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THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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

PUBLISHED AT LONDON, ONTARIO. NOVEMBER 23, 1905. WINNIPEG, MANITOBA. No. 687

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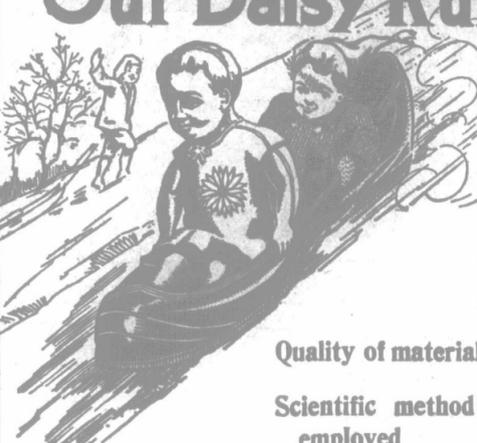
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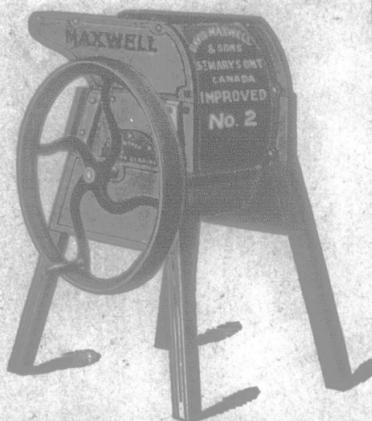
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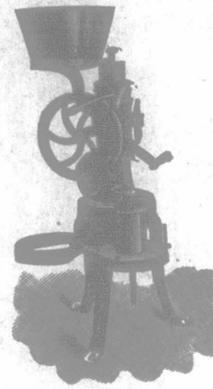
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Entry may be made personally at the local land office for the district in which the land is situated, or if the homesteader desires, he may, on application to the Minister of the Interior, Ottawa; the Commissioner of Immigration, Winnipeg; or the local agent, receive authority for someone to make entry for him.

The homesteader is required to perform the conditions connected therewith under one of the following plans:

(1) At least six months' residence upon and cultivation of the land in each year for three years.

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Deputy of the Minister of the Interior.

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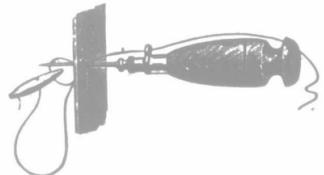
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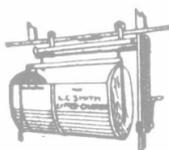
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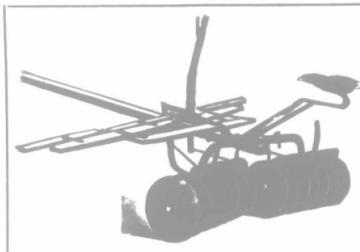
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Empire Cream Separator Co.
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Bell's Pulpers and Slicers are Favorites Everywhere.

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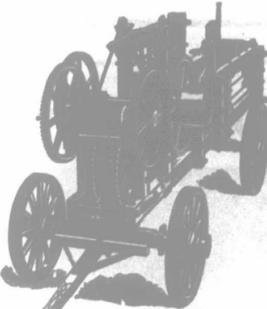
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Farmer's Advocate

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"PERSEVERE AND SUCCEED"

ESTABLISHED 1866

VOL. XL

LONDON, ONT., AND WINNIPEG, MAN., NOVEMBER 23, 1905.

No. 687

EDITORIAL.

Farmers and the Tariff.

The farmers of Canada have reason to congratulate themselves on the able, clear and forcible presentation of their views on the tariff question before the Government Tariff Commission at their sessions recently held in Quebec and Ontario. And from what is known of the calibre of the agriculturists of Manitoba and the other Western Provinces, we may rest assured their case will be presented with no uncertain sound, and with equal forcefulness.

At Montreal the Huntingdon County farmers were represented by a deputation. Mr. Robert Sellars, their spokesman, represented them as the "voiceless multitude," who rise before dawn and retire long after dark, who toil long and arduously in fair weather and in foul, who are the real exponents of the simple life, who have practiced the art of self-denial almost to the point of perfection, who are obliged to look at both sides of every dollar—the Canadian farmers. Mr. Sellars drew a striking comparison between the farmer and the manufacturer, and concluded that if the latter would only practice a portion of the self-denial and self-sacrifice that is practiced every day by farmers all over the Dominion there would be no cry for higher protection. This deputation pleaded for a tariff for revenue only, and put themselves on record as being in favor of letting the tariff stand as it is, or, at least, not increasing it.

At the meeting of the Commission in Toronto last week the case for the farmers was ably advocated by Mr. James McEwing, President of the Farmers' Association of Ontario; Mr. W. F. W. Fisher, Secretary of the Dominion Grange; Mr. E. E. Drury, of Simcoe Co., and others, and from their showing, the Commission must have received a very vivid impression that, in any revision of the tariff, the greatest constituency of producers and consumers in the Dominion, the farmers, are not disposed to submit to the increases in duties being asked for by many in other lines of business without a vigorous protest. Mr. McEwing claimed that those engaged in agriculture are the greatest wealth-producing class in the Dominion; that they are also the greatest consumers, and, therefore, have the first right to consideration in tariff legislation. He presented the resolution adopted at the last regular meeting of the Farmers' Association, which declares against any increase in the tariff now in force, endorses the British preference, and declares the opinion that if the principle of maximum and minimum tariffs be adopted, the maximum tariff should not be greater than that at present in force. Increased tariff, he claimed, would result in decreased consumption of goods because of the higher prices, and the decreased volume of imports would cause a loss of revenue. Thus, the increased duty would not increase the revenue, and would at the same time impose a burden on consumers by adding to the cost of living. In support of the contention that the tariff cannot aid the general farmer, he quoted trade statistics of 1904, showing that in that year the imports of hogs and hog products into Canada amounted to \$820,000, while our exports of similar Canadian products amounted to \$13,524,600, and declared that no tariff on imports could increase the selling price of hogs in this country when such a great bulk of their products is exported and so few are imported. A similar comparison was presented regarding our imports and exports of cattle, sheep, cheese, but-

ter and grain, some of these showing even greater disparity than in the case of hogs. And these figures, he claimed, show clearly that the price which farmers obtain for their produce is fixed by the condition of the foreign market to which we export, and that an increased duty would be quite useless as a means of raising the selling price in our home market. Mr. McEwing also showed that in some instances no duty is imposed where a duty might help the farmer, as in the case of hides and wool. Last year our imports of wool were \$1,319,000, and our exports \$315,000, while of hides our imports were \$4,775,000, and our exports a little over \$2,000,000. Here was a case where protection might help the farmer, but such articles are on the free list, and the Canadian manufacturers of leather and woolen goods reap the benefit. It was stated by the delegation that the chief products of the general farmer in Ontario are butter, cheese, hogs, lambs, wool, and poultry products, and that in all these, except hogs, the United States market prices are usually higher than the Ontario prices, and this being so, the Ontario farmer is protected by what may be called natural conditions, and he cannot be benefited by any tariff imposed on products similar to his own.

Mr. Drury, speaking as a practical farmer, and from knowledge acquired from enquiry as to the circumstances of the general farmer while on his tours as a speaker in attending Farmers' Institute meetings throughout the Province, dealt with the amount by which the farmer's living is increased by the tariff, giving an account of an actual case within his knowledge, of the expenditure, on an average well-to-do family on an Ontario farm of 200 acres—100 acres in cultivation, 20 acres in pasture, the balance wooded—placing their expenses in the purchase of dutiable goods at \$340.37, and the average annual expense for implements at the low figure of \$38.80, which, with some other items, brought the total to \$429.17, the average duty on these being about 30 per cent., would make the taxation a little over \$130. He further claimed that the indirect effect due to this system of protection to Canadian manufacturers was felt by farmers in the difficulty of securing satisfactory farm help, owing to farm hands going into manufacturing towns and getting a job when they wanted it, and that the laborer was not thereby benefited in the end. The general feeling of the farmers, he said, was that the tariff should not be lowered, but would like to see the British preference increased, because this would give cheaper goods, such as we have to buy, and facilitate our export trade to England, now hampered by the difficulty of obtaining return cargoes. If the maximum system is to be applied against commercially hostile countries he contended that an exception should be made in agricultural implements, which, when imported at all, came from the United States. In concluding, Mr. Drury pertinently remarked the soundness of the commercial and political life of the country depends upon the maintenance of a reasonable tariff policy.

