. Farmers have lost heavily where they have bred for early litters, but early breeding is not so much the rule with them as it is among breeders of purebred stock. At the same time, their preparations to receive the litters when they arrive are, as a rule, not so comfortable and complete. Breeders of purebred stock have also been large losers in many sections of the west, the loss in early pigs being in many instances as high as fifty per cent., or even more. Indeed, in some large sections of the breeding districts, the pigs farrowed as late as the latter part of April and prior thereto have only averaged about two to the litter saved."

The *Cincinnati Price Current*, of May 25th, a journal whose statements can usually be relied upon, gives the following summary of the situation:

"While the record shows some gain in number of hogs marketed the past week there is a continued large deficiency in comparison with the movement a year ago. The returns of western packing indicate a total of 465,000, compared with 415,000 the preceding week, and 395,000 two weeks ago. For corresponding time last year the number was 540,000. For March 1 the total is 4,655,000, against 5,040,000 a year ago—a decrease of 385,000, or 8 per cent. The quality continues good. Prices have moderately strengthened, and at the close average fully 5 cents per 100 pounds higher than a week ago."

Whether this scarcity in the west affects the Canadian trade or not it is gratifying to know that the situation on this side has greatly improved. The depression of the past few months has been one of the severest the Canadian bacon trade has experienced since its inception, and it is to be hoped that it will be a long time before we shall experience another one like it. There is a somewhat bright side, however, in the fact that the very low prices have increased consumption and caused Canadian bacon to go into more homes than it otherwise would, thus advertising its good quality.

There was an increase of nearly 100 per cent. in our bacon exports in 1898 as compared with 1897, and there is every prospect of a further increase this year. What is required, however, is that the quality of the product should be maintained, and in this a great deal depends upon the condition in which the hogs come to market. In last week's market review we stated that very many under-sized hogs were being marketed and that packers were complaining of some

of them making a soft quality of bacon. It will be in the farmer's interest not to sell his hogs till they weigh at least 160 lbs., and to finish them off upon some good substantial food that will tend to make the flesh and fat more solid. If the hogs are running on fresh grass it is always advisable to feed them, for three or four weeks before marketing, a good ration comprised chiefly of barley, or pea chop, which will make them kill better and produce a better quality of bacon.

Dairy Pointers for June

In this country June is the month of the year in which there is the largest supply of milk at our cheese factories and creameries, and this year promises to be no exception to the rule. With the copious rains we have had during the past week or two the pastures should be in prime condition and able to furnish the cows with an abundance of good, succulent food for the production of milk. The prices, too, are fairly good and should be an incentive to farmers to supply all the milk they can to the factories. This being the case every effort should be made to turn out the very finest quality of product.

It is admitted that June butter is really the best of the year, and there is nothing to prevent June cheese holding the same relative position provided every effort is made by both patron and maker to turn out the finest quality of product. One of the drawbacks to the making of really fine June cheese in many factories is the improper and insufficient curing facilities. Very often June goods when placed in the curing-room are as good as can be made, but the excessive heat, improper moisture and bad ventilation to which they are subjected have such injurious effects upon the product that when the cheese is ready to ship it is anything but a really fine cheese. Under such conditions the maker should be protected and not made to suffer loss because his cheese has deteriorated in quality in the curing process. If all the curing rooms in this country were so equipped that a proper temperature of about sixty-five degrees could be maintained for curing June cheese, and when cured the goods could be placed in cold storage, we believe as good a quality of cheese can be made during that month as at any other time of the year. It is the month in which there is the largest make, and if the quality could be made the very best of the year it would add very much to the profits of the year.

As a rule the month of June is free from very bad flavors in the milk, and if the patron takes reasonable care of the milk it can be delivered at the factory in good condition. It will, however, not do to neglect the milk. When the milking is done, and which, by the way, should be done in as cleanly a manner as possible and in such a way that no dust or dirt will get into it, the milk should be thoroughly aerated after having been properly strained. This aeration should be done in a place where the atmosphere is pure, and may be done by dipping and stirring the milk or by the use of an aerator set on top of the milk can through which the milk is poured a couple of times. But be this as it may, the milk should be thoroughly aerated in some form or other before it is set away for the night. A good way to keep milk over night is in pails hung on a pole elevated high enough from the ground so that dogs or cats cannot reach it. A good stirring a couple of times during the evening is always advisable. During June if everything else is properly attended to it will not be necessary to place the milk in cold water to keep over night. When possible there should be two cans for conveying the milk to the factory, one for the night's milk and one for the morning's milk, otherwise the two milkings should not be mixed together till the wagon is ready to start for the factory.

What with the dairy schools and dairy instructors every maker in this country should know how to make good June cheese. We are not aware, however, that in this, as in other callings, a great deal depends upon the individual. There are men in the business who would not be able to

make the finest quality of cheese even if they attended a hundred dairy schools and had an instructor to visit them every other day. Our advice to such is to seek some other employment and leave the field to those who have the qualities in them necessary for good makers, which are cleanliness, carefulness, exactness, neatness, punctuality combined with a large share of skill, intelligence, and good judgment. We have placed cleanliness first because we consider it most important. A Danish dairy authority has said that there are three essentials to good butter-making; the first is *cleanliness*, the second *cleanliness* and the third *cleanliness*. And if cleanliness is so essential in butter-making it is just as essential in cheese-making. But if the maker has a large share of the qualities we have mentioned, and with the opportunities for instruction which he now has at his very door, there should be nothing to prevent him making the finest quality of June cheese, providing the milk is delivered to him in good condition. If his curing-room is not in the best shape for curing the cheese, he should use his best endeavor with the company or owner to have it improved and do the best he can to keep the temperature as even as possible. Then the whey-tank should not be neglected. It is a common source of pollution around every factory if neglected. Makers should see to it that the tanks are kept clean and pure as well as themselves, and if these are attended to and neatness and cleanliness predominate around the factory the whole will have a good effect upon the patron and be an example for him to follow.

Dairymen and Good Roads

It is often a surprise to us that patrons of cheese factories and creameries do not rise up in their might and demand good roads at any cost. In sections where co-operative dairying has been carried on for years we often find our very worst roads, which during the spring and fall months must be almost impassable. To haul milk five or six miles over such roads would to many seem almost an impossibility, but still it is done and the same thing continues year after year.

If the bad roads in such sections were replaced by roads that would remain good at all seasons of the year the patrons of the factories in these localities would be able to get their milk hauled very much cheaper and would get a better quality of product out of the milk when delivered. We speak advisedly in regard to this latter contention. There is no doubt that milk is often materially injured for either butter or cheese making by being churned and agitated as it is when hauled half a dozen miles on some of those almost bottomless or rough rocky roads.

In this goodly city of Toronto there are block-paved streets so bad that to ride on them gives one a sensation not unlike a quick tumble down a stairway. A year or two ago, before the block pavement was replaced by asphalt, on one of the streets the city milkmen could not drive because the milk would be churned into such a state that their customers would not take it. In order to retain his trade one milkman was compelled to leave his wagon at the end of the street and to carry the milk by hand for a couple of blocks. If hauling milk a block or two even on this rough pavement would have such an injurious effect on milk for family use only what must be the effect when milk is subjected to similar treatment for an hour or two when on the road to some creamery or cheese factory? Is it not reasonable to suppose that its quality will be very much injured for either butter or cheese-making?

A scheme for the formation of a mutual insurance fund for protection against loss by the condemnation of tuberculous cattle has been approved by a meeting of farmers and stock breeders held at Gooles, England. The rate of insurance is to be a shilling per head for bullocks, heifers, and bulls, and two shillings for cows, to be paid by buyers and sellers. Compensation is not to be paid for animals worth less than £10.

Transplanting in the Garden

An important part of the garden work is that of transplanting tomatoes, cabbage, and such like. In this country the practice is to grow these plants from the seed. Very often they are not grown by the farmer but by a gardener or person who has a hothouse and proper facilities for doing so. Many farmers, however, grow these from the seed and it can be done quite readily if a warm and suitable room can be secured in the very early spring for the purpose. But whether the farmer grows these plants himself or purchases from someone great care must be exercised in transplanting them to the garden.

The future value of a plant will depend much upon the way in which it is handled when set out. "Stocky" plants are desirable when they can be had, but slender cabbage and tomato plants will do well if set so that the stems are covered to the second leaf, or farther if the plants are very long. Roots will start out along the stem and the plant will quickly recover from the shock of removal. But in no case should the roots be too far below the surface. Because a plant has a long stem is no reason why the roots should be down where they can do no good and can only exhaust the plant. It is much better to lay the stem in a little trench nearly horizontal with the surface, bending enough to bring the plant above ground. The plant will grow upward if left alone in this position.

A good way to do this transplanting is with a spade and two persons. One thrusts the spade into the ground at an angle, then shoves the handle over to an upright position. The other person places the plant in the opening made by the spade. When the spade is withdrawn the soil falls back around the plant. This is a rapid and easy plan, but the ground should be in good condition, otherwise the plan will not succeed very well. The spade cannot be used to much advantage among clods or coarse manures or in dry sand.

Growing Melons

Nothing is more delicious, and for that matter more wholesome, than melons. They should be grown on every farm if for no other purpose than to make the boy's heart glad and his teeth water, when their lusciousness and juicy sweetness are brought into view when September arrives. Of course there is the temptation to your neighbour's boys (and not small boys either) to plan a marauding expedition to the melon patch some dark night and carry off the watery fruit. But still the thing is worth trying, and we would advise every boy on the farm to set out a good sized melon patch within the next few days. They can be grown with very little trouble, and with reasonable care a good crop can be secured.

A writer in one of our exchanges has this to say in regard to growing melons:

"Some time in May or early in June prepare a piece of rich, sandy ground, well exposed to the sun, manure it and give it a good digging; then mark it out into squares of six feet every way; at the angle of every square dig a hole twelve inches deep, and eighteen over, into which put seven inches of very rotten manure with the addition of a carbo. ated alkali, as the melon draws heavily of this ingredient from the soil; throw on this about four inches of earth and mix the dung and earth well with the spade, after which draw the remainder of the earth over the mixture, so as to form a round hill about a foot broad on top.

When the hills are prepared as above, plant in each, toward the centre, eight or nine grains of good melon seed, distant two inches from one another, and cover them about half an inch deep. When the plants are up, and in a state of forwardness producing their rough leaves, they must be thinned to two or three in each hill; draw earth from time to time round the hills and as high about the plants as the seed leaves; when fit stop them. This oper-

ation should be performed when the plants have two rough leaves, and when the second is about an inch broad, having the first runner-bud rising at its base; the sooner this is detached, the sooner the plants acquire strength, and put out fruitful runners."

Sore Shoulders on Horses

As a rule, this trouble lies in the "breaking in" of the horses' shoulders. When the breaking in is once successfully accomplished, with careful watching the shoulders will stand the hard work well. The young and tender shoulder needs plenty of air, and even when standing the collar with a pad does not permit the air to cool the heated parts. Very often in the spring horses are put to work that have not had a collar on for months. Many of these will have sore shoulders that will remain with them throughout the busy season.

It is not easy to obviate the effect of sudden and hard work on tender shoulders, as the horses cannot be laid off when once the busy season begins. A writer in the *National Harness Review* has the following to say in regard to this matter. "Many will become sore under hard collars, many under sweat pads, then holes will be cut in the parts over the sore places, the hard collars on same will be removed, and larger ones with pads and holes substituted; some will receive applications of axle grease and continue their work with shoulders becoming worse; some collars will be cleaned each night, more will not; a few fortunate ones will have their collars removed at noon and cleaned, and instead of softening axle grease, will have their shoulders (whether sore or not) washed with an astringent, such as a solution of one ounce tannic acid dissolved in a quart of water; this will be repeated at night for a short time and will require from five to ten minutes per team per day. The shoulders so treated will not become sore, or, if already sore, will quickly heal, and they will be able to pull with comfort much heavier loads than can the horse whose shoulders are as raw as his willingness and patience are great."

A Post-office on Wheels

A "post-office on wheels" is an accomplished fact in Maryland. The service was inaugurated on April 3rd, 1899, and consists of a mail wagon drawn by two horses, fitted up with all the conveniences of a modern post-office. It is similar to the mail car on the railway, and the covered wagon is fitted up with pigeon holes for the distribution of the mail *en route*. The clerk in charge has with him a supply of stamps, etc., so that parties along the route desiring to send letters may do so.

The route for this wagon is thirty miles, and it takes eight hours for it to cover the ground. There are 358 families on this route, of whom over 200 receive mail daily. The wagon leaves Westminster (Md.) every morning (Sundays and legal holidays excepted) at 7 o'clock. About 400 pieces of mail are handled daily by this wagon, and it is expected that the number will increase.