Mr. McEwing, in conclusion, said: "We wish the manufacturers Godspeed in their race for prosperity, provided the prosperity secured is due to their own efforts, but we emphatically protest against any movement looking towards empowering them to take toll of our earnings by means of legislation." Meetings will be held by the Commission at other points in Ontario, and it is hoped that representative farmers will prepare to present their case still further when opportunity offers.

The Royal Show Again Migratory.

The annual exhibition under the auspices of the Royal Agricultural Society, for over sixty years had been held alternately in different towns and cities in various parts of England and Wales until three years ago. Then, owing to the great expense of fitting up new show grounds, and for other reasons, including a declining revenue, it was decided to locate the show permanently in the vicinity of London, where a valuable property was secured and what were intended to be permanent buildings erected, in the hope that the city people would be attracted by the exhibition and an increased attendance of country people as well. This hope, however, failed of realization, the citizens of the metropolis evidently not being aware of the presence of such an important institution in its neighborhood, while the rural population supplied even fewer visitors than when the show was held in provincial towns, the result being a financial loss each year so heavy as to discourage the Council of the Society from continuing the show in what was designed to be its permanent home.

At a special meeting recently held it was decided by a unanimous vote to accept the invitation of a deputation from Derby to hold the Royal Show in that city next year, and the date was fixed for June 27th to 30th. The experience of the Royal Society in regard to a fixed and permanent home for its shows differs widely from that of the principal fair associations of Canada and the United States, which have proved to their satisfaction that the settled show with permanent buildings is more successful in every way than the peripatetic show, and would not consider a proposition to return to the old order of things.

Without claiming familiarity with all the circumstances, we have a suspicion that the recent decision of the Council to economize by reducing expenses of its officers, might well have been arrived at sooner, and that had this been done and more enterprise shown in advertising the fact and the location of the intended permanent show, the result might have been such as to have avoided the necessity of again going the rounds of other centers.

Our friends on the other side of the sea do not appear to realize as we do on this side, the value of printer's ink as a factor in swelling the record of attendance at a fair, and the consequent increase in the amount of the gate receipts.

Open-air Treatment for Cattle.

It is understood that the Dominion Minister of Agriculture has authorized the Veterinary Department to institute an experiment with the cattle of the Nappan (N. S.) Experimental Farm, which reacted some time since when subjected to the tuberculin test, first by Dr. Hall, V. S., of Amherst, and subsequently by Dr. J. H. Frink, V. S., of St. John. The idea is to submit both those which reacted and those that did not to the same open-air treatment as is now resorted to in the case of human beings affected with tuberculosis. By removing them to a suitable place, where they will be isolated, a series of experiments may be carried out to determine the curative action on cattle of the outdoor and nutrition system of treatment. The importance of the subject would seem to make it desirable that the Dominion Veterinary Service should institute such an investigation, and under the competent direction of Dr. Rutherford, Veterinary Director-General, arrive at some definite conclusions that would be of service to the live-stock interests of the country.

THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE
DOMINION.

PUBLISHED WEEKLY BY
THE WILLIAM WELD COMPANY (LIMITED).

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JOHN WELD, MANAGER.

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LONDON, CANADA.

Raising the Factory Standard.

One of the subjects down for discussion at the district meetings of the Western Ontario Dairymen's Association, to be held this month, is the licensing of cheese factories and creameries, based upon some system of inspection and subsequent oversight. A couple of years ago this subject was raised in the "Farmer's Advocate," and discussed at considerable length at that time and since. Now that it is to be ventilated again, dairymen should give the subject careful consideration, so that at the meetings they will be prepared to take part in the discussion with familiarity, and be in a position to state their convictions and back them up with facts and arguments. In conversation lately with Mr. G. H. Barr, the Association Secretary, we gathered that the licensing idea has not been very enthusiastically received in the Western part of Ontario. There appears to be a fear that it may involve something burdensome, or, as was manifested when the question was debated in these columns before, that there would be a loss of individual control and initiative among the factories and creameries, and a centralizing of authority which appears to be regarded with disfavor under Ontario conditions. "One of our creamerymen," said Mr. Barr, "after a recent meeting, where the subject had been ventilated, came to me and said: 'Now, look here, you people (meaning the Association organization) have got us in hand, and you are just trying to give us another twist.' I replied to this effect: 'There are in this Province, as is well recognized throughout the dairy world, a host of first-class makers who keep their factories in sanitary condition; they keep themselves clean personally, and turn out a Number One quality of goods. There are others that are careless and slovenly, while the conditions around their factories and curing-rooms make it practically impossible to turn out a good article. The position, then, is simply this:

Should they be permitted to produce an inferior class of stuff which will compromise the reputation of our dairy products in the eyes of the consuming public and in the markets of the world, thus working injury to men whose factories and whose methods are up-to-date? Licensing would have the effect of bringing the unfortunate exceptions up to the standard of the better class, and would work them no real hardship. In fact, a properly-planned and administered system of licensing should, in reality, have the effect of benefiting them. What we desire to work out is some system in advance of what we have now that will do the greatest good to the greatest number." What say our dairymen?

HORSES.

What the Hackney Is and Was.

There is no type of horse so little understood or appreciated as the Hackney. This is due to perverted ideas, lack of analysis, the desire to entertain what chimes with our own personal ideas rather than to achieve accuracy, and, lastly, because the type was unfortunately made a fad, and run into the ground. Trotting men forget that the Hackney is distinctly a trotter, and the century-old progenitor and ancestor of trotters the world over. Thoroughbred men overlooked that he is a trotting Thoroughbred, pure and simple.

The Hackney is somewhat of an anomaly, combining the best qualities of trotter and Thoroughbred, as well as qualities which neither possess. He does not conflict with either type when considered aright, but is the link which connects them, or, rather, forms a continuation of usefulness. He is one of the oldest types of horses in existence, and was the distance-coverer before the days of the railroad, and the "trotters" of the early fifteenth century were Hackneys, and it should be remembered that this same Norfolk trotter, besides producing the famous and showy Hackney, also cut quite a figure in the production of the American trotter, as shown by the Hackney and the famous Hambletonian families, both tracing to the one common source through paternal and maternal lines.

In the far-away days the Hackney performed what were wonders in the way of records, when regarded from the possibility of to-day's equine standpoints. These include the performances in 1794 of Ogden's mare, who trotted four miles in 12 minutes 14 seconds; she also went forty miles in three hours, ten miles in 32 minutes, and thirty miles in two hours, trotting and carrying in the saddle 250 pounds. The trotter has been developed for speed and light-wagon work, but we can develop the Hackney for heavy-carriage and heavy-road work along the same line of excellence. If the trotter is to be bred to do it he must be merged back into the Hackney type, for no other type of horse ever has been and none probably ever will be found to equal it along those special lines. Another great Hackney was Phenomena, in the early part of the last century, bred by the popular Sir John Astley, in Norfolk, sired by Othello, a trotter or Hackney horse, dam being a half-bred mare. She trotted 17 miles in 56 minutes, and was matched to duplicate the performance, when she went 17 miles in 53 minutes, four of these miles being covered, consecutively, in less than 11 minutes. At the advanced age of twenty-three years this wonderful mare went 9 miles in 28 minutes 30 seconds. In 1815, Nov. 24, J. Fenton sent his mare a mile on the Sudbury road in 2 minutes 58 seconds, and she covered a mile on Sudbury Common in 2 minutes 53 seconds. In 1832, April 27, a very good mare, Nonpareil, by Flanders Fireaway, was matched to go 100 miles to a cart in ten hours, and she trotted it in 9 hours 56 minutes and 57 seconds, covering the first forty miles in exactly four hours. There are many more such performances, all demonstrating the wonderful possibilities of the Hackney as a carriage and heavy-harness horse. But they must be bred, shown and demonstrated from the utility standpoint, rather than from that of the show standpoint. Col. J. L. Torrey, of Embury, Wyo., has now over 1,000 half-bred Hackneys, not bred to bronchos, but to carefully-selected trotting and Thoroughbred stock. He states that, being deputy-sheriff, he has frequently had to run down horse thieves, and that his Hackneys have done 90 miles in ten hours, time and again. Mr. Cassatt's son rode a Hackney through the Cuban war, bred by his father, and universally acknowledged to be the finest officer's mount in Cuba, as reported in the Times.

"The Cost is Small, Yet the Returns Are Sure"

THE MAN WHO SAID THAT WAS TALKING ABOUT WASTE AND FOR SALE" ADS IN THE FARMER'S ADVOCATE AND HOME MAGAZINE OF LONDON, CANADA.

Administering Medicines to Animals.

The art of administering medicines to animals without endangering the life of the patient is not as simple a matter as many think. This is especially the case when the medicine is in a fluid state, and is given by the mouth. When fluids are rapidly poured into the mouth of a patient whose head is elevated for the purpose, it is not uncommon for a greater or less quantity of the liquid to pass down the trachea to the bronchial tubes and cause more or less serious trouble, according to the nature of the liquid and the quantity thereof. This unfortunate occurrence results from different causes. If the animal's head be elevated and a fluid poured into the mouth, it at once reaches a box called the pharynx, just beyond the root of the tongue. From this box originates the gullet and also the windpipe or trachea, the entrance to which is guarded by a valve. If from any cause the fluid is not swallowed promptly the pharynx becomes full, and after a short time the patient is forced to breathe. The expulsion of air from the lungs forces the valve open, and, as a consequence, a greater or less quantity of fluid enters the larynx and passes down the trachea to the bronchial tubes. This causes the patient to cough more or less violently. If sufficient fluid passes down to fill the tubes the animal will die from suffocation in a few minutes. This occurs more frequently in pigs and sheep than in the larger animals, but its occurrence is by no means uncommon in cattle and horses. If a less quantity passes it sets up what is called mechanical bronchitis, and if the amount of fluid in the tubes be quite small it may become absorbed, and the animal recover, while, in other cases, the patient suffers for a few days and eventually dies, notwithstanding the most skillful treatment. There are different reasons why this unfortunate accident occurs during the administration of fluids to animals. There may be a soreness of the throat which prevents the animal endeavoring to swallow on account of the pain it causes; there may be a partial or complete paralysis of the muscles of deglutition (swallowing); there may be merely a stubbornness on the part of the patient, or the fluid may be introduced in such large quantities that he cannot swallow it fast enough. In order to safely administer medicines in this way, "called drenching," it is necessary to observe closely whether the patient is swallowing, and to pour only a little into the mouth until he commences to swallow. There are many methods in giving medicines, some of which require special instruments, and are practiced only by veterinarians, as the hypodermic, injecting the active principle of a drug in a fluid form under the skin; the intravenous, injecting it into a vein; the intra-tracheal, injecting it into the trachea. All these methods, to be successful, and avoid untoward results, require great care as regards cleanliness of medicines and instruments, and it is necessary to have instruments especially designed for the purpose, hence are practiced only by veterinary practitioners, who practice these modes of administration where practicable, as the actions are more certain and more quickly produced. Other methods are, in the form of powders, balls, drenches, and the introduction of fluids into the mouth out of a syringe. We will first discuss the administration of medicines to horses. Powders are given either in damp food, in the drinking water, mixed with water and given as a drench, or placed on the back of the tongue out of a spoon. The latter is a handy, safe, and sure method of giving powders that readily dissolve. The powder is placed in a perfectly dry spoon, an assistant steadies the horse's head, and the operator catches his tongue in his left hand and with the right introduces the spoon into his mouth, passing it well back, and unsets it. The powder drops on the root of the tongue, dissolves in the saliva, and is swallowed. Of course, when the quantity is large, or does not dissolve readily, this plan is not satisfactory, as the patient will often drop more or less of it out of his mouth. When the appetite is good, and the powder not of a very disagreeable taste, it is convenient and satisfactory to give it mixed with damp food, as boiled oats, damp chop or bran, etc. The administration of medicines in the form of a ball is much practiced, but it requires a little skill on the part of the operator. The drug is made moist with water, treacle, or other moistening substance, rolled into a bolus not more than three-quarters of an inch in thickness and not more than two inches long, and neatly wrapped in tissue paper. If an assistant be present it is well to get him to steady the patient's head and prevent him holding it too high. The operator grasps the ball with the fingers of the right hand and the horse's tongue with the left hand, and thereby keeps the mouth open. He then passes the ball back into the mouth and drops it behind the root of the tongue. If this be done he cannot chew it, and will either swallow it or cough it up. I should have stated that the ball should be moistened with a little oil before being introduced into the mouth. It requires a little practice to enable a man to give a ball without danger of the horse getting it between his molar teeth or getting the operator's hand there. If the hand

should be enclosed between the teeth it should not be forcibly drawn out, as this is sure to make severe scarifications. It should be held quiet, and the left hand, which still holds the tongue, used to get the horse to relax his hold. If the tongue be kept well out of the right side of the mouth between the molars he will not close very firmly on the hand that is in the other side of the mouth. There are instruments called mouth speculums with which the mouth can be kept open and the safety of the hand secured, but the farmer seldom has one of these, and the veterinarian seldom requires one for this purpose. With any of these methods of giving medicines the principal danger is a waste, and, of course, if some be wasted, more can be given. In drenching we must always allow for some waste, and at the same time guard against injuring the animal. In order to drench a horse his head must be held up. He should be backed into a stall or against some solid object that will prevent him from going backwards. A hame strap or something of that sort is put into his mouth, a rope or strap attached to it and run through a ring or over a beam and pulled until his head is sufficiently high, or a stick may be attached and an assistant hold his head up in this way. The operator now puts the neck of the bottle into the mouth from the side and allows a little fluid to run out. If he swallows readily the drench may be allowed to run slowly, but if he does not swallow the roof of the mouth should be rubbed with the bottle. This usually causes him to swallow. His tongue should not be pulled out nor his throat pinched, as the latter will cause him to cough and open the valve. The point to be observed is not to pour the fluid faster than he swallows. Some people pour the fluid into the nostril, but this is very dangerous. If during the process of drenching the patient commences to cough, his head should be immediately lowered, even though the drench be wasted. There is generally more or less waste in drenching, and if the waste exceeds the allowance made for such, more should be given. A very nice way of giving fluids to horses is with a two-ounce syringe. The syringe is filled, the horse's tongue taken in the left hand and the syringe introduced well back into the mouth with the right, and the fluid forced out into the pharynx. He usually swallows it readily, and there is little waste and no danger. Several syringe-fuls can be given this way, if necessary. Under no circumstances should a horse with a sore throat be drenched in the ordinary way, but fluids may be given with a syringe.

The administration of medicines to other classes of animals will be discussed in a future number. "WHIP."

The Thoroughbred for Crossing Purposes

To the Editor "Farmer's Advocate":

The breeders and stockmen generally of Manitoba and the Northwest do not seem to thoroughly realize the value of the Thoroughbred stallion as a means of getting salable horses and generally improving our stock.

It is a popular idea in the great West of ours that the Thoroughbred is useful only as a race horse, or that when crossed with small mares, becomes the progenitor of saddle horses. It is true that he is bred almost solely for racing, but that his usefulness ends there is a very mistaken idea, for there is no other breed of horse so thoroughly general-purpose. To this breed we owe the various Coach breeds, the Hackney, the hunter and the American trotter, or Standard-bred. Were it not for the constant crossing of the Thoroughbred upon the foundation stock of the first three types mentioned, those types would soon cease to exist. It is not found necessary in producing the trotter to use the blood of this grand old breed to the same extent as in the production of the other lighter types of horse, though the practice is still in vogue with many of their breeders, and I am safe in saying that there is not a trotter living without one or more strains of this valuable blood in its pedigree, and in many cases very close up.