The service is entirely free. Matter posted in the Government boxes along the route must be stamped the same as when put into a regular post-office. Congress has appropriated \$500,000 for the extension of free rural mail delivery during the year beginning July 1st next. This will enable the experiment to be tested in many States and districts, and will give this "boon" to a large number of farmers. So far it has given the best of satisfaction. Such a service would make the small cross-roads post-office unnecessary, and if these were done away with a large amount might be saved that would go a long way towards paying the cost of a "post-office on wheels." This is something for our Postmaster-General to consider, and we would like to see rural mail delivery tried in Canada.

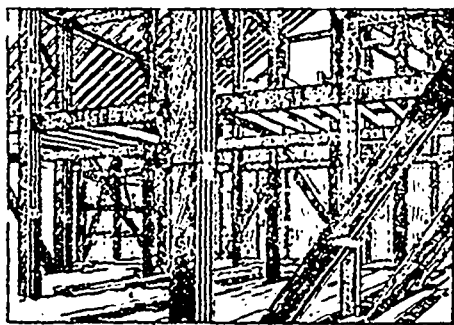
Intensive Farming.

Henry Stewart, in a recent issue of *Home and Farm*, writes of this subject as follows: "Intensive culture of the soil is such a system as shall conserve the fertility of it, as it was in the beginning, when man first took possession of it and redeemed it, as we say, from a state of nature. This redemption indeed, as we are in the habit of saying, was quite a different thing from what the common meaning of the word implies. It has been, in fact, quite the opposite, as we may see any day by gazing upon one of the common, old fields and comparing it with what it was when nature had it under control and the land was burdened with the native products of it, making hard work necessary for the changing of it to man's uses. When thus, as we say, it was redeemed, it was overflowing with fertility. It gave to the hand of the husbandman freely all its reserved riches, accumulated during centuries of a natural process which was the very opposite from that of its culture by man's hands. Nature was saving and accumulating. The mineral elements of the soil needed for the production and support of vegetable life had accumulated for ages, and the wealth of the atmosphere vitalized by the sun's warmth and brought down by the ample rains which had supported during we know not how many centuries of luxuriant growth of the forests and prairies, mixed with these, were all at the service of the cultivators of the soil. But, alas! how extravagantly has this rich inheritance been administered. For years; nay, centuries, we have been as busy as possible exhausting this ancient store without a thought beyond how soon we could get the whole of it and turn it to our uses."

It is much easier to exhaust the ancient store of fertility in the soil than to restore it again. But this is what the farmers in the older sections of the country will have to aim to do if they ever expect to get their farms back to their former productiveness. This is the most important problem that confronts the modern farmer, and when he has once solved it his future success is secured. By conserving one's energies and not spreading out over too much ground a great deal can be done. One of the difficulties in the older parts of this country is that many farmers are endeavoring to work too much land. Farm labor is getting scarce and to work some of the large farms as they should be worked, requires more help than the average farmer has at his disposal.

Plank Frame Barns

In our issue of May 16th we published a short account, with illustrations, of plank frame barns. Since then we have received a letter from a farmer at Leamington, Ont., asking for more detailed information regarding their construction. As far as we can learn there are none of these barns in use



Looking Through the Plank Frame Barn. Fig. 316.

in Canada and therefore we have to go outside of Canada for our information and give it for what it is worth.

Last fall the *Rural New Yorker* took up the question and gave some particulars regarding the construction of plank frame barns, from which the accompanying illustrations and the following description is taken, and which we

think will supply our inquirer with the information he requires:

"In regard to the manner of construction, Mr. Woodward says that, in building this kind of barn, there are no 'steps' in the work of erection; it is rather a weaving together continuously, one plank at a time. There is no such thing as putting a bent together and then raising it as under the old square-timber system. In Fig. 313, the outside plank of the corner post may be set up in place, toenailed at the bottom to the sill, and stay-lathed. Then a single plank of each of the other parts in that end of the building may be set up in the same way, and one or two of the nailgirts (the horizontal pieces) may be nailed on. After that, any half-finished mechanic can see how to proceed, one plank at a time, to the finish, stay-lathing each part until one or more tie-planks have been put in place to hold the thing together. It will be seen at the left of Fig. 313 that the several planks of the post, the brace, and both the upper and lower ties are all interspaced, and these are nailed at each and every joint or crossing, and thus all the numbers are woven together, and the frame grows increasingly rigid. With each added plank, the nails should correspondingly increase in length. Bolts are usually recommended, and he believes, used, but he prefers the wire nails and spikes."



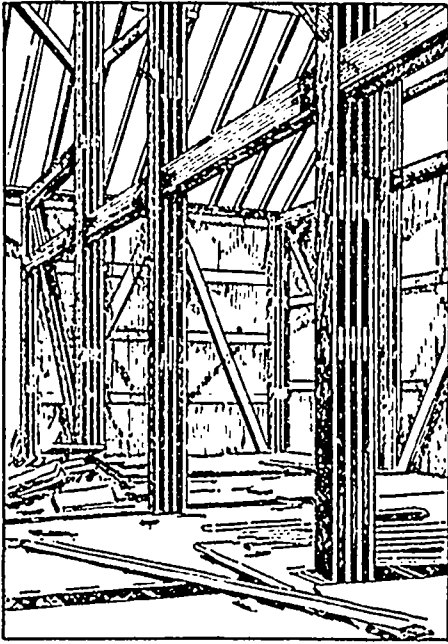
Broadside of the Plank Frame Barn. Fig. 316.

Mr. J. A. Woodward, referred to above, superintended the building of a plank frame barn at the Pennsylvania Agricultural College, and writes as to its value as follows: "Skilled labor is not needed in framing; any apprentice or day laborer who can handle a saw and square and drive spikes is a good hand. We used spikes instead of bolts. It is the strongest frame of its size I ever saw, very much stronger than any square timber frame of the same size. I have examined the barn in company with the superintendent of our college farms, and, though our crops have been immense, and the barn is filled to its utmost capacity (it is 93 by 108 feet in size), there is no sign of strain or yield about it. My opinion of the plank frame is so favorable that I shall use it exclusively in any building in which I may hereafter be interested."

Mr. S. G. Gilcrest, of Ohio, built a similar barn last year, and describes its construction as follows:

"Last November, I built a barn with a frame after the plan of Mr. John L. Shawver. This frame is made entirely of planks—2 x 4, 2 x 6, 2 x 8, 2 x 10, and 2 x 12 inches, but very few of the latter size, only the collar beams. The posts are 2 x 8, the joist beams 2 x 10, and the braces are of the lighter timbers. This barn is 40 x 80 feet, with 24 foot posts. There is a basement eight feet high throughout the entire building, with a 12-foot driveway through the

centre the short way. This basement is used exclusively for live stock, all the space above is for hay, and there is no timber from the floor to the comb, in the way of handling it. Whether this frame is as strong, at all points, as some of the mammoth timber frames (much of which is used) we have seen in barns, would be difficult to decide;



A Corner of the Plank Frame Barn. Fig. 313.

but I am convinced that the Shawver frame is abundantly strong for all purposes for which a barn is used. My barn is now nearly full of hay; I observed it pretty closely, and I cannot see any place where there is any lack of strength or symmetry. It stands as straight and trim as any building, in fact there is no chance for it to do otherwise, as it is so well braced and supported wherever needed."

Sheep Eating Weeds

We have had occasion in these columns to refer frequently to the fact that sheep are the greatest destroyers of weeds of any animal kept on the farm, and we are glad to have our views upheld by such an authority as the *American Sheep Breeder*, from which we take the following:

"The fact that many plants usually classed as weeds are in pastures often eaten by sheep, either to give variety to their diet or for the tonic effect on their systems. It mentions the common dandelion, parsley, yarrow, and even thoroughwort, as desirable for this use. In England sheep growers purposely sow yarrow when laying down pastures for sheep, and also the narrow-leaved plantain. Most of these are somewhat bitter to the taste, and the liking for what is bitter seems to be a peculiarity of the sheep, which often leads it to eat leaves that are poisonous rather than medicinal. It is possible that all these plants have medicinal qualities, but the sheep does not know enough to doctor itself with them, as sheep are often poisoned by eating leaves of laurel when allowed to run where that poisonous plant grows. We have known sheep to be poisoned when an overdose of cherry leaves was probably the cause. The leaves of the cherry, peach, almond, and of the oleander, all contain prussic acid, and are all poisonous when eaten in any quantity.

"It is chiefly, we think, when pastures are dried up, and the sheep's appetites are clamorous for some green thing, that these fresh leaves are most attractive to them. Yet we should hate to leave even dried leaves of the cherry, almond or peach where sheep could eat all they liked of them. The craving for something bitter probably explains why sheep will eat the tender shoots of nearly all deciduous trees, which are almost invariably bitter to the palate.

With regard to anything uncleanly as regards animal excrement or blood, the taste of the sheep is more refined and sensitive than that of any other farm animal. But it unquestionably does have a liking for what is bitter to the taste, and will eat the small, wormy apples that a hog will turn up his nose at, while the hog will pick its favorite food among filth that no sheep could be brought near enough to touch. In the early summer, while the small, bitter, wormy apples are falling, the sheep is, therefore, a much better scavenger in the orchard than is the hog."

The Kind of Horse to Breed

At the annual meeting of the National Horse Breeders' Association, held at Chicago in March last, Col. F. J. Berry, the president, in his annual address made the following statement in regard to the kind of horse to breed:

"The American horse breeders have had a severe lesson. It has taught them that every horse should be bred for a certain purpose and of a certain type and of a specific class, with all the size, shape and quality that the market demands. The small horse is a thing of the past. It has proven a failure and an unsatisfactory investment. The grade has been raised every year during the last few years, and each successive year requires a larger horse and one of better quality to meet the demands of the market, and he must be a horse of his own class and be an up-to-date market horse, and to be the most saleable he must be decidedly of one of the following classes, which are known as the export classes of horses, and at the same time they are the most saleable and profitable for all American markets:

Class No. 1—Road, Carriage and Coach Horse.

Class No. 2—A Cab Horse.

Class No. 3—An Omnibus Horse.

Class No. 4—A Draft Horse.

Class No. 5—The American Trotter or Road Horse.

Here is the type set for breeders to aim to produce, as the old way of breeding without system proved so disastrous and a great failure. A proper study of these types will enable the breeder to meet the demands of all markets."

The Barn Floor

Mr. J. S. Woodward, of New York State, gives the following account of a new barn floor recently put in by him:

I have built a number of barns and in my last one I put in a different floor from any I ever saw, and eight years' use has fully sustained the claim that it is perfect. It has also the advantage of being cheap. I first put down a floor of good quality, well seasoned hemlock boards one inch thick and all of a width, twelve inches, these I nailed with three 8 penny nails in each board in each joist. Over this I laid the best quality of water proof paper. On this I laid another floor of well-seasoned Norway pine one inch thick, boards of the same width as the hemlock first laid. I had this lumber surfaced and jointed so as to have edges straight.

To commence a board was ripped in the middle, so as to cause the two thicknesses to break joints. The pine was crowded up tight and three 10 penny nails put into each board in each joist.

Of all the floors I have ever had in a barn over a basement in which stock were kept this is the first one that has never hampered up in places. The paper makes it absolutely tight so that we put grain directly on the floor in granaries and it never moulds, and the same with the hay and grain in mows.

To have put in a floor of two inch pine tongued and grooved, or with grooves and a hard wood tongue, would have cost me \$36 per 1,000 surface feet of floor. I got the hemlock for this floor for \$10, the pine planed for \$14, and the paper cost \$1, which made the whole cost of material \$25 for the same area. I don't think it any more work to

lay the double floor than to have put down the plank floor.

I never saw a stable floor so good as one made of tough clay and gravel, one third clay and two thirds gravel. Get tough, clean clay and mix it two thirds clean, with rather coarse gravel, and make into the consistency of mortar and put into place, and as soon as it is dried enough to begin to crack pound or ram it down hard, the harder the better, and continue this until dry. With plenty of bedding this will last as well as planks and is much pleasanter for a standing surface than plank or cement. If for lack of bedding horses ever paw out holes it can be easily repaired by simply filling with same and ramming down

Pastures

By Prof. Shaw

Pastures are either natural or artificial. Natural pastures are those which are indigenous to the country. They cover the ground in the open prairie when first occupied by the settler, and they grow, as it were, spontaneously in forest areas where the forest is cut away. The former are usually spoken of as native prairie pastures, and, though succulent and nutritious while they last, the season of their succulence is brief. The latter, the artificial pastures, composed mainly of blue grass and white clover, are superior to the former, inasmuch as they furnish succulent food spring and fall, whereas the former only furnish it in the spring or early summer.

If, therefore, our stock is to have suitable pastures during all their growing seasons, these must be grown in an artificial way. Some of these pasture crops may be grown on the upland and some in the bottom lands or in sloughs. The former include winter rye, timothy and clover, mixed grains, sorghum, corn, the Dwarf Essex rape and Australian brome, and the latter include temporary or permanent pastures sown with certain natural grasses. These will be considered separately.