These facts should be proof alone of the value of the Thoroughbred for crossing purposes, but we have still further proof in the fact that, to successfully raise horses for the cavalry and artillery, the Thoroughbred stallion must be used. Some will say, why will not some other type or breed do equally as well? Simply because no other breed has the stamina or conformation, for it is generally known that for intelligence and courage, length of neck, short, strong back, and strength of muscle and hardness of bone—all essentials in horses of this class—the Thoroughbred has no equal, and is capable of transmitting his own qualities to his offspring as no other sire, whether of the lower or higher order of animals, can. Then, as a sire of carriage

horses, when crossed with the neat, active farm mare, again the Thoroughbred stands unequalled. I do not say as high-steppers, but as carriage and coach horses, for they transmit to their offspring that elegance of carriage and easy, frictionless action that is so much sought after in the big cities, and that the Thoroughbred alone possesses.

I do not wish it to be supposed I mean these various classes of horses can be produced by crossing the Thoroughbred indiscriminately on cold-blooded mares; such is not so, but one thing is, that every time the Thoroughbred stallion is crossed with the common mare it is a step in the right direction for improvement, for a cross of "hot blood" in the farm brood mare is always an advantage where general-purpose and light horses are being bred, as it gives her offspring endurance and ambition; in fact, a cross of the Thoroughbred is essential in the brood mare if success is to be met with when using the Hackney stallion, or any of the Coach-bred or Standard-bred stallions for crossing purposes, as these breeds, or rather types, are themselves of mixed breeding, therefore they must have some of the pure or "hot" blood in their mates to give the offspring sufficient stamina and style.

To sum the whole thing up, why use sires of mixed breeding which are not strongly enough bred to reproduce themselves, when by using the Thoroughbred, which is the most purely-bred horse, and consequently strong enough to reproduce where others fail, one gets, in a measure, what they are breeding to when using the other type. When selecting a stallion of this greatest of breeds, care should be taken to have no undesirable vices or qualities in the horse selected, as, to a certainty, they will be produced in every instance, so strongly does he transmit



Senator's Roan Mina.

Champion yearling Shorthorn heifer of three counties—Essex, Kent, and Elgin—1905. Bred and owned by John Lee & Sons, Highgate, Ont. Photo by Farmer's Advocate representative at Highgate fair.

his quality to his offspring. The horse to select should be of good temper, size and quality, with plenty of substance. Substance must not be overlooked, as in all high and dry climates the tendency is to run to quality rather than substance.

If farmers would use Thoroughbred stallions with their cold-blooded mares, in a few years this great Northwest would be world-famous for its equines. It is such tactics as these that have made and kept Great Britain justly famous for producing most of the finest horses in the world.

I am sure I have said sufficient to show in some small measure the value of the Thoroughbred. But chapters could be written on their excellence and uses, and then not exhaust the supply of material wherewith to write. That these lines may help others to help the industry in the right direction, is the sincere desire of R. D. Sask.

An Old Country embargo-off advocate says: "The 'Farmer's Advocate' has not mastered its brief, but has shown its hand." Of course it has shown its hand; the "Farmer's Advocate" always speaks out, has the manliness to fight the cause of its readers, speaks its own mind, and does not fight from behind the defences. The Dundee man might as well own up, "We have a lot of money invested in wharves and lairages from which we do not get a penny in return while the embargo remains."

STOCK.

Dentition in Cattle.

The specification adopted in connection with the great International Show, at Chicago, for testing the ages of cattle by their teeth, is as follows, and is interesting as showing the dentition in such animals at different stages of growth:

Twelve months.—An animal of this age shall have all of its milk (calf) incisor teeth in place.

Fifteen months.—At this age center pair of incisor milk teeth may be replaced by center pair of permanent incisors (pinchers), the latter teeth being through the gums, but not yet in wear.

Eighteen months.—The middle pair of permanent incisors at this age should be fully up and in wear, but next pair (first intermediate) not yet cut through gums.

Twenty-four months.—The mouth at this age will show two middle permanent (broad) incisors fully up and in wear, and next pair (first intermediate) well up, but not in wear.

Thirty months.—The mouth at this age may show six broad permanent incisors, the middle and first intermediate pairs fully up and in wear, and the next pair (second intermediate) well up, but not in wear.

Thirty-six months.—Three pairs of broad teeth should be fully up and in wear, and the corner milk teeth may be shed or shedding, with the corner permanent teeth just appearing through the gums.

Thirty-nine months.—Three pairs of broad teeth will be fully up and in wear, and corner teeth (incisors) through gums, but not in wear.

Contagious Cattle Abortion.

At the annual Autumn Conference of the Scottish Chamber of Agriculture, held in Perth last month, a resolution was adopted thanking the British Board of Agriculture for appointing a Departmental Committee on contagious abortion among cattle.

Mr. W. S. Ferguson, seconding, said no scourge cost the country more than contagious abortion. Some had been able to keep it in check. A great many more would be breeding stock were it not for this scourge. The late Principal Williams had taken up the subject, but he was a little in advance of his time. What he had done would be at the service of those now engaged in making enquiry. The Highland Society had at that time

voted £200 to the Principal, but that did not enable him to touch more than the fringe of the subject. For the present enquiry the Highland had given £500, and the Treasury had voted £4,000. No doubt more money would be given if it was shown that this was well spent. Hitherto they had been groping in the dark, and did not know what they were dealing with. What breeders wanted was scientific information on this subject, to enable them to know what they were dealing with.

Mr. Alex. Pottie, V. S., Paisley, was understood to say that he had an effective cure for abortion; that, provided his system were persevered in for a reasonable length of time, the scourge could be stayed. He seemed to be arguing that his system should have a fair trial from the Departmental Committee. He had stopped the disease in hundreds of places, and there was no need for elaborate investigation if this were so. It did not matter what theory he proceeded on if the end aimed at was gained. Evidence and reports of experience should be taken from all parties.

Wanted.

OUR READERS TO USE THE "WANT AND FOR SALE" AND "POULTRY AND EGGS" COLUMNS FOR THEIR ADVERTISEMENTS. THE FARMER'S ADVOCATE AND HOME MAGAZINE, LONDON, ONT.

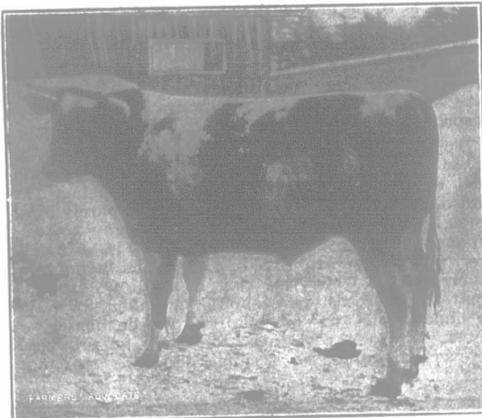
Winter Feeding of Beef Cattle.