Winter rye is mentioned first, since it is the earliest pasture that we can have in our State. Sown at the rate of two and one half bushels per acre, late in August or early in September, it may be made to furnish abundant pasture from the opening of spring to well on in May. When pasturing it, keep it cropped reasonably short, since as soon as it is allowed to joint its power to produce pasture that will be relished is gone. But dairy cows in milk should only be pastured on it during a few hours of the forenoon lest it taint the milk.

Timothy and clover pasture will be ready as soon as the rye pasture is done. Sometimes it is not easy to get a stand of these because of dry weather. Let us look at this question for a moment. These grasses usually start well in the spring, but fail later in a dry season. Why do they fail? They fail from want of moisture. The crops amid which they grow take the moisture and overshadow them, hence when the crop is cut, and dry weather follows, the grasses perish. Let us heed the lesson and try to grow them without undue shade, and on land that will hold moisture. These conditions will be found most perfectly on corn ground only stirred on the surface in preparing it for the crop and when the grass seeds are sown with crops of winter rye and barley.

Next in adaptation comes wheat, and after wheat oats. Winter rye stools less than other kinds of grain, hence it does not shade the grasses so completely. It is also cut early and the grasses are exposed before the hottest and driest season. The seed also can be sown early on winter rye, and, if covered with the harrow, will be much more sure to grow. Barley stools less than wheat, is less tall, thus letting in more sunlight, and is also cut earlier than any other kind of grain. When grass seeds are sown with wheat or oats on spring plowed land, and the season turns dry, they are almost sure to fail.

What Science is Doing

Sometimes it is wise to call a halt in our own affairs in order that we may be able to note more clearly what progress is being made in other fields of usefulness. While the agriculturist is busy with his land, his crops and his stock, the scientist is actively pursuing his investigations and endeavoring to solve the problems of the universe and the mysteries of nature about us on every hand. Several new discoveries in this wide field have been made recently which may have considerable effect upon the world's progress in future years. There are two of these discoveries that have perhaps aroused more interest than the others, namely, wireless telegraphy and liquid air.

Of these two discoveries that of wireless telegraphy is perhaps attracting more attention just now than the other. This consists in sending messages without wires on the waves of the air. Recent experiments in sending messages across the English Channel between France and England without wires have taken the invention from the experimental stage and placed it upon the plane of practicability. Messages were transmitted with perfect freedom and replies received in less than a minute. The apparatus necessary consists of vertical masts placed at two points between which messages are desired to be transmitted. The telegraphic apparatus may be placed in a house near the mast. On the top of the mast is the transmitter and receiver which sends off the message and receives the reply. The distance that a message can be sent depends upon the height of the mast.

It is not expected that this plan will replace to any great extent the present system. The objection to the wireless system is that there is no secrecy about it, and the messages may be broadcasted through the air to any number of receivers located within the circle of influence. Though it may be useful for signalling between ships at reasonable range it will be impracticable to use it for conveying messages across a large body of water such as the Atlantic Ocean. For instance, the radius of the earth being 4,000 miles, it would require towers 1.038 miles high to send a message between New York and London. It may be possible in time to improve the system so that these objections may be overcome, and if so this new discovery will work wonders in bringing nations and peoples into more intimate intercourse with each other.

The liquefying of air has its most useful sphere in the field of power and force. By condensing the air into a liquid, as has been accomplished, and then allowing it to expand into air again, a great amount of power is secured, which may be utilized for any purpose for which steam or electricity is now used. The inventor, Mr. Tripler, is said to have made the statement that he can produce ten gallons of liquid air from a compressor driven with three gallons. Many scientists doubt this statement, as it is, to a large extent, producing something from nothing, which is an impossibility, and in keeping with what was claimed for the Keely motor.

It was hoped some time ago that the penetrating Roentgen Ray, or, as it is commonly called, the X Ray, would prove of value for curative purposes, but this hope has been abandoned by the medical profession. It is claimed, however, that the Ray can be used effectively to diagnose disease in the human body, particularly consumption. It has been used with good results for this purpose, and old tubercle scars located in patients who never suspected they had been attacked by the disease. By diagnosing the disease at this early stage, special treatment can be given and the disease checked before it has reached an acute stage. Though there is no record of its having been tried, it might be possible to locate tuberculosis in cattle by the same method. At any rate, we would like to see the experiment tried.

Some attention is being given, more particularly in Germany, to the use of electricity in agriculture. Steam power for tilling the land is only applicable to large farms, but it is claimed that when electric power can be distributed from central stations it can be used in many effective

ways, even on small farms. An electric current may be produced in many ways. Water power, steam, oil, gasoline engine or wind-power may be utilized for this purpose. Electricity may be used on farms for lighting and heating. Where it has been used in European countries for outside work such as plowing, etc., it is utilized in the same way as steam power. A French scientist, however, claims that by the use of electric cables power may be distributed over a number of fields, which may be used for plowing or like work.

Professor See, of the United States Naval Observatory, has announced a new theory of the world's formation which is, in brief, that the temperature of a gaseous star varies inversely as its radius. In other words, when a gaseous body shrinks, its temperature increases, or, to make the illustration specific, our sun, which is known to be growing smaller, is therefore growing hotter. This is exactly contrary to the accepted belief that the sun is cooling off. From this hypothesis the Professor reasons that at one time the condition of our solar system and of all other stellar systems was a formless swarm of icy masses floating like some great flock of birds in blue space. This vast cold nebula sets up a slow motion which is the beginning of development. It revolves on its axis and condenses gradually by the attraction of gravitation. As it grows smaller it revolves a little faster. In the course of a few million years its motion is so fast that a part of the mass not able to keep up is detached, forming a planet, and, as the process goes on, more planets are formed, the central mass gradually becoming hotter. All this is directly contrary to some of the current beliefs, which represent our solar system as beginning as an unpalpable nebulous mass, heated to an almost inconceivable degree. This mass by revolving threw off the planets in the same way, only they were hot and are gradually cooling off.

(Since writing the above we have learned that Mr. Tripler denies stating that he could produce ten gallons of liquid air from three gallons.) Ed.

Hard on the Scrub

The people of Colorado are about to adopt a practical method towards preventing the production of scrub live stock in that state. The law will follow the principle that it is easier to check a disease before its germs have spread contagion and similarly it is much better to kill a scrub before its miserable conception than after its wretched bringing forth. The law which will come into force on July 6th provides that no mustang or inferior stallion, no inferior bull, and no inferior ram shall be allowed to run at large. Not only will this be a punishable misdemeanor, but any stock raiser who finds an inferior sire running at large may castrate the animal. Any person allowing his cows to run at large upon the public ranges of the state must furnish a high-grade bull for every twenty-five cows so running. Jersey bulls will not be allowed to run at large under any pretence whatever. Where so much live stock runs at large as in some of the Western States this should prove an effective means of preventing the production of "scrub" animals.

Mean Trick on the Hens

Yankee Way of Making them Work Overtime

"I hate to tell this story," said the man from Long Island, as he raked his chin whisker with his fingers. "It's a tale of deception and the betrayal of the confidences of faithful, hard-working creatures.

"Well, to boil it down, it was this way. A thin-faced Yankee moved over from Connecticut, bringing with him about fifty hens. He fixed up the old barn on the

place next to mine, which he bought, and he installed the poultry, with three or four arrogant roosters, in this here barn. He gave out, although he didn't talk much, that he was a-goin' to run an egg farm. He called it an egg ran .n. As he wasn't sociable to any large extent, and was 'a the habit of drinkin' by himself, nobody paid much attention to him. We let him potter around and just formed the conclusion that he was a mighty mean man. And, by ginger spruce! he was the meanest low-downedest cuss that I've ever run up against, and we have some purty mean members of the tribe over in Long Island.

"Well, things went along, and this fellow—Perkins was his name—went down to the railroad station every day 'n' shipped his eggs to N' York. One day Sam Martin came to me and sez, sezsee:

"'Joe, how many hens has that 'ere Perkins fellow got layin' for him?'

"Well, I didn't know edactly, but the postmaster, who keeps the grocery store as a side-show to his business with Uncle Sam, he chipped in 'n' says: 'Why, he's only got fifty hens: I counted 'em.'

"'That's jes' what I thought,' says Sam, 'and that's why I ast ye. Ye see, that fellow's sendin' about twelve dozen eggs to ther city every day. He can't make eggs, 'n' he don't steal 'em, for nobody's missed none, so where'n thunder does he get 'em?'

"To tell the truth, we all thought Sam was mistaken, but the next day I was down at the railroad station, and so were a lot of others. Sure enough, Perkins shipped about twelve dozen eggs to the market.

"Now, you folks who live up here can't think how that Perkins egg situation bothered us. We stopped talkin' politics, church squabbles were lost sight of, 'n' we didn't do anything but talk about the Perkins egg output daytime and in the post-office at night. Bimeby it came to a crisis. The strain was a-gettin' too heavy. We were losin' sleep over the matter. It was decided that we must investigate. We appointed a committee, and went out to Perkins's place. But do you think he'd let us get within ten feet of that barn? Nary.

"We felt bad over our throw-down for a day or two, till finally somebody suggested that Perkins had cast a spell on the hens. The thing looked supernatural, uncanny, you know, so, to get at the gist of the whole thing, we decided to sneak out to that barn some night about midnight. Well, we did 'n' I'll never forget that night till my dying day. We sneaked up to the barn. Everything was quiet, 'n' we didn't notice that he'd run electric light wires from the big hotel into the barn. Howsumever, we got bold, 'n' one of our gang threw open the barn door.

"Say, gentlemen, it was the saddest sight of my life. I've seen deceived women and such, but this beat 'em all, for those hens were dumb creatures. Whatjer think this mean cuss of a Perkins had done? Well, he'd hung up painted scenery, like ye see in theeayters, all around the sides of the barn, to look like landscape. Then from the middle of the roof hung down a dozen electric lights. Around the sides of the barn, in their boxes, set the most woe-begone, dejected, worn out set of hens you ever saw. If you ever saw agony in a hen's face it was there. Why, they had almost human lines of care writ in their faces.

"You see the game of this Perkins party was a slick one. It was this away. He'd turn on the electric lights for four hours 'n' the hens would do their duty 'n' lay their usual eggs. Then he'd turn off the lights, 'n' the hens would think it was night 'n' go to bed. He'd let 'em sleep for four hours 'n' then slap would go the lights on again full glare. The misguided hens would think it was another day, and strain themselves—work overtime, as it were—and lay another egg apiece. The poor things didn't know how they were fooled, but they knew something was wrong, 'n' the appealing looks they turned to us made us almost cry. Say, some of those fowls was on the verge of suicide.

"Well, we held an indignation meeting the next day, 'n' the result was that this Perkins feller moved back to Connecticut to dodge the Cruelty to Animals people."—*New York Sun*.

The Gaited Saddle Horse.

What is known as the gaited saddle horse is becoming very popular in the West and South-western States. The following description of this horse is given by a Western breeder:

"The gaited saddler goes all the gaits of the hunter and the walk-trotter, but he is not so reckless as to jump fences, hurdles and bars, and he is too modest to sport a short tail, and he looks breezy enough without having his mane plucked. In addition to the walk, trot and canter, he goes at least two more distinct gaits, and he often goes four more, making in all seven distinct, clear, clean, unmixed gaits. The gaits required to entitle him to recognition as a gaited saddle horse are walk, trot, canter, rack and running walk, fox-trot, or slow pace. He has his choice of either of the last three named for his fifth gait, but he must go the first four, and he must have the proper breeding or he cannot be recorded in the National Saddle Horse Association."

The slow pace or amble is the least desirable of the seven gaits, and, except as a ladies' saddle horse, is seldom chosen as the fifth gait. The running walk and fox trot are business gaits and are valuable for long distance rides. The walk (flat-foot) should be regular, spirited and quite rapid. If a horse walks four and a half or five miles an hour he is good enough at this gait. The running-walk is faster and easier than the flat-footed walk, but not so fast as the fox-trot. A horse of good endurance and clever at this gait will make from six to seven miles an hour and travel sixty to seventy-five miles a day without great fatigue to himself or rider.

The fox-trot is quite similar to the running walk, but has a distinct loose-jointed motion. This, too, is an all day gait. The trot of a gaited saddler should be quite similar to that of a harness horse but not so extended. The rack is probably the most fascinating gait, and if well done is the hardest on the horse. The canter is the most graceful of all gaits and one that is quite easy for both horse and rider. There is quite a difference between a canter of a gaited horse and the gallop of an unrestrained horse. The gaited horse will go from a walk or a stand still into a canter while the other is forced into it from a trot.

Advertising 80 Years Ago

The art of advertising is not altogether a product of the latter part of the nineteenth century. In the early years of this century horse breeders seem to have had ideas of their own in regard to what constituted an advertisement as the following description of a horse which is said to have been circulated at the Epsom races in 1820 will show.

"On Saturday next, at twelve, will be sold by auction, by Mr. O'Shaughnessy, at the sign of the High Mettled Racer, in Skibberton, the strong, staunch, steady, stout, sound, safe, sinewy, serviceable, strapping, supple, swift, smart, sightly, sprightly, spirited, sturdy, shining, surefooted, sleek, well sized, well shaped, sorrel steed, of superlative symmetry, styled 'Spanker,' with small star and snip, square sided, slender shouldered, sharp sighted, and steps singularly state's, free from strain, spavin, spasm, stringhalt, strangury, sciatica, staggers, scouring, strangles, sallenders, surfeit, stams, strumour, swellings, scratches, starfoot, splint, squint, squirt, scurf, scabs, scars, sores, scattering, shuffling, shambling gait, or symptoms of sickness of any sort. He is neither stiff mouthed, shabby coated, sinew shrunk, spur-galled, saddle galled, shell-toothed, shine gutted, surbated, skin scabbled, short winded, splay-footed, or shoulder slipped, and is sound in the sword point and stiffl joint, has neither sick, spleen, stiffness, snaggle teeth, sand crack, starron, coat, swelled sheath, nor shattered hoofs, nor is he sour, sulky, surly, stubborn, or sulien in temper, nor shy, nor skittish, slow, sluggish, nor stupid; he never slips, trips, strays, stalks, stops, shakes, snarvels, snuffles, snorts, stumbles, or stocks in the stables, and scarcely or

seldom sweats; has a showy, stylish, switch tail, and a sale, strong set of shoes on; can feed on soil, stubble, sainfoin, sheaf oats, straw sedge, or Scotch grass; carries sixteen stone with surprising speed in his stroke over a six foot sod or stone wall. His sire was the Sly Sobersides, out of a sister of Spindle-shanks by Sampson, a sporting son of Sparkler, who won the sweepstakes and subscription plate last season at Sligo. His selling price—sixty-seven pounds sixteen shillings and sixpence sterling."

CORRESPONDENCE

Commercial Fertilizers

Alberts' Thomas-Phosphate

To the Editor of FARMING:

I have been a good deal interested in the remarks made by Mr. George Wright in regard to his experiments with Thomas-Phosphate. I can scarcely conceive it possible that a dressing of phosphate, and particularly of the durable Thomas Phosphate, would not have some beneficial effect, yet I can readily understand, and especially under such circumstances as Mr. Wright describes, that this effect might easily escape ordinary observation. For instance, in the corn crops, wheat, oats and barley, a difference of yield of a few bushels per acre need not necessarily make any appreciable difference in the *appearance* of the crop. And, indeed, under certain circumstances, the poorer crop would be very likely to make the more attractive showing of the two.

And again in the matter of quality, I have frequently seen a dressing of phosphate improve a sample of wheat, and also of barley by several shillings per quarter, and yet make no perceptible difference in the crop, except by special examination immediately before harvest. This I saw in particular last summer at the two leading experimental stations, the famous Rothamsted, presided over by Messrs. Lawes and Gilbert, and the farm of the Royal Agricultural Society of England, at Woburn. The crops dressed with ammonia looked decidedly more vigorous than those dressed with phosphate, and there was no particular difference noticeable in the grain until entering upon the ripening stage; and then the nitrogenized grain began to shrink and shrivel, while that fed with phosphate continued to fill out and complete its development into a perfect sample.

But the particular circumstance I notice in Mr. Wright's case is that he tells us *all* his crops were *excellent*, both where phosphate *was* applied and where it was *not* applied. This shows that his land was already in a high state of fertility, so much so as to be, for the time being, scarcely amenable to further manurial influence. This principle is thoroughly recognized in England, and land for experimental manuring purposes is systematically impoverished by a course of exhaustive cropping before being considered a reliable index to the action of the various manures.

This principle was fairly well defined in the December number of the Royal Agricultural Society's *Journal* for 1897, and the question appears to me of sufficient importance to your readers to justify the giving of a short résumé of it. Certain errors of results had been attained in one series of experiments, of which the report says. From this it appeared that, even with the poorer manuring, crops of wheat and barley about as heavy as the land could produce were actually obtained. This being so it would not be possible for the richer manure to give more than the maximum yield for the land, and accordingly the difference between the richer and poorer manuring could not be brought out. It is well known that land in high condition is unsuited for experimental purposes, just for the reason that a moderate dressing may produce on such land the maximum crop the land can bear, and so give just as good a result as a more liberal and expensive application."

This was light sandy land, and by some previous tenant had been allowed to get foul with weeds, that it had been

assumed that it was in low condition as regarded fertility. But after being cleaned and worked this was found not to be the case, but that it was in much too high condition to bring out reliable manurial comparisons; and indeed for several years afterwards it produced considerable crops without manuring at all. I may state that a further enquiry into the history of this particular piece of land elicited the fact that it had been in permanent pasture up to a few years previously. There was evidently a considerable store of accumulated fertility remaining in the soil, and this, a course of cleaning and thorough cultivation liberated.

It is, however, highly probable that the phosphatic dressing *has* been beneficial, and, at the same time, it is tolerably obvious that rather is Mr. Wright to be congratulated on having his land in such a high condition of fertility and crop producing power, than that Thomas Phosphate is to be considered in default for not having forced crops beyond that desirable zenith—"excellent."

FRANK WALLIS.

Lincoln, England.

The Crop Outlook in Prince Edward Island

To the Editor of FARMING:

The weather here is decidedly cold, with frosts almost every night. Fruit buds are all killed and the fruit crop on the Island will this year be *nil*, notwithstanding the laudable efforts of the Fruit-Growers' Association. It goes to show how little man can do to meet the will of the Creator. It is very dry and a drouth is imminent. Seed

is very slow in germinating. Grain in the soil two weeks has not yet shown above ground. The wheat blade above ground looks puny and sickly. No rain has fallen since the 11th April, and if rain does not fall soon much of the grain will fail to germinate.

This is a bad spring for dairying, as no grass appears. Cows require to be fed as in winter, and this few can do. The hay crop will be an entire failure. Farmers are already preparing to sow crops to be made into hay. Farmers are, at least in this part of the country, becoming quite despondent. The outlook is certainly not hopeful. Many farmers have thrown up the sponge and expatriated with their families to the New England States. One day last week two (2) families, several young men and two young girls, all from this vicinity, departed for Boston. The exodus of farmers has become serious.

J. A. MACDONALD.

Hermanville, P.E.I., May 23, 1899.

The National Sheepbreeders' Association of England has adopted a resolution in favor of the compulsory dipping once a year of all sheep, with a view to the eradication of sheep scab.

The Cumberland and Westmoreland Chamber of Agriculture of Great Britain has passed a resolution to the effect that any proposal for stamping out tuberculosis by means of the slaughter of all animals which react to the tuberculin test is quite impracticable.

An English scientist, Professor Penberetey, gives a flat denial to the generally expressed belief that consumption was chiefly propagated by animals. In the human race the most fertile seat of infection is man himself.



A GROUP OF SHETLAND PONIES.

The Farm Home

The Country Home.

A Paper Read by Mrs. F. M. Carpenter
Before the Saltfleet Woman's
Institute.

(Continued from last issue.)

Educate the boys and girls on the same moral plane. Right is right and wrong is wrong. Teach them kindly words, that sympathizing attentions, watchfulness against wounding others' sensitiveness, cost but little and are priceless in their value, and that a good name is more to be desired than riches. True are the words of Shakespeare: "Good name in man and woman dear, my lord, is the immediate jewel of their souls. Who steals my purse steals trash, 'tis something, nothing, 'twas mine, 'tis his; and has been slave to thousands. But he who filches from me my good name robs me of that which not enriches him and makes me poor indeed."

Young people need employment. Everything ought to be done to conduce to their happiness and to give them joy, gladness and pleasure. There are three most joyous sounds in nature—"the hum of a bee, the purr of a cat and the laugh of a child." They tell of peace and happiness and contentment. If possible have music in your homes. Lovers of music must echo the words of Gounod in his letter to his mother when he says: "I see nothing more imposing and more touching than a grand musical work. Music is so sweet a companion to me that were it excluded from my life I should be deprived of a great deal of happiness." We who enjoy it in the home know what a source of pleasure it is.

Have the evening lamps burning cheerfully, such bright lights that the rooms will be pleasant places to be in. Do not shut up some of the rooms for company, but use the whole house for the family, and provide for them the best it can produce; it is none too good for them—for our own. Provide the best papers, periodicals, and books for their perusal, and encourage reading, study, and discussion among them. Have games and amusements in abundance. Through all ages and climes, with every race and tribe since the world began, men and children alike have sought to be amused. Monotonous indeed would life become were it not for occasionally looking forward and anticipating some source of pleasure.

It is not alone in passing a pleasant hour that amusements are useful, they assist in quickening the perceptions, in expanding the muscles, in invigorating the system and in driving away care. They may be made an adjunct to education and aid us mentally, morally and physically. The boy who

can lead his playmates in the game is the one most likely to lead them in the school-room, and the mechanic who can unravel the mysteries of a puzzle is the one most apt to learn the intricacies of his trade or calling. Rather let play be an ideal which we may strive to reach than a frivolity from which we would fly. Give us the man who can play his game heartily and then go to work, rather than the one who has no game to play, good though his work may be.

We require amusements and recreation almost as much as we need food and raiment, and wise is that parent who early teaches his children to seek their pleasures at home in place of abroad. All of us, even the youngest, have heard of cheerless homes from which the children steal away to seek in other channels the sports and pastimes that are there denied them, and all of us, especially the older ones, have tender recollections of bright firesides where, when the lessons and labors of the day were over, we gathered to indulge ourselves in festive amusements. If we have such attractions about our homes we will not find so many of our young people leaving the farm home to find their pleasures amid the whirl and excitement of city life.

We find our greatest men-to-day leaders at the bar on the bench, in our legislative halls, in every commercial enterprise, in fact in nearly every walk in life were country boys, born, reared and educated in the freedom of the fields and woods, and revelling in their childhood days in the pleasures of the country home.

Encourage the children to bring their playmates home with them, giving them time and assisting them in having pleasant social gatherings. It may be a little bother, but it will enable you to keep on a more familiar footing with them and to know their associates. As parents link your pleasures, your interests, everything in the home with your children. "A parent's love it is a gleam of sacred light. What makes the world an Eden seem without its gentle cheering beam all would be night."

(To be continued.)

Frances Willard's Health Rules.

The following are the "Golden Rules of Health," established by her father, which Miss Willard followed in her girlhood:

"Simple food, mostly vegetables, fish and fowls.

"Plenty of sleep, with very early hours for retiring.

"Flannel clothing next to the skin all the year round; feet kept warm, head cool, and nothing worn tight.

"Just as much exercise as possible, only let fresh air and sunshine go together.

"No tea or coffee for the children, no alcoholic drink for anybody.

"Tell the truth and mind your parents."

Every Day Recipes.

HAM BALLS.

Put through a meat cutter four pounds of cold boiled ham, fat and lean together. Add half a dozen hard-boiled eggs mashed to a paste, one tablespoonful of lemon juice, two tablespoonfuls of finely chopped parsley, one-half of a teaspoonful of onion juice and four tablespoonfuls of melted butter. Pound and mash to a paste and make into balls half the size of an egg.

COFFEE CAKE.

An excellent coffee cake that will keep indefinitely, calls for one cupful of butter, one of brown sugar, two cupfuls of molasses, one cupful of cold coffee, one teaspoonful of soda, one pound of raisins, a tablespoonful of cinnamon, a teaspoonful of ginger and one of cloves, a little shredded citron, four eggs and four cupfuls and a half of sifted flour. Bake in a moderate oven for an hour.

POTATO SOUP.

Wash, pare and boil three potatoes in boiling salted water until very soft. Put one pint of milk, one stalk of celery and one slice of onion in a double boiler. Cook one tablespoonful of butter and one of cornstarch together, with a little of the milk. Mash the potatoes, add the milk, the cornstarch and butter, and let it boil one or two minutes; add one teaspoonful of salt and one saltspoonful of pepper; strain and serve hot.

APPLE MERINGUE.

Pare and core five or six apples and put them in a shallow pudding dish. Mix one saltspoon of cinnamon with one-half a cup of sugar and fill the cores. Put a bit of butter over each apple and one to two tablespoonfuls of water in the dish. Bake until the apples are soft. Make a frosting with the whites of three eggs, one cup of powdered sugar and the juice of one-half a lemon. Let it brown slightly in the oven and serve it hot or cold, with sugar and cream.

DEVILED MUTTON.

Cut some thick slices from a leg of cold underdone mutton. Score them with a sharp knife. Mix together one-half of a teaspoonful of papriks, one-quarter of a teaspoonful of salt, and one-half of a teaspoonful of made mus-

tard and rub the slices with the mixture, working it well into the scorings. Prepare a sauce with one-half a cupful of the dish gravy, one-half of a teaspoonful each of Worcestershire and mushroom catsup, one teaspoonful of lemon juice and four tablespoonfuls of port wine and heat. Broil the slices of meat, arrange them on a hot platter which has been well rubbed with a cut onion or clove of garlic, pour a little of the sauce over them and serve the remainder in a small boat.