The fact that either winter feeding or summer grazing of beef cattle has not been satisfactorily profitable for one season is no sure indication that the following year will necessarily show similar results. The markets for meats fluctuate, as do those for cereals and dairy products, and the next year may bring higher prices for one and lower for others. One of the lessons to be learned from an unfavorable year or a declining market is that the product of best quality finds the readiest buyers and brings the highest price. Another lesson is that the product most cheaply produced, the quality being equal, brings the most profit. Since few farmers who practice feeding beef cattle raise as many as they require to consume the winter feed, or the pasture they have, but depend upon buying a part or all the cattle they feed, it goes without saying that their profit or loss in the transaction depends largely on the class of stock purchased and the price at which they are bought. Were the feeder endowed with the necessary foresight to correctly predict market prices six months in advance he would be in a position to buy with a feeling of comparative safety, but while that gift is withheld he has to take chances in this line of business, as most men have in others, and the best thing he can do, having decided to buy, is to secure as good a class of cattle as he can, and at as low a price as he can buy that class; and then feed them as economically as possible while making sufficient gain in weight to have them in condition to bring the highest market price at the time he wishes to sell. Whether the outcome will spell profit or loss, or merely holding his own, will depend on his skill in feeding and condition of the market when he sells. The object of this article and of a series to follow is to endeavor to throw some light on the problems of buying and feeding cattle with a view to economy of production, in order to secure the best results, so far as the feeder can control the situation. One of the difficulties in securing the class of cattle one would choose to feed—and it is a somewhat serious difficulty—is the lamentable scarcity of well-bred, thrifty good-doing steers or heifers available in this country, owing to the neglect of farmers to use a good class of pure-bred bulls of the beef or dual-purpose breeds. The benefit of all concerned of improving the stock by this means is a lesson the average farmer has been deplorably slow to learn, despite the oft-repeated reminders of the market reports and of writers in farm papers. Under existing conditions, the best that can be done is to "take time by the forelock" and keep a look-out for possible bargains some time before the cattle are needed to put on feed, securing a good one or a few when they are found and can be bought right. If these cannot be secured near home, the next best thing—and sometimes it is the best—is to occasionally visit the cattle market in some good center, and keep a lookout for a carload of a useful sort not sufficiently finished for the export trade or the butcher, and that can be purchased at a price likely to allow a margin for profit on a few months' feeding. The railway companies, we understand, make special reduced freight rates on stock shipped out for feeding and returned to the market by their road, and the banks are generally willing to loan money to farmers on the security of the cattle when marketed. So that, if a man has a supply of fodder and other feed to be disposed of, and has not the ready cash to pay for the needed cattle to feed, he may, if willing to take the risk of borrowing money, market his feed through cattle to better advantage than he could in the raw state, and have at least a good stock of rich manure for his labor to increase the fertility of his land. And if he buys and feeds judiciously, the gain in weight of the cattle is likely to let him out safely, even though the price per pound at which he has to sell may be no higher than what he paid, and if it is a cent a pound more on the weight when purchased and the added weight, it is considered a fairly satisfactory result, while any price above this is regarded as a fortunate outcome.

The question whether it is likely to be more profitable to buy what may be called half-finished or short-keep feeders at a higher price, or thinner cattle requiring a longer term of feeding at a lower price, will depend largely upon the quality of the cattle in each case, the amount of feed on hand, and the date at which it is desired to sell. One thing in favor of the heavier cattle, and the early selling is that one may be in a position to sell at almost any time in case of a possible rise in the market price, and thus realize a gain profit, while the lighter cattle cannot be sold to advantage till they have been fed for a considerable time. In either case it is a mistake to buy unsuitable cattle; that is, a class that is not likely to be good feeders, to have a good weight, and give a good return for the feed they consume. The saying that "well bought is half sold" applies in this case more surely than in any other actions.

It requires but few words to describe the profitable feeding steer, but unless the buyer has been observant of the difference between good and common or scrub cattle in this respect, and has had some experience in handling the better class, he may make serious mistakes in his selections. He will be in danger of preferring size to quality, smoothness and thriftiness, and may find that he has a lot of cattle lacking in uniformity, of a bad type, and hard to sell to advantage. If he has not confidence in his own judgment, he may do well to enlist the assistance of an experienced buyer in whom he has confidence.

The good-feeding steer or heifer will show the characteristics of some one or more of the pure-bred beef breeds in color and conformation, will stand on short legs, will have short, broad head and a bright eye, a broad muzzle, a short, thick neck, a full brisket, smooth shoulders, well-sprung



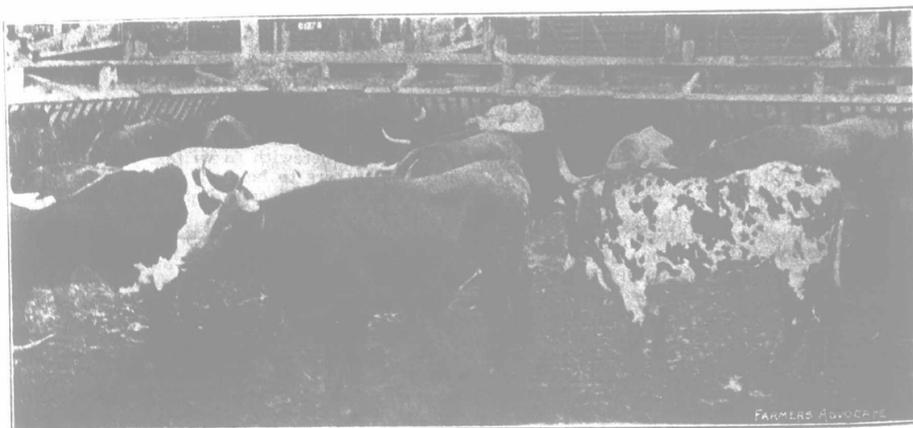
A Good Feeding Sort.

and deep ribs, a strong back and loin, long, level quarters, long thighs, well filled in at the junction or twist, will be thick through the heart, wide between the fore legs, the fore ribs and flank well let down, will have a good coat of soft-handling hair, a loose, soft-handling skin, and a quiet disposition.

A two-and-a-half-year-old steer of this description should weigh about 1,100 pounds in good, thrifty condition, coming off the pasture, or when put in the stable for winter feeding. The difference between the class of steer described and a common or a dairy-bred animal is that the former will lay on flesh of a good class rapidly on the back, loin and ribs, where the best cuts are found, and will make rapid gains in weight, while the other class will put but little flesh on his back, but will fill up inside with tallow, a low-selling product, and will never have the appearance that takes the eye of the buyer and brings the best price, but will have to be sold at one to two cents a pound less, while his gain in weight will also be much less than that of the beef-bred steer, and there is little chance of any profit on his feeding.

It is well to buy not later than November for winter feeding, as after the grass becomes frozen it is less nutritious, and the cattle are failing rather than gaining in condition, and this loss has to be made up before any gain can be made. However, we have seen cattle bought in the market in December which have made satisfactory gains when stabled and wisely fed.

The feed at first after stabling should be mainly roughage, as straw, hay and ensilage, with a moderate supply of roots or bran, or both, to be supplemented with a light meal ration after the first week or two, and gradually increased. The question of the advantage or otherwise of light versus heavy meal feeding and of balanced rations will be treated in a following article.



Unprofitable Feeders.

Shorthorn Registration.

To the Editor "Farmer's Advocate":

I beg to draw attention to the fact that entries for Volume 22 of the Herdbook will be closed on the 31st of December, 1905, and if breeders wish pedigrees to appear in that volume it would be advisable for them to send them in as soon as possible, when the applications will receive our prompt attention.

Volume 21 is now in press, and will be mailed to all entitled to same next month. It contains the pedigrees of 4,940 bulls, and 5,290 cows, or a total of 10,230; also a list of prizes (awarded at the different exhibitions which receive our grants), together with the names of the exhibitors and the names of the prize-winning animals.

Since the Record Office has been removed, a number of breeders have been enquiring as to the cost of registration. The fees have not been changed, and are as follows:

Fees, invariably in advance:

TO MEMBERS.	TO NON-MEMBERS.
For recording pedigree of each animal under 24 months \$0 75	For registration and certificate of each animal under 24 months \$1 25
For recording pedigree of each animal over 24 months 1 00	For registration and certificate of each animal over 24 months 1 75
Transfers, each 25	Old certificates exchanged for new forms, each 10
Duplicate certificates, each 25	Transfers, each 25
Old certificates exchanged for new forms, each 10	Duplicate certificates, each 25
Back volumes of herdbooks, each 2 00	
Membership fee, yearly 2 00	

All registration fees must accompany applications, and may be sent by postal note, post-office money order, registered letter, express money order, or marked cheque. Postage stamps will not be accepted.

New application blanks will be supplied free to all who apply.

A new form of registration certificate is now being issued (with the railway shipping vouchers attached). Send in the old certificates and they will be exchanged for the new form at the cost of 10 cents each.

Keep animals registered. It is a poor animal not worth the fee necessary to record its pedigree.

Always state on the application form the number or volume where the dam is recorded. It would also greatly aid, when forwarding pedigrees for registration, to write them legibly and correctly, and be careful to give every particular required on the application form. Before sending in pedigrees, their accuracy as to date of birth, color, name of breeder, owner, etc., should be carefully checked. No pedigree will be received unless made on the printed application form of the Association, and must be certified by the breeder, his accredited agent, or representative.