Mrs. Rorer's Way of Making Lemonade.

The juice of one lemon, with three tablespoonfuls of sugar and half a pint of water, may be used as lemonade. As a rule, however, lemonade is made by boiling sugar and water together, using a little of the rind. When the syrup is cool you make it palatable with the lemon juice.

An Ideal Bedroom.

Many people have a mistaken notion that unless one has plenty of money it is useless to attempt anything beautiful in the way of house furnishing.

It was my good fortune once to find an ideal bedroom in a farm house, and for the benefit of others I will say that it was the work of the pretty occupant.

In the first place, the room contained just as few articles of furniture as possible, the owner explaining that she had little time to dust, and it was healthier to have as much space as possible for pure air.

The floor was covered with inexpensive matting and had three large home-made rugs, which were thoroughly cleaned every week in the sunlight and allowed to air all day. The bed was a plain, dark, wooden one with a mattress made of corn husks. It had springs that could not harbor dust, and on top of the mattress was a thick comfort made of strong ticking filled with wool. The bed clothes were heavy blankets and light fluffy comforts. A gay foot quilt of silk patchwork also wadded with wool made a bright spot in the room.

The windows had good dark shades and sash curtains of dotted muslin made from an old white dress. A plain little dressing table without drape, a set of drawers, and two chairs completed the furnishing of this room.

The young lady who had planned and arranged it told me that she had made enough rag carpet for the room and traded it for the matting. The mattress was made from corn-husks carefully dried in the sun and the rugs were woven out of woollen rugs like the carpet.

It did not represent an outlay of more than five dollars in actual cash, and yet it was the neatest and most healthful little room I had ever seen in a country house. Every morning

the windows were flung wide open and the room thoroughly aired. There were no draperies to harbor dust and no heavy feather bed that had been handed down through several generations.

I did not wonder that the occupant was clear-eyed and rosy-cheeked. She was just what all country girls ought to be, a graceful, healthful young woman, a total stranger to drugs and patent medicines, and a blessing to the home in which she lived.—*Hilda Richmond.*

Water Drinking.

When it is remembered that the body is made up very largely of water, it will be understood how important to health is a constant supply of this fluid. Many people have the idea that to drink water in any amount beyond that which is actually necessary to quench thirst is injurious, and acting on this belief they drink as little as possible. The notion, however, is wide of the truth. Drinking freely of pure water is a most efficacious means not only of preserving health, but often of restoring it when failing.

All the tissues of the body need water, and water in abundance is necessary also for the proper performance of every vital function. Cleanliness of the tissues within the body is as necessary to health and comfort as cleanliness of the skin, and water tends to ensure the one as truly as it does the other. These waste materials are frequently poisonous, and many a headache, many rheumatic pains and aches, many sleepless nights and listless days are due solely to the circulation in the blood, or deposit in the tissues, of these waste materials which cannot be got rid of because of an insufficient supply of water.

Hints to Housekeepers.

There is now a fad to have floors of bedrooms treated with paint and enamel finish of the color prevailing in the furniture. The wall covering should match the floor, and the wood-work should be white. Sometimes the wall has a dado of matting or denim that matches the floor in color, while the upper part of the wall is covered with flowered paper.

A new remedy for seasickness comes from Germany. The discoverer says that seasickness is due to lack of blood in the brain, and wearing red glasses will send the blood to the brain with a rush, and so relieve the condition. He ascribes such benefit as may follow the use of champagne and other stimulants, as well as the relief given by lying down, to the congestion of the brain produced, but asserts that the red glasses act more quickly and efficiently.

A woman who studies economy, but not at the expense of good appearance, says that a most satisfactory

petticoat for general wear is made from an old serge dress skirt. It should be of the wiry sort of that material and have the smooth, hard finish rather than the rough surface. Washed and made up with bias ruffles, it is light, durable, and holds out the dress admirably.

To clean brass inlaid work requires more than ordinary care, and the following method should be employed: Make a mixture of equal parts of tripoli and linseed oil, dip a piece of felt into it, and apply; then polish gently. If the wood be rosewood, polish with finely powdered elder ashes; or make a polishing paste of rotten stone, a pinch of starch and a few drops of sweet oil and some oxalic acid mixed with water.

If a floor or surround of a carpet requires staining or restaining, the following mixture makes a durable stain, and can be polished with a flannel and beeswax: Half an ounce of rose pink and four ounces of alkanet root, put into one quart of cold-drawn linseed oil, and allowed to stand by the fire for a couple of days, during which time it must be constantly stirred. It should be applied to the floor with a whitewash brush, and one coat must be thoroughly dry before another is given.

In baking cake or muffins in gem pans, it should be remembered that if there is not quite enough batter to fill all the set, a little water should be put in each one of the empty ones before they are put into the oven.

All paint work should be cleaned with soap and water in which there is a little cloudy ammonia, and finished with a sponge and clean cold water, but not touched with a cloth.

When the supply of tomato catsup is exhausted a very nice substitute is made by cooking canned tomatoes until quite thick, then adding a little vinegar, with salt and cayenne pepper to taste, with perhaps a trifle of sugar. This is an excellent dressing for cold meats, baked beans, etc., and is greatly relished at this time of the year.

The Care of Gloves.

Gloves, in their first estate, are a somewhat expensive article of feminine dress. It is seldom good economy to purchase very cheap gloves, as they are liable to tear when putting on, to rip easily, or to develop somewhere a thin place which betrays one at an untimely moment. The frugal manager prefers to spend more upon her gloves at the outset and have them last longer, and she makes up for the additional expense by taking care of this part of her wardrobe.

When gloves are removed from the hand they should not be pulled off a finger at a time, but the wearer should take hold of them at the top and peel them off, so that the whole glove is

wrong side out when it leaves her hand. If there is any moisture about the glove it is well to leave it until it is entirely dry before turning it. Gloves require airing, just as other articles of dress do. When perfectly dry, the careful woman turns her gloves, pulls them out lengthwise, and lays them together as they were when she bought them in the store. If she is not expecting to wear them again for a few days she folds them in tissue paper, and lays them in her glove box.

A glove may be spoiled as to shape for all time by heedless putting on when first worn. Children who are always losing their gloves should be taught to keep them in an appointed place, and should be trained to have no heedlessness in this matter. Much valuable time is consumed when one never knows where one's habiliments are.—*Harper's Bazar.*

How to Clean Marble.

Take two parts of common soda, one part of whiting, and one of powdered pumice stone. Pound these ingredients together, sift through a fine sieve, and mix with water to a paste. Apply it with a piece of flannel, rubbing it thoroughly; then wash off with soap and water, and the marble should look bright and clean. To polish marble, the following recipe will be found useful: Dissolve six ounces of pearl ash in a quart of boiling water, add four ounces of white wax, and simmer all together for half-an-hour. Set this to cool, take the wax off the surface, work it into a soft paste in a mortar with a little hot water, and apply this to the marble, using it as any other polish.

How to Clean Brass Trays.

Brass trays are kept in order by simply washing them in boiling hot soda soapsuds, and then lathering them well, a little soap being used if they are very dirty. One way of cleaning them is to sift fine brickdust till it is a very fine powder. Take up a good portion of this on half a lemon (previously used in lemonade or sherbet-making), and rub the tray well over with this, carefully going over any stains till removed, and then rinsing and letting it dry. Treated in this manner, trays keep clean and an admirable color for a long time. Metal polish and such things spoil the color, giving it a yellow tinge quite different from the golden brass it looks when cleaned with lemon-juice and fine brickdust.

The Family Room in Summer.

In arranging the home this spring take the pleasantest room in the house for the family living room. If it has not a hardwood floor fill the cracks between the boards with a paste made of soaked newspapers and glue and then give the floor two coats of paint. If you do the work yourself get mixed paint especially prepared for floors.

If you have rugs use them, but they are not necessary. Have a lounge with a denim or other washable cover, cool easy chairs and a table large enough to hold the reading-lamp and a late magazine or book for each member of the family—large enough for the whole family to sit around and read. Then plan your work so that father and mother and each boy and girl can have time to read at least twenty minutes on the busiest day. It will pay to have these things, the periodicals and books and the time to use them, even if you economize in clothing and table expenses to pay for them.

A Pointer for the Girls

Father—"Now, see here! If you marry that young pauper, how on earth are you going to live?" Daughter—"Oh, we have figured that all out. You remember that old hen aunt gave me?" "Yes." "Well, I have been reading *FARMING*, and I find that a good hen will rear twenty chickens in a season. Well, the next season that will be twenty-one hens; and, as each will raise twenty more chicks, that will be 420. The next year the number will be 8,400, the following year 168,000, and the next 3,360,000. Just think! At only 25 cents apiece we shall have \$840,000, and then, you dear old dad, we'll lend you some money to buy another farm."

The Cheerful and the Peevish Woman.

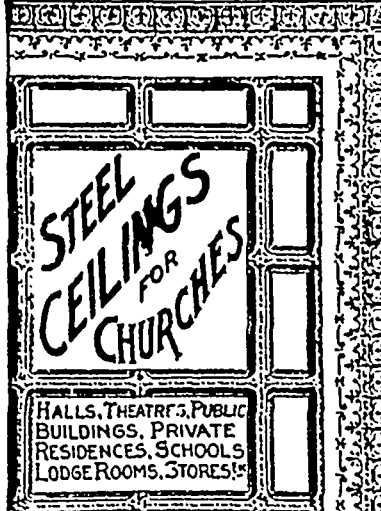
Have you noticed how differently women act when overtaken by trouble? One meets it half-way, and overcomes it. Her moral strength scorns to be cast down by the storms of life, and only a line here and there on the brow betrays the trace of care. Outwardly she is the personification of cheerfulness, and her husband and children bless her.

Then there is the woman who breaks down under difficulties, until even the slightest duty becomes a burden. She sighs and complains from morning till night, until her children dread the sharp tongue, and thinks her husband harsh and callous to her sufferings if he remonstrates.

Which is the better helper in the home?

How to Cook a Ham.

An ordinary ham is really much more tasty cooked in this way: Soak for a day in tepid water, and then place in a large saucepan with sufficient water to cover it. Add two blades of mace, half a dozen cloves, five long peppers, and three bay leaves. Simmer gently, allowing twenty minutes for every pound. When cooked remove the pan from the fire, and leave the meat in it until cold. Take up the ham, skin it, brush over with beaten egg, sprinkle brown bread-crumbs over, and set in a moderate oven to brown.



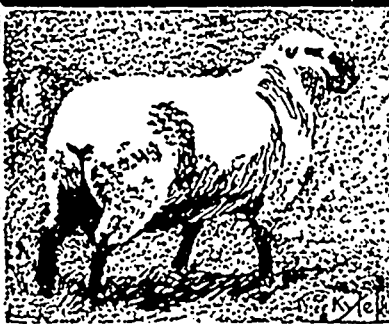
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GANGRENE
SHEAR CUTS
RED LICE ON SHEEP
WOUNDS
RINGWORM
BRUISES, ETC., ETC.
AND SCAB.

Full directions on every can. Cures the worst cases. The most effective and economical dip on the market. If your dealer can't supply you, write us direct for it, and if there's anything out of the ordinary in the ailments of your flocks and herds we'll be pleased to give free any additional advice in the matter.

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Affiliated with the University of Toronto.
Patrons: Governor General of Canada and Lieutenant Governor of Ontario. The most successful Veterinary Institution in America. Experienced Teachers. Fees, \$65 per session.
PRINCIPAL, PROF. SMITH, F.R.C.V.S.,
TORONTO, CANADA

Questions and Answers.

Cows Scouring.

To the Editor of FARMING:

Will you kindly let me know in your next issue the best kind of grain to feed to a milch cow when on pasture. My cows are scouring very much from the fresh grass. By so doing you will oblige me very much.

GEO. H. KATZENMUIR,
New Hamburg, Ont.

Very frequently when cows are changed from dry feed to fresh grass in the spring of the year a mild form of diarrhoea may result. There is nothing very much to be feared from this, and in fact a little loosening of the bowels at this season of the year will do good. In the case referred to, unless there is a very bad and continued attack, in which case it might be advisable to consult a veterinary surgeon, we would not advise doing anything to suddenly check the disease. Even if no change of feed is made the cow may recover in a few days. It would not do any harm, however, to give the cow a little ground oats to keep up her strength. Do not give anything to suddenly check the disease, as the results might be disastrous.

Food Tests of Holstein-Friesian Cows.

Mr. S. Hoxie, Superintendent Advanced Registry American Holstein-Friesian Association, sends us the following data concerning recent tests:

The greatest scientific interest of the day with regard to comparative merits of the various breeds of dairy cattle is in the cost of production of the various products. The Holstein-Friesian Association of America, in connection with the various state experiment stations, is conducting tests for the purpose of determining the food cost of butter. As a matter of interest to your dairy readers I give below the results of recent tests:

DeKol Manor Beets; age, 2 years, 1 month, 15 days; food consumed, pasturage, pea meal 11.83 lbs., ground oats 11.83 lbs., ground barley 11.83 lbs., ground buckwheat 11.83 lbs.; product, milk 307 lbs., butter-fat 9.695 lbs. Representative of Cornell University Station, H. C. McLallen.

Mutual Friend 2nd; age, 6 years, 6 months, 26 days; food consumed, ensilage 434 lbs., wheat bran 45 lbs., cotton-seed meal 3½ lbs., ground oats, 5 lbs., corn meal 15 lbs.; product, milk 427.4 lbs., butter-fat 14.724 lbs. Representative of Cornell University Station, A. R. Ward.

DeKol Lady; age, 1 year, 11 months, 2 days; food consumed, pasturage, pea meal 11.83 lbs., ground oats 11.83 lbs., ground barley 11.83 lbs., ground buckwheat 11.83 lbs.; product, milk 312.4 lbs., butter-fat 9.384 lbs. Representative of Cornell University Station, H. C. McLallen.

Aggie Paul; age, 2 years, 2 months 2 days; food consumed, ensilage 303 lbs., hay 7 lbs., wheat bran 28 lbs., oil

LITTLE'S PATENT FLUID <NON-POISONOUS> SHEEP DIP AND CATTLE WASH

The Original Non-Poisonous Fluid Dip.

Still the Favorite Dip, as proved by the testimony of our Minister of Agriculture and other large Breeders.

FOR SHEEP

Kills Ticks, Maggots; Cures Scabs, Heals Old Sores, Wounds, etc., and greatly increases and improves growth of Wool.

CATTLE, HORSES, PIGS, Etc.

Cleanses the skin from all Insects, and makes the coat beautifully soft and glossy.

Prevents the attack of Warble Fly.

Heals Saddle Galls, Sore Shoulders, Ulcers etc. Keeps Animals Free from Infection

No Danger, Safe, Cheap, and Effective.

BEWARE OF IMITATIONS.

Sold in large tins at 75 Cents. Sufficient in each to make from 25 to 40 gallons of wash, according to strength required. Special terms to Breeders, Ranchmen, and others requiring large quantities. Sold by all Druggists. Send for Pamphlet.

ROBERT WIGHTMAN, Druggist, Owen Sound
Sole Agent for the Dominion.

Woodstock Steel Windmills

FCP
POWER
AND
PUMPING

Get a
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GRAPHITE BEARINGS
They Run without Oil.

Steel Towers, Pumps, Tanks,
Saw Tables and Watering
Troughs, etc.

WOODSTOCK WINDMOTOR CO. Limited

Woodstock, Ont.

ROCK SALT

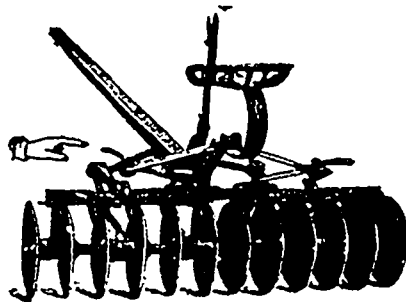
FOR HORSES AND CATTLE

70c. per 100 lbs.; 500 lbs. for \$3.00 here.

CASH WITH THE ORDER.

TORONTO SALT WORKS, Toronto, Ont.

Farmers



We are surprised to read the claims of some of the makers of Disc Harrows. One would think it was the **WATFORD DISC** they had reference to.

The up-to-date disc of to-day is a throw-out harrow. Still the Watford will throw either in or out. The leading improvement in disc harrows to-day is the spring pressure and its application to hard or soft ground, to cut a uniform depth, and to avoid weight on horses' necks. This pressure must be applied directly over and in line with the centre of discs, just where

you will find it in the Watford, and where we have had it for years. Comfort for rider. Buggy Spring construction. (See Cut.)

Special Offer—Where Watford Implements are not sufficiently known we will name an interesting price, it being understood that special cut is to have no bearing on regular selling price—a special price for a special purpose.

Yours for up-to-date implements on the farm,

Thom's Implement Works, Watford, Ont.

BUTTER WRAPPERS.

GENUINE VEGETABLE PAROCHMENT, made to our order in Germany, especially for the Canadian market, and its purity and sanitary qualities are guaranteed. It is very strong, has a nice, silky finish, fine fibre, and will not taint the butter like cheap imitations. Highest testimonials from dairymen all over Canada. We sell these butter wrappers, 7½ x 11 inches, cheaper than any house in Canada, and large dealers who have wrappers printed should get our samples and quotations. Free samples sent anywhere. Address,

THE SENTINEL-REVIEW
WOODSTOCK, ONT.,

imports Genuine VEGETABLE PAROCHMENT for butter wrappers. It is the largest house in Canada selling and printing butter wrappers. This paper is not an imitation. It is the

SENTINEL-REVIEW,
WOODSTOCK, ONT.

meal 16 lbs., corn meal 30 lbs., ground oats 14 lbs.; product, milk 280.3 lbs., butter-fat 11 303 lbs. Representative of Michigan Station, Porter H. Davis.

Clothilde Artis Topsey: age, 4 years, 1 month, 10 days; food consumed, pasturage, malt sprouts 21 lbs., gluten meal 7 lbs.; product, milk 412.8 lbs., butter-fat 13 724 lbs. Representative of Cornell University Station, Leroy Anderson.

Paula Dorinda: age, 2 years, 10 months; food consumed, ensilage 363 lbs., hay 13 lbs., wheat bran 80 lbs., oil meal 31 1/2 lbs.; product, milk 343 2 lbs., butter fat 11.101 lbs. Representative of Michigan Station, Porter H. Davis.

Our Garden.

BY I. N. COWDREY.

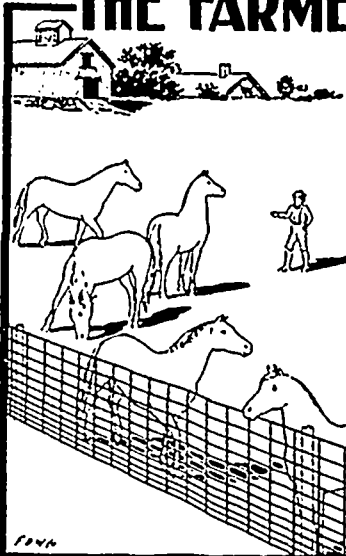
We have a plat of ground about fifteen rods long and six rods wide, that we use for a garden and small fruit. We have a row of blackberries planted to one side, then about twelve feet from this row is a row of grapes, then a row of currants and gooseberries, then a row of asparagus, then come the strawberries. We have the raspberries in another patch. All these rows are placed far enough apart to drive between them with a wagon, so that manure or mulch can easily be drawn on. Between these rows we grow nearly all our garden. The vegetables are all planted in rows he long way, and if one row is too much of anything the rest of the row is filled out with something else. The rows are planted far enough apart to admit of horse cultivation. A liberal supply of manure is put on every year, and the ground is cultivated up very deep instead of plowing with a big plow. This keeps the ground level, where a big plow would throw it up in ridges. The currants, grapes and berries are kept trimmed up in narrow form so that the cultivation can be done quite closely. By this way of gardening the small fruit can be kept clean with the garden, where if the two were not combined the small fruit would more likely be neglected.

"Your mother agrees with me exactly, Johnny," said his father, proceeding to trim the twigs from a tough switch. "She thinks, with me, that you need a good trouncing, and you are going to get it, my son." "Yes," bitterly exclaimed Johnny. "You and maw always agrees when it comes to lickin' me. You and maw's the whole thing. I don't never have no show. This family's run by a trust!"

Publishers' Desk.

Matthew Moody & Sons, Terrebonne, Que., have issued a neat catalogue of the spring and summer machinery which they manufacture. The list which this catalogue contains includes about every line of machinery used on a farm, comprising several new machines which they are now making for the first time. This well-known and reliable firm are one of the largest and oldest manufacturers of agricultural machinery in Canada and well deserve the large patronage they now have.

THE FARMER'S BEST FRIENDS



Good Horses and Good Fences.

Any sound horse is a good horse, but there is only one absolutely satisfactory fence—

THE AMERICAN FIELD FENCE.

Made of large, strong wires, absolutely immovable, thoroughly galvanized and nicely woven.

A Genuine Money Saving Fence.

Sold by dealers everywhere. If you can't find it, write direct to us for catalogue.

AMERICAN STEEL AND WIRE CO.,
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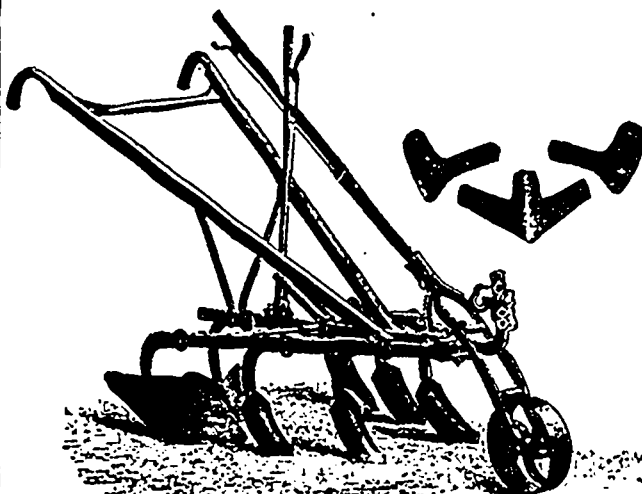
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Our Scufflers are well made, nicely painted, will stand inspection and are good sellers. They are made with 5 and 7 points.

Our Mower cannot be surpassed, completed with Roller Bearings and up-to-date in all particulars.

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Agents would do well to see our line of Pulpers and Slicers before looking elsewhere.

THE COSSITT BROS. CO., Limited, BROCKVILLE, ONTARIO

The Ontario 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.

VOL. II.

No. 34

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

Annual Membership Fees:—Cattle Breeders' \$1; Sheep Breeders', \$1; Swine Breeders', 2.

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 15,000 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.

F. W. Hodson, Secretary.
Parliament Building, Toronto, Ont.

Stock for the West.

Two car loads of stock shipped to Manitoba and the West, under the auspices of the Northwest Government, will leave Ontario about June 12th. There is still space for a few animals in one of these cars. Those wishing to take advantage of this shipment—the last of the season—are requested to communicate at once with F. W. Hodson, secretary of the Cattle, Sheep and Swine Breeders' Associations, Parliament Buildings, Toronto.

Live Stock for the West via Association Car.

A car load of stock, shipped under the auspices of the Dominion Live Stock Associations, was started from Paisley on May 31st. There were loaded at that point a Yorkshire sow from Wm. Howe, of North Bruce, and a Shorthorn bull by George Douglas, of Cargill. The sow will be delivered to T. Bradford, Stonewall; the bull will be delivered to J. T. Patterson, of Calgary. At Elora a bull was loaded, addressed to Chas. Michie, Calgary from W. B. Watt, Sal m. At Malton the following stock were placed in the car: A Shire filly from J. M. Gardhouse, Highfield, addressed to G. H. Bradbrook, Yorkton; a Yorkshire sow from J. E. Brethour, Burford, addressed to T. Bradford, Stonewall; a Clydesdale mare from James Russell, addressed to Rockliff Linton, Hargrave, Manitoba; a Tamworth boar from Fred Row, Belmont, addressed to Lemon Jickling, Morden, Man.; a Shorthorn bull from Ed. Shaw, Malton, addressed to A. J. Shaw, Cochrane, Alta; from Wm. Willis, Newmarket, a Cotswold ram, addressed to W. J. Dodd, Innisfail; a Jersey bull from Richard Gibson, Delaware, addressed to W. J. Lumsden, Hanlan, Manitoba. At Brooklin the following were loaded: A Shorthorn bull from Chas. Calder, Brooklin, addressed to J. A. Carswell, Penhold,

Alta; a Shropshire ram from the Hon. John Dryden, Brooklin, addressed to John Turner, Calgary; a Jersey heifer from Mrs. E. M. Jones, Brockville, for H. Kipp, Chilliwack, B.C.; three Shorthorn bulls from L. Burnett,

M.P., Greenbank, addressed to T. C. Davis, M. P., Prince Albert; two Shorthorn bulls from John Bright, Myrtle, one for Rev. John McDougall, the other for George McDougall, Morley, Alta.

Institute Membership.

The following is a list of the members received since the last list published:

Elgin West.....	2
Frontenac.....	4
Hastings East.....	3
Haldimand.....	8
Halton.....	6
Middlesex East.....	1
Middlesex West.....	1
Peel.....	7
Perth South.....	18
Simcoe South.....	1
Simcoe West.....	4
Stormont.....	1
Victoria East.....	1
Waterloo, South.....	30

Secretary's Report

(Continued from last issue.)