If care is taken in these points, much inconvenience, delay and correspondence will be avoided.

There are hundreds of breeders in every Province who are not as yet members of our Association. Note the small fee to join, \$2.00 per annum, which entitles the member to register animals at reduced rates, and if there are four animals to record in one year, enough will be saved to pay the membership fee. If not already a member, send in the name, and also tell neighbors of the advantage derived from being a member.

The Association has, since 1895, distributed prize money amounting to over \$25,000 at the leading exhibitions and winter fairs in the various provinces. The distribution of a liberal share of our surplus funds, in the form of prizes for the encouragement of a strong representation of the breed at the principal shows, has been beneficial to the fraternity in advertising the Shorthorn, thus keeping in the public view the merits of the greatest breed of cattle yet produced.

We are now numbering the females, so that each certificate is numbered as issued. If there is not a number on your certificate send it in, and we will put it on and return promptly.

All communications addressed to Accountant.

National Live-stock Records, Department of Agriculture, Ottawa, can be sent free.

Send in your applications and they will receive prompt attention.
H. G. WADE,
Ottawa. Registrar and Editor.

The Bacon Pig.

Bacon hogs ready for the market should possess long, deep bodies, with straight or slightly arching top and straight underlines.

The shoulders should be fairly upright, joined closely to the body, and rounded nicely over the top from side to side. The bodies should not, however, be any thicker through the shoulders at points more than half way up from the underline to the top line than through points at a similar height situated between the shoulder and the ham.

The croup should slope but slightly from the loin to the root of the tail. It should be of good length, and should maintain its width throughout, which width should be the same as that of the body and shoulders.

In short, a straightedge laid against the side from the shoulder-point to the tail should touch at every point.

The ribs should spring out well from the spinal column, but should fall in fairly vertical lines once their greatest curvature is attained, thus making a deep-bodied rather than a round-bodied animal.

The body should be carried on good stout, clean, straight-boned legs, free from weakness at the pasterns and with square-set hocks.

The feet should be strong and compact, the animal standing right up on his toes.

The neck should be of medium thickness, with no tendency to coarseness.

The head should be clean-cut, and free from flabbiness at the jawl.

SUITABLE BREEDS.

As already suggested, pigs most nearly conforming to these requirements are found in greatest numbers among Large Improved Yorkshires, Tamworths and Berkshires, and among their grades and cross-breeds.

By "grade" is meant an animal the product of a pure-bred sire; that is, a sire registered or eligible for registration in some generally recognized herdbook, and from a dam not so registered nor eligible for registration, whether she have none or many crosses of pure-bred blood. By "cross-bred" is meant an animal the product of a pure-bred sire and from a pure-bred dam, the dam being, however, of a different breed from the sire.

Some of the more striking peculiarities of these different breeds of pigs suitable for bacon production are given below. These statements are made after several years' experience of a varied character with each sort.

Large Improved Yorkshires, white pigs, have been found to be a prolific and fairly early-maturing breed. In shape they come very nearly being ideal bacon pigs. They furnish a very large proportion of carcasses answering the requirements of the best bacon trade. The hams are well developed, and the proportion of fat to lean is usually about right.

The sows are docile, good milkers, and very prolific. The boars are very impressive, seldom if ever failing to leave a strong impress on their progeny. They are usually robust, healthy animals, but are not quite as well suited for pasturing as are pigs from some of the other breeds.

Berkshires, black pigs with more or less white in the face and white points, have shown themselves to be not so prolific as some other breeds, but to be very early-maturing animals. Their admirers claim for them such a superiority in this respect and in their apparently superior powers to assimilate food as to more than make up for the rather small litters which are not infrequently borne. In conformation they are not quite so well suited for the bacon trade as are some of the other breeds. They are very well suited for pasturing, having few if any equals in this respect, and giving very satisfactory returns, indeed, while being fed in this way. They are quite free from the affections of the skin and other troubles which quite often cause loss with white and red skinned sorts while on pasture.

Tamworths, red pigs, have here shown themselves a quite prolific and fairly early-maturing breed. They are almost invariably deep-sided and long-bodied, but are not infrequently rather light in the ham. They are fairly rapid growers, but are somewhat slower to come to maturity than are some other breeds. They cross well with Berkshires and with the Large Yorkshire. As sires they are fairly impressive.—[J. H. Grisdale in Bulletin 51.]

Tell Your Wants

TO OVER 30,000 OF CANADA'S BEST FARMERS BY ADVERTISING IN THE "WANT AND FOR SALE" COLUMN OF THE "FARMER'S ADVOCATE AND HOME MAGAZINE," LONDON, ONT.

FARM.

Dodder (*Cuscuta epithymum*).

A large part of the trouble coming from the introduction and dispersal of pernicious weeds in grasses, clovers and other cultivated plants, is to be laid directly to the doors of irresponsible or careless seedsmen, who import seeds from Europe; and I may say that nearly all our worst weeds have come from that continent. During the past year, especially, there has been imported and distributed through this Province a comparatively new weed, known as Dodder. Although there are several species, *Cuscuta epithymum* is the only one that has yet proven itself dangerous in Ontario.

Dodder is a plant that differs from the majority of plants, in not being able to draw its food either from soil or air, but belongs to the parasites, or to those plants which live upon the juices or reserve products of other plants. Dodder seed when placed in the soil germinates in practically the same manner as other plants, but instead of two green leaves there appears above the surface a very inconspicuous yellow shoot. This is self-supporting, until the store of nourishment contained in the seed has become exhausted, when it throws out haustoria "suckers" at points where the stem comes in contact with that of the clover, and by fixing these sucking discs into the stem establishes a union which enables it to draw the juices of the clover in much the same manner as the rootlets of the common green-leaved plants draw nutriment from the soil. When this union is effected the dodder plant disconnects itself from the earth, but still continues to grow very

which he submitted to Dr. Fletcher, Ottawa, and which proved to be dodder. In 1904 it had spread so as to produce a sort of blight throughout the field. The alfalfa was cut once, and gave a yield of one and one-half tons per acre. In 1905 six acres were cut, and gave a yield of about one ton of dodder stems and alfalfa per acre. The remainder of the field the tenant did not consider worth harvesting, as the dodder had taken entire possession of the crop. As to whether this tenant should be legally responsible for allowing this pernicious weed to go to seed repeatedly in the midst of a magnificent clover-producing center, to the detriment of not only the owner of the property, but possibly the whole Province, is a matter I shall leave to your judgment.

The history of its introduction is only a repetition of what has often occurred before. The seed was imported, offered for sale at a low figure, and, as a result, the dealer's purpose was readily accomplished.

In Germany this weed has proven a national calamity, as it nearly forced farmers to abandon the growth of clover, and the above is evidence of what it is capable of accomplishing in Canada under favorable conditions.

As to methods of eradication: When small dodder-infested spots are first noted they should be mowed as closely as possible with a scythe several feet beyond where the yellow vines are observed. After the vegetation has been removed these spots should be spaded, as cutting is not reliable. The small clusters of flowers that produce practically all the seed are near the root of the clover stem, and will often remain on the stubble after the alfalfa has been cut, and there ripen their seed. The writer examined a large number of these dodder capsules containing seed, and found that those produced at the upper part of the clover stem were practically barren, while those near the root were well filled with seeds.

Burning small areas is effective, but a considerable degree of heat must be maintained for several minutes

to destroy the seeds. This may be secured by covering the ground with straw or shavings well covered with kerosene. For entire fields, cultivation with hoed crops, such as roots or corn, for two successive seasons, is usually successful, but rotation should be modified so as to leave out leguminous plants until the vitality of all seed remaining in the soil has been destroyed.

Unfortunately, the new Canadian Seed Control Act, which, to use the words addressed to me a few days ago by a wholesale seedsmen in Toronto, "is proving the very best thing that could possibly have happened to raise the standard of the seed trade in Canada," does not include this weed, so that having no protection, we should use every precaution to avoid

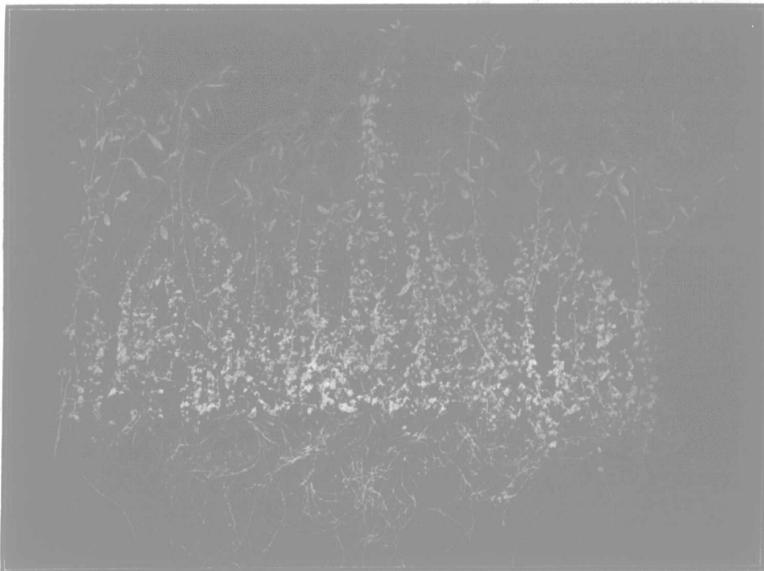
sowing clover, and especially alfalfa seed containing dodder as an impurity. If a guarantee cannot be obtained from the dealer, the seed should be carefully examined by the buyer before sowing. H. H. MILLER.

[Note.—Six species of dodder, or love-vine, have been reported in Canada—one on flax, two on clover and alfalfa, and the others on non-economic plants. The Nevada Agricultural Experiment Station reports that the common clover dodder, *Cuscuta epithymum*, has such a decided preference in the Northwest for alfalfa as to justify the name given it there, *Alfalfa Dodder*. Mr. Dewey, a weed expert at Washington, states that *Cuscuta arvensis*, which also occurs on both clover and alfalfa, is the most injurious native dodder east of the Mississippi.]

Earlier than the first appearance, to which Mr. Miller refers, the observant farmer will likely notice on his clover or alfalfa the tangle of yellowish or reddish yellow stems, without leaves, but bearing the clusters of small whitish, pinkish or yellowish flowers described in his letter. Cutting and burning at this stage eradicates it.

The conditions in Canada are probably not so favorable to this weed as in Germany. Reports of its existence here and there have come to this office for many years, but we have not heard of its becoming generally and firmly established in any neighborhood.

A lens is needed to detect its presence in clover seed. The seeds of both species named resemble clover seed in shape; both are dull in color and rough when seen under the microscope, whereas the seed of clover is bright and smooth. Those of *C. epithymum* are much smaller than clover seed. The seed of *C. arvensis* is about the same size as white clover seed.—[Editor.]



Dodder.

Our Western Letter.

It is the 10th of November in Alberta according to the calendar, but if you ask the man in the street he will tell you it is the day after elections, for in this country we do not judge time by the almanac alone. The election is over, and everybody breathes a sigh of relief, for if ever a campaign was woven of the warp and woof of dirt and bitterness this one was, and now that the worst of the fight is over, let us hope that some of those who carried the personal questions to the front and ignored the real ground of controversy between the parties may waken up sufficiently to be thoroughly ashamed of themselves. The parties started even; there was no previous record to rake up, and while yet the page is fair shall we not keep it so, and does not this acrimonious controversy in which charge and counter-charge of corruption flashes back and forth from party to party, and from paper to paper, tend to give the stranger within our gates the idea that in the Dominion of Canada political integrity, or even the semblance of it, is not in the market, and scarcely to be had at any price.

Charges of malicious malfeasance have been made by both parties, but nothing will ever be heard of them again. Yet, if these things are true, they are a disgrace, and certainly they should be probed to the bottom. It's up to the representatives of both sides to put up or shut up—put up the proofs of statements made, or publicly withdraw the charges. Enough of politics.

The weather! That's a cleaner subject for discussion. It's ideally beautiful these days. Day after day Old Sol goes his rounds over a sky as clear and blue and cloudless as ever formed the vault of heaven in any land. At night, from five to ten degrees of frost; and from ten o'clock in the morning warmth and sunshine and clear sky, so that coats are needless, and work in that clear sunshine is exhilarating. But the people in other lands will never learn. A few days ago I met a landseeker from Nebraska who had been told that it was not safe to come to Alberta in November; he would not be able to see the country for snow and ice. But this Yankee came, and the felt boots and double-fleece-lined, felt-paper-fur-side-in garments he brought with him can be saved for future use if he ever returns to his old home in Nebraska; but if he does, what a light he will be to the people of his own land!

They—I mean the C. P. R. Co.—are building a new line from Lacombe eastward. It now extends for about thirty miles, and a trip along that line possesses the advantage of novelty. The train backs out—because it can't turn round at the other end of the line. There is only one passenger coach, and it is divided into three—one part for regular passengers, then the smoker, and last the baggage. Some places the stations are not built, and it is very interesting to see them fire the express and freight out onto the open prairie. One place is called Chigwell; there is one store there, and not another building, but lest you might miss the spot the owner has a sign up, "This way to Chigwell store." Some day that may be a thriving town, for, after all, the great things of this world had not great beginnings, and even the mighty oak was one day a tiny seedling, scarcely worth a passing notice.

Another town, and it is more pretentious, is Alix, at the present terminal of the line. Alix has two or three stores, a big boarding-house, and several other buildings, and, of course, the ever-present essential—a land guide and real-estate agent. There is nothing more interesting in the whole world than the buildings of these new towns: A single store, with a lodging-house above it; a blacksmith shop; an implement agent; construction trams; a railroad; regular trains; rapid growth; a thriving town. That's the story, much abbreviated. Oh, if you want to see the growth of a country, the beginning of things, you must see it in the West to-day, where history is in the making!

Everybody isn't satisfied! If this country surpassed the Garden of Eden it wouldn't please everybody. I met one woman in Alix who said she would sooner be a lamp-post in the City of Toronto than a millionaire in the Province of Alberta. Opinions differ. Her choice and mine are very different. I wouldn't care to be a lamp-post in Toronto, although I doubt not that such an article would be useful, especially if it shed some light upon the problems of municipal government in that city; but I would sooner own a quarter-section of land and take part in the development of this country, and in the production of wealth, and in the work there is for every one out here. Yes, that a thousand times for me, but she sees through other eyes than mine, and some day she will probably return to function as a lamp-post in that beautiful city she has always loved so well. J. R. DEACHMAN

Clover in Manitoba.

The impression had long prevailed that red clover, owing to the severity of the winters, and from other disabilities, could not be successfully grown in the Province of Manitoba. The editors of the Western edition of the "Farmer's Advocate," judging from what they had seen of successful clover-growing on the Experimental Farm at Brandon, and on the farms of a few enterprising farmers in different sections of the Province, and realizing the urgent need of the growing of some leguminous or nitrogen-gathering crop to renew the supply of nitrogen and furnish vegetable matter to take the place of that being exhausted by continuous grain-growing, as well as to supply for stock-feeding purposes that best of fodders—clover—a year ago announced that the publishers of the paper would give four silver medals to the men who grew the best crops of clover in four districts of Manitoba in 1905, and a gold medal for the crop which best survived the winter and made a stand in 1906. A gratifying number of farmers in each district entered the competition, and the success of the seeding after the harvesting of the grain crops with which, in most cases, the seed was sown, was, generally speaking, quite satisfactory. In the case of two of the winning entries the clover seed was sown alone, and in the other two it was sown with a nurse crop of barley, and it was somewhat surprising that, contrary to the generally-accepted theory, that only by sowing the seed alone could a good catch be secured, the competition showed that with a seeding of barley as good a stand of plants was secured in most cases as where sown alone.

In the matter of seeding there was a wide variation in the amount sown per acre. As much as twenty pounds and as little as six pounds were sown, and the best results were from seed sown at about the rate of from eight to ten pounds per acre.