Breed.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	
Berkshires.....	699.00	550.00	650.00	750.00	575.00	512.50	643.50	745.50	636.50
Yorkshires.....	247.00	246.00	250.00	450.00	429.50	410.50	230.00	359.00	522.00
Suffolks.....	100.00	61.50	.....	32.00	.....	22.00	16.00	.....	5.00
Chester Whites.....	124.50	125.00	100.00	100.00	48.00	179.00	92.00	207.50	221.00
Poland Chinas.....	100.00	125.00	360.00	85.00	46.00	148.00	118.50	165.00	116.50
Tamworths.....	.....	38.00	50.00	45.50	166.50	124.00	96.50	213.50	408.50
Duroc Jerseys.....	.....	.....	.....	.....	40.50	76.00	34.50	104.00	75.50
Essex.....	.....	.....	.....	.....	.....	.....	21.50	.....	8.50
Victorias.....	.....	.....	.....	.....	.....	.....	.....	.....	3.50

The totals for each breed are as follows:

Berkshires.....	\$5762.00
Yorkshires.....	3147.00
Suffolks.....	235.50
Chester Whites.....	1197.50
Poland Chinas.....	1264.00
Tamworths.....	1172.50
Duroc Jerseys.....	330.50
Essex.....	30.00
Victorias.....	3.00

GROWTH AND MEMBERSHIP.

The membership of each of the associations was larger in 1898 than in

the previous year and in the case of the Cattle and Swine Breeders' Associations was larger by at least 30 per cent., and this without special endeavors being made to obtain members. This indicates that the associations are in a healthy, growing condition and that the growth is not due to special influences.

The following comparative statement shows the receipts and membership of each of the associations each year since organization:

		CATTLE.								
		1894.	1895. 6.		1897.	1898.				
Receipts.....			\$1642.13.		\$1577.24.	\$1599 00.				
Membership.....			84		75	99				
		SHEEP.								
		'90-'90.	'91.	'92.	'93.	1894.	1895.	1896.	1897.	1898.
Receipts.....	\$303	424	361	768	1039.50	1060 00	1619.13	1596.83	1594.00	
Membership.....	33	94	61	68	78	96	51	93	94	
		SWINE.								
		'90-'91.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	
Receipts.....	\$340	662.35	1124.00	1496.00	1355.89	2376 80	2721.06	3031 55		
Membership.....	40	170	212	295	244	240	271	369		

PROVINCIAL WINTER FAIR

The Provincial Fat Stock and Dairy Show held in Brantford last year was very successful. A full report of the prize winners will be published in the

report of the Live Stock Associations. The following comparative statement of entries, etc., since 1891, will show the growth of what is now the largest show of its kind on the continent:

	Show held at Guelph, 1891.	Show held at Brantford 1898.
No. of Entries....	81	1760
Entry Fees.....	\$120 50	\$661 75
Gate Receipts....	68 75	545 55
Total amount of premiums paid	325 00	\$4,370 00

*Show held under management of Guelph Fat Stock Club and Agriculture and Arts Association.

†No entries were required for special prizes this year as has been the case previously. About 25 entries were refused on account of not being received in time.

‡In addition to this amount a number of special prizes, consisting of farm implements, were donated.

Following is a list showing the number of each breed entered for exhibition at the Show in 1898:

Fat Cattle.	Shorthorns	15
	Herefords	1
	Polled Angus.....	10
	Galloways	16
	Devons.....	3
	Grades	31

Total fat cattle..... 76

Sheep.	Cotswolds	25
	Lincolns	23
	Leicesters	26
	Oxfords	24
	Shropshires	40
	Southdowns	40
	Dorset Horns.....	15
	Merinos	1
	Hampshires.....	8
	Suffolks	41
	Grades	243

Total sheep..... 243

Swine.	Imp Berkshires	25
	Imp. Yorkshires	41
	Chester Whites	24
	Poland Chinas	27
	Suffolks & Essex	16
	Tamworths	32
	Duroc Jerseys.....	40
	Grades	96

Total swine..... 301

Dairy.	Shorthorns.....	4
	Ayrshires.....	10
	Holsteins.....	8
	Jerseys.....	8
	Guernseys.....	3
	Grades	8

Total in dairy dept..... 41

Total in all departments..... 671

To be continued.)

What is the most profitable lamb? Some who read of spring lambs being sold for \$8 or \$10 each think this kind is the one to have. But the truth is that when the expenses are figured up this kind of lamb comes in with the Christmas strawberry and the winter-grown grapes, as a costly luxury to both consumer and producer.

Dwarf Essex rape is not a grass or hay plant, but belongs to the same order of vegetation as the turnip and cabbage. It is a fast growing, grazing and soiling plant, and must be sown annually, as the roots will not survive the hard freezing of winter in the middle and northern latitudes. For broad cast seeding four or five pounds of seed to the acre is about the right thing. For sowing with oats, or in the corn field at last cultivation, from two to three pounds to the acre, and about the same amount when sown in drills twenty-five or thirty inches apart for cultivation.

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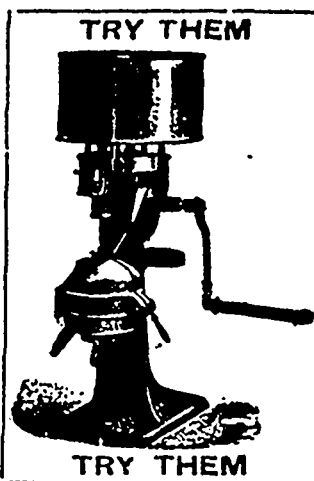
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MONTREAL

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Head Office and Works, DURSLEY, ENGLAND.



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AND WHITEWASHING CAN BE
DONE WITH

THE SPRAMOTOR

It is the result of most careful and exhaustive experiment. Each feature was thoroughly tested before being placed on the market.

Toronto, November 9th, 1898.

Spramotor Co., London, Ont.,

Gentlemen,—The machines for spraying and white-washing you have supplied to Dentonia Park Farm have done their work well, and are quite satisfactory. I could not have believed there was so much value in spraying fruit trees. We had a good crop of apples, whereas our neighbors who used no spraying machine had practically none.

Yours truly,

W. E. H. MASSEY.

Certificate of Official Award:

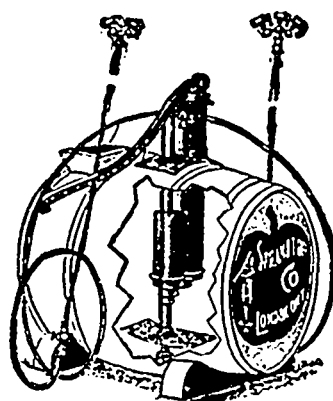
THIS IS TO CERTIFY that at the Contest of Spraying Apparatus held at Grimsby, under the auspices of the Board of Control of the fruit experimental stations of Ontario, in which there were eleven contestants, the Spramotor, made by the Spramotor Co. of London, Ont., was awarded First Place.

H. L. HUNT, H. PATTIT, Judges.

If you desire any further information, let us know and we will send you a 72-page copyrighted catalogue and treatise on the diseases affecting fruit trees, vegetables, etc., and their remedies.

Agents Wanted.

Mention this paper.



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To Dairymen of Manitoba and N. W. T. Districts:

We beg to call your attention to our having opened a Branch of our business at Winnipeg, where we will carry a complete line of all articles required in the manufacturing of Butter and Cheese, for either Creamery or Dairy, and at such prices as will enable you to save money.

Heading lists of goods stands the full line of "De Laval," "Alpha" Power and Hand Separators, which are to day conceded by our leading Experiment Stations and Dairy Schools, as well as advanced Creamery and Dairymen, to be the best cream separators on the market to day, and other goods of the same standard of merit, which will appeal to all dairymen as worthy of their consideration before purchasing elsewhere.

Our object in opening this branch is to be near the dairymen of Manitoba and the N.W.T., so as to better serve those who have favored us with their patronage in the past, either direct or through local agents, and to acquaint ourselves with new customers. All of which will result to our mutual interest.

The users of any style of "De Laval" separators, who are not fully posted on operating same to best advantage, or those desiring any more information on the Separator question, we shall be pleased to hear from, assuring them that such enquiries will have prompt and satisfactory attention. Any who contemplate the purchase of a cream separator this spring, we should be pleased to hear from, so as to send them reading matter that will prove of much interest and benefit, giving experience of dairy authorities on cream separators, showing first cost is not the only consideration in a separator purchase. If what facts we produce are not convincing enough to any intending buyer that the "De Laval" "Alpha" Separators are the best, we will be pleased to place one of such separators in any dairy on a 15 or 30 days' trial, against any cheap infringing separator, to prove by practical results that the "DE LAVAL" is not only the Best but also the Cheapest. Let us hear from those in any way interested.

For further information or particulars, address

THE CANADIAN DAIRY SUPPLY CO.,

236 King St., Winnipeg, Man.

We want local agents in every Dairy District.

if

Market Review and Forecast

Office of FARMING,
Confederation Life Building,
Toronto, June 5th, 1899.

The healthy tone continues in general trade and not for years has the confidence in the future been so pronounced as it is at the present time. A recent set-back in mining stocks and other securities has been a disturbing element, but apart from this the situation is healthy. Money continues stiff for speculative purposes, although it seems plentiful enough for all mercantile pursuits. Discounts are steady and unchanged.

Wheat.

The improvement noted last issue in the wheat situation continued till Thursday, when there was a slump in the Chicago market of 3 cents from the top for July wheat. This drop has had its effect upon markets elsewhere and a generally easier feeling is reported. The English markets continued firm early in the week, but in keeping with the feeling on this side prices have declined both at Liverpool and London. The recent advance has been due to the reports of crop damaged principally in Southern Russia and the Danubian Provinces. The condition of the crop both in Europe and on this continent are still influencing the market and will continue to do so, till it is harvested. Wheat harvesting has begun in Texas and it is expected that it will become general in the south in a week or two, where the crop is expected to be an average one.

The amount of wheat on passage to Europe increased by 1,120,000 bushels last week. Prices at local markets have not changed much, though an easier feeling is noticeable. Receipts at Montreal have been very heavy and the exports large. On this market the offerings have been fair, but there is an easier feeling at 70 to 71c. bid north and west for red and white, and 67 to 68c. for goose. No. 1 hard Manitoba is quoted at 85½ and No. 1 Northern at 82½c. Toronto. On the Toronto farmers' market red and white brings 75½ to 76c.; rife, 67 to 69c., and goose 66½c. per bushel.

Oats and Barley

The oat markets have been generally easier and dull. The English markets are weak and lower, owing to heavy receipts from Russia and liberal supplies of American and Canadian. At Montreal prices are 2½c. lower than a week ago, and from 34 to 34½c. are about the quotations afloat. Oats are dull here at 30c. west; on the farmers' market they fetch 37c. per bushel.

The Montreal barley market is quiet at 49 to 51c. for malting grades and 43 to 45c. for feed. The quotations here are 40 to 43c. west.

Peas and Corn.

The English pea markets are dull, but stocks are light. At Montreal the market is quiet and ½c. lower, and quotations are 74½ to 75c. afloat. The market here is steady at 64 to 65c. west. On the Toronto farmers' market peas bring 62 to 63c. per bushel.

No. 2 Chicago mixed corn is quoted at Montreal at 39½ to 40c. afloat, and at 41 to 42c. on track Toronto.

Bran and Shorts.

The demand for these is falling off, owing, no doubt, to the good supply of grass. Sales of Ontario bran have been made at Montreal at \$15.25 to \$15.50 in bulk on track; shorts are easier at \$16 to \$16.50. City mills here quote bran at \$14 and shorts at \$15 in car lots f.o.b. Toronto.

Clover and Timothy Seeds.

Prices for these are more or less nominal. Quotations at Montreal are: Ontario timothy, \$1.75 to \$2, and American \$1.50 to \$1.75; red clover \$3.75 to \$4.50 and alsike \$3.50 to \$4.50 as to quality. There does not appear to be anything doing on this market.

Eggs and Poultry.

The egg markets continue active. The English markets have been steady, with a good demand at the low prices. No Canadian eggs seem to be going forward. At Montreal the market keeps firm under a good demand. Buyers are paying good prices at Ontario points where sales have been made for the Northwest. Montreal quotations are: Choice fresh receipts, 11½ to 12c., and No. 2, 10 to 10½c. While no eggs are going forward now contracts have been made for fall shipment at 6s. 3d. and 6s. 4d. per 120. Eggs are in fair supply here, the demand good, and the market steady at 11½ to 12c. wholesale. On the Toronto farmers' market new laid eggs are quoted at 11 to 13c. per dozen.

There is nothing doing in poultry. On the farmers' market here chickens fetch 55 to 70c. per pair and turkeys 10c. per lb.

Potatoes.

These are quiet at Montreal and easier at 65 to 67½c. for the best, and 55 to 57½c. for sprouted lots. There has been a good supply here at 70 to 75c. per bag in car load lots. On the Toronto farmers' market potatoes fetch 65 to 70c. per bag.