From the results of the competition, the editors have no doubt as to the feasibility of clover-growing in the West. It, therefore, only remains for a more general adoption of the crop by those whose farms require renovating and those who keep live stock to any considerable extent to demonstrate on a larger scale the possibility of successfully growing clover, a consummation which will relieve the minds of many who have been apprehensive of the future of Western farming owing to the prevalence of the opinion that the crop would not succeed there, and that in course of time the fertility of the land would become exhausted, and farming, consequently, prove unprofitable. The same misgivings were once entertained regarding farm lands in the Eastern Provinces, but the growing of clover and feeding of stock has saved the situation and demonstrated that land fairly treated will not become unfruitful.

Manure Spreading—Ensilage Feeding.

1. For the past few years we have been drawing our manure out of the stable and spreading it direct on the land, but as the snow is going away the water in the ditches close by the field are highly colored by the juice from the manure. Is this a waste, or is there no fertility in this color, as some claim? Do you think it would be best to put it in small heaps (five or six to a load) and spread in the spring?

2. From experiments conducted at Guelph, has it been found advisable to feed ensilage with cut straw or alone?

3. We have a pure-bred aged cow, that calved in February, 1904. She had been served regularly by the bull until last May, when we thought we could not get her in calf, so turned her out to pasture, along with a bull and some other cattle, but in about two weeks we noticed she had a large udder. We brought her down, and she has milked fairly since. What was the cause of this? I don't think she lost her calf.

Ans.—1. There is no doubt that where the drainage water from the surface of a field shows discoloration there has been considerable waste from the manure which has been spread upon the surface during the winter. The method adapts itself to fields where there is comparatively little surface drainage. If the method of spreading manure on the surface of the ground during the winter is judged by results, it seems to be a very satisfactory one in almost all cases. Your correspondent, however, seems to be an exception to the rule. When the snow is very deep, we sometimes practice putting out the manure in somewhat larger heaps than your correspondent mentions, driving over the heap each time with the team and sleigh, so as to pack it firmly and prevent excessive fermentation. We then spread from these heaps in the spring with the manure-spreader.

2. While no careful tests have been made as to the relative merits of feeding silage alone and with cut straw, I may say that I prefer the latter method for two reasons—by mixing cut hay or straw with the silage, I believe the stock relish the food more, and also the method enables one to feed rather more straw if he desires to do so, as the animals will eat straw better when it is cut and mixed with silage.

3. I am not sure of the account for the peculiar behavior of the cow in question. Possibly some reader of the

"Farmer's Advocate" has had a similar experience, and can suggest a reason. It is quite possible that there was abortion. G. E. DAY.
O. A. C.

DAIRY.

Sampling Cream.

When cream stands for any length of time the top layer will be richer than the cream below; this makes it necessary to thoroughly mix each lot of cream by pouring from one can to another just before taking a sample for testing. If the cream is lumpy it should be poured through a fine hair-sieve before sampling.

Gathered-cream factories have, in some cases, adopted the following method of sampling cream: Each driver is provided with a box of numbered bottles having a capacity of about four ounces each, one bottle being provided for each patron. This box is protected from heat in summer and cold in winter so that the sample bottles of cream may arrive at the factory in nearly the same condition as when taken from the farms. This gives the buttermaker a chance to inspect each patron's cream and locate the defective lots, if there are any. After inspection at the factory the samples are poured into composite sample jars which contain a preservative; no preservative is added to the bottles taken to the farms by the man who weighs, samples and gathers the cream, but he must protect these samples from changes caused by heat and cold during the different seasons of the year. In some factories each lot of cream received is tested, as this is considered more accurate and satisfactory than tests of composite samples.

Cream should be sampled with a tube or some arrangement that gives the same aliquot portion of each lot. When the composite samples are tested, the cream should be weighed into the Babcock cream test-bottles. Measuring cream with a pipette of any kind or size does not give accurate results in testing with the Babcock test. In Wisconsin the law requires the cream should be tested by weighing into test bottles.

Testing cream accurately requires greater care than testing milk, especially in reading the per cent. of fat. The short-necked cream bottles graduated from 40 to 50 per cent. do not afford an opportunity for exact readings, because the column of fat is so wide that the meniscus may include nearly one-half of one per cent. fat, and uncertain readings that may be either too high or too low are the result. Cream test-bottles should have a narrow neck. This makes it possible to graduate the neck to divisions representing less than one-half of one per cent. each.

Very accurate test of cream may be obtained by weighing half the usual quantity of cream, or nine grams, into narrow-necked test-bottles that are graduated to two-tenths of one per cent. like the whole-milk bottles, and multiplying the readings by two.—[Prof. E. H. Farrington, Wis. Exp. Station, in Bulletin 129.]

How First-prize Butter was Made.

I have been asked to give a short description of the method followed in the making of the butter which won first award in the section for 56-pound box of salted creamery at the Canadian National Exhibition, 1905.

In the first place I would state that our creamery is a part of the manufacturing plant known as the Canadian Milk Products, situated at Brownsville, Oxford Co., Ont. Our main line of manufacture is dried milk powder, but we also make considerable quantities of butter. Our supply of milk is derived from the farmers, who deliver it at the factory daily. As our market demands a first-class grade of powder, it is essential that all milk be cooled to 65° F. previous to delivery, and must necessarily be clean, of good flavor, and sweet. The milk from which the prize butter was made was delivered in the evening of the 22nd of August, only evening milk being used for the purpose.

After the milk was delivered, it was immediately separated at a temperature of 65° F. The cream was run from the separator into the cream vat, and immediately cooled to 50° F., by means of ice-cold water which surrounded the vat. After the cream had been reduced to this temperature, it was treated with 20% of pure lactic-acid starter, was well stirred, finally covered, and left for the night.

Arriving at the creamery next morning, I examined the cream with regard to flavor, temperature, and acidity, and found that it had a distinctly clean, pleasant flavor, to both taste and smell, the temperature was 49° F., and the acidimeter showed an acidity of .25. The cream was then treated with Hansen's butter color, at the rate of $\frac{1}{4}$ of a dram per 100 lbs. of butter.

After careful preparation of the churn (viz., Success), by first scalding, then thoroughly cooling, the cream was allowed to run into the churn, and churning process began, which lasted for a period of 57 minutes. During the churning process, and just at the point when the cream breaks, it was treated with two pails of brine at the same temperature as the cream. As soon as it was sufficiently churned and the granules were the size of wheat grains, the churn was stopped and the buttermilk immediately drawn, the temperature being

56° F. After the buttermilk had drained thoroughly, the butter was rinsed with water and allowed to drain. After this water was added, at a temperature of 50° F.; as much water being added as there was cream originally. The churn was then revolved eight times, and the wash water allowed to drain. After the butter had drained thoroughly, it was salted at the rate of .75 of an ounce per pound of butter, the salt being evenly distributed by means of a sifter, etc. The churn was then revolved twice without worker, then twice with worker in position every half hour until the butter was sufficiently worked. During process of salting and working the churn was run at as low speed as possible, in order to preserve the grain and the body of the butter.

The manufacturing being done, we must next turn our attention to the packing, etc. None but the best boxes and parchment paper procurable were used. The parchment paper, 24 hours previous to use, was soaked in a solution of formalin and brine. The boxes were lined with a double thickness of parchment paper, after which they were packed ready for exhibiting. After exhibits were prepared they were immediately cooled to a temperature of 18° F., and maintained at that temperature until shipped to the exhibition. It may be of interest to know that the butter was made six days previous to judging at the exhibition.

With regard to the saltless butter which we exhibited, the process of manufacture was entirely the same as with the salted butter, except that instead of salt being added $\frac{1}{2}$ of 1% of preservaline was added.

In conclusion, I may say that the score on this butter was as follows: Flavor, 48 $\frac{1}{2}$; grain, 24; color, 14 $\frac{1}{2}$; salt, 9 $\frac{1}{2}$; finish, 5; total, 96 $\frac{1}{2}$ points out of a possible 100.

G. S. DOBBIE,

Buttermaker