Fruit.

There are very few apples at Montreal and what few there are bring from \$5 to \$5.50 per barrel. The season so far as last year's fruit is concerned is over, and there will be very little of interest to report till the new crop is at hand.

Hay and Straw.

At Montreal the market for baled hay is firm under good local export demand, and quotations are \$7.50 to \$8 for No. 1 quality, \$6 to 6.50 for No. 2, and \$5 to \$5.50 per ton for clover. The market here is steady at \$7.50 to \$8.50 for cars on track. Baled straw is quoted at \$4 to \$4.50 for cars on track. On the Toronto farmers' market timothy hay brings \$11 to \$13; clover \$7 to \$9.00; sheaf straw \$6 to \$7 and loose straw \$4 to \$5 per ton.

Wool.

The Boston and New York wool markets are reported firm and strong, while the demand continues active. Actual sales have fallen off lately, but this is considered to be due to the fact that lots of wool are being held for a higher market. This activity, however, does not seem to have reached the markets

on this side the line, where fleece is quoted at 13 to 14c. and unwashed at 8c. per lb.

Cheese.

The easier feeling reported last week still continues and values seem to be sliding downwards. There is a very large make going on which is making buyers rather wary about what they pay. During May the exports of cheese from Montreal were 85,183 boxes as compared with 57,395 boxes for the same period of 1898, an increase of over 28,000 boxes, while the exports from New York for the same time have been in excess of last year. In the English markets business has now settled down to the new goods, the old stock being about all disposed of. It is reported that Western June goods have been offered at London and Liverpool for July delivery at 37s. 6d. to 39s. 6d. or fully eight or nine shillings less than present cable quotations. This is the kind of selling short that is ruinous to the trade. The parties making the offer, if it is accepted, will make every endeavor to bear the market to as low a point as possible.

The very favorable weather and the prospects of a big June make have had their effect upon values, which at Montreal have dropped ¾ to 1c. during the week. A week ago finest Western, white, was sold there at 9½ to 9¾c. and colored at 9½ to 9¾c., while last week 8¼ to 8½c. for finest Western, and 8c. to 8¼c. for Eastern are the ruling figures. On the local markets during the week quite a lot of business has been done, but factories have had to accept lower prices. Sales have been made all the way from 7¼ to 8¼c., about 8c. being the ruling figure. Though these prices are low, they are fully one cent above what was paid on the local markets at this time last year.

Butter.

The butter situation on the whole is stronger than that of cheese. While there is a somewhat quieter feeling in the British markets owing to more liberal receipts from Denmark, stocks are generally light and holders are not pushing sales. Quotations on the London, England, market range from 85s. to 87s. 6d. for choice Canadian creamery. At New York prices are top high for much to be done on export account, the local trade taking the bulk of the receipts. Considerable Ontario creamery butter is going to the mining districts of British Columbia and the west, for which 16 to 16½c. has been paid at the factories for fodder goods. There is a large make going on and the exports from Montreal for May have increased by 8,000 packages, as compared with those of 1898 for the same time. The Montreal market is slightly higher than a week ago, the ruling figures being 16½ to 17c. for choice grass creamery in boxes.

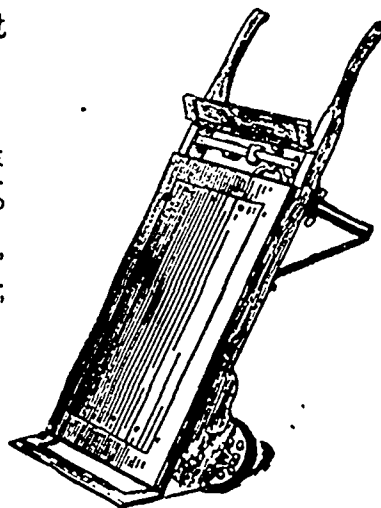
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NO
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THE ST. MARYS
TRUCK SCALE
CO.

St. Marys, Ont.

and 16½ to 16¾c. for choice in tubs. As high as 16¾c. is reported to have been paid at the creameries during the week. Prices, therefore, are being well maintained and our advice to the dairymen a few weeks ago not to give up butter-making for cheese making seems to have been sound.

Creamery butter is reported steady on this market at 16½ to 17c. for prints and 16c. for tubs. Receipts of choice grass-made dairy butter are large, for which there is a good demand and a steady market at 12 to 13c. for choice large rolls and tubs and 13 to 14c. for prints wholesale. On the Toronto farmers' market pound prints fetch 14 to 16c. and large rolls 13 to 14c. per lb.

Cattle.

The cattle situation is not as strong as it was a week ago. Cables report lower prices on the British markets. At the end of the week prices were weak at New York and trade dull, while some of the western markets were lower. At Buffalo stockers have been lower and irregular. The receipts of live stock on Toronto market on Friday were large, 136 loads all told. The quality of fat cattle was very fair, these being principally exporters, butchers' cattle being scarce. Trade in exporters was slow with prices easier. This was caused principally by lack of space on boats for immediate shipment and the large run.

Export Cattle.—Choice, well finished exporters of heavy weights sold at \$4.50 to \$5 and light ones at \$4.50 to \$4.70 per cwt. Heavy export bulls of good quality sold at \$3.87½ to \$4.25 per cwt., and light export bulls at \$3.40 to \$3.65 per cwt.

Butchers' Cattle.—These were scarce with prices firm at nearly equal to those for light exporters. Choice picked lots, equal in quality to the best exporters, sold at \$4.50 to \$4.65; good quality at \$4.40 to \$4.50, and medium at \$4.25 to \$4.35 per cwt.

Stockers and Feeders.—The market for stockers was slow and prices easy at \$3.25 per cwt. for inferior, \$3.50 for medium, \$3.75 for good, and \$3.85 for choice picked lots. One or two choice bred steers brought \$4 to \$4.25 per cwt., but the bulk sold at \$3.50 to \$3.75. Stock heifers are firmer at \$3 to \$3.25 per cwt., and inferior stock bulls sold at \$2.75 per cwt. Heavy feeders are in demand with prices firm at \$4.40 to \$4.60 for well bred steers, half fat weighing 1,000 to 1,150 lb. each. Feeding bulls suitable for the byres are worth \$3 to \$3.50 per cwt.

Calves.—These are slower at Buffalo owing to liberal supply. On this market on Friday they brought from \$2 to \$10 each as to quality.

Milk Cows and Springers.—From \$25 to \$35 each was paid for the general run of these on Friday, but a few choice extra cows brought \$45 to \$50 each.

Sheep and Lambs.

The market for these is on the whole easier. The eastern markets have been easy, which has had its effect on trade in the west. The deliveries of sheep on the market have been large and prices for sheep were easy on Friday at \$3.50 to \$3.75 for clipped ewes. Unclipped ewes sold at \$3.75 to \$4 per cwt., and bucks \$2.75 to \$3 per cwt. Yearling lambs were almost unsaleable at \$4 per cwt. for clipped and \$4.50 for unclipped. Some extra choice grain-fed lambs brought \$5 per cwt. Spring lambs were plentiful with prices easy at \$2.50 to \$4 each.

Hogs.

The market for these is in about the same position it was a week ago. On Friday on Toronto market prices were \$5 per cwt. for select bacon hogs weighing not less than 160 lbs. nor more than 200 lbs. each, unwatered and unfed, at \$4.50 for light and \$4.37½ for thick, fat hogs. Owing to too many high and thick, fat hogs coming forward prices for them will be 12½ cents per cwt. lower this week. At Montreal the market for live hogs has ruled firm and strong. All desirable hogs sold at \$5 per cwt. and heavy at \$4.50 to \$4.75 per cwt. The *Trade Bulletin* cable of June 1st, re Canadian bacon, reads thus: "The market is somewhat unsettled, but with light stocks holders are not pushing sales."

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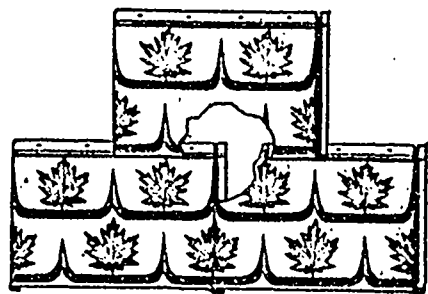
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interlock each other on all four sides—leaving no openings for snow or rain to get in. They are easily put on by anyone—are practically fire and lightning proof and give a building a neat, finished appearance. We can tell you more. Ask for free catalogue and samples.

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MITCHELL'S ANTI-LUMP JAW

has proved by its effective work that a bottle of it should be in every cattle raiser's hands.

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Spring Footlift

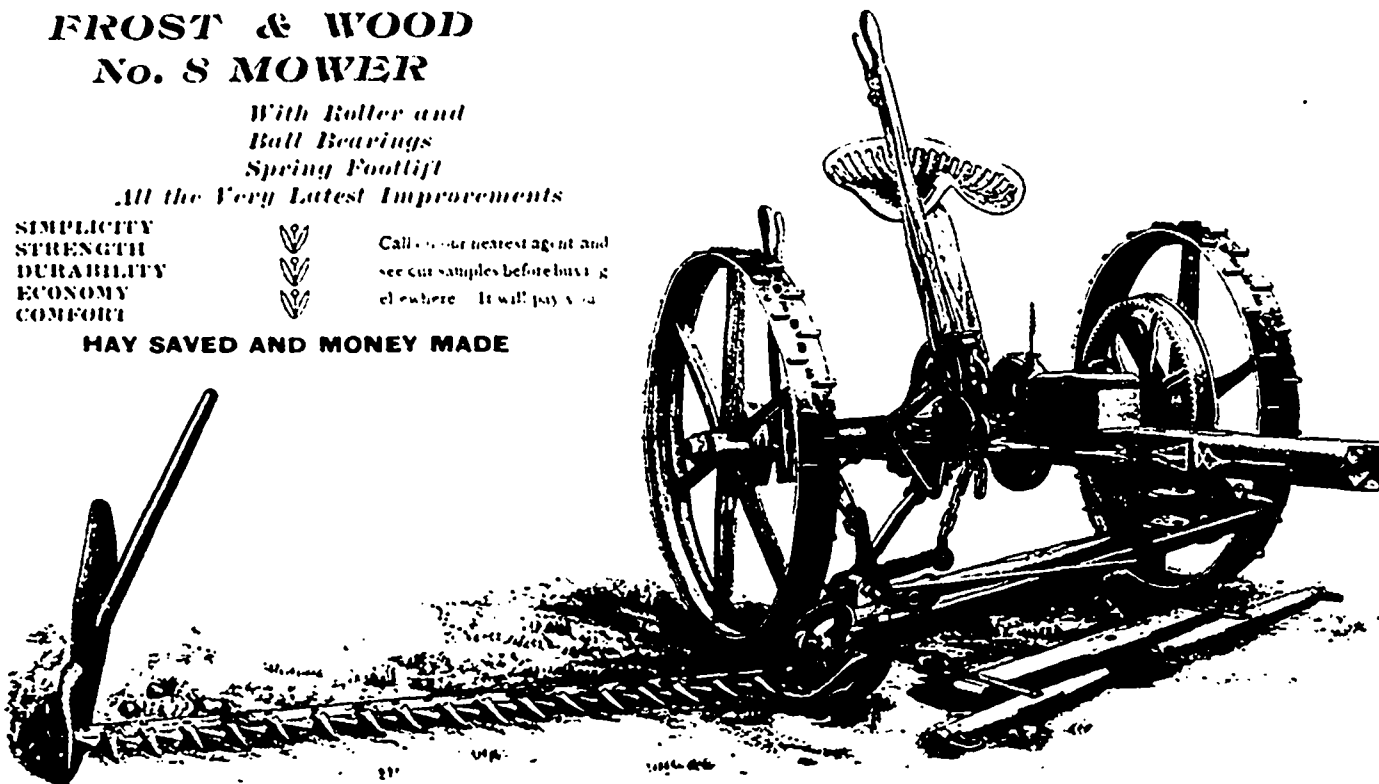
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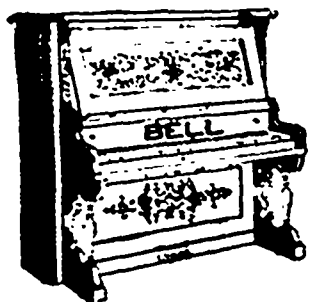
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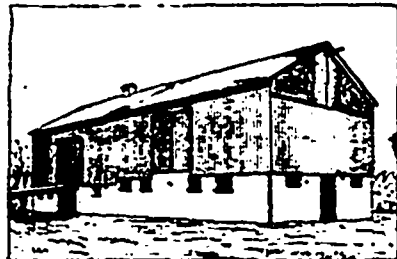
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WM. J. WEIR.

ESTATE OF JOHN BATTLE

Mention this paper. U. THOROLD, ONT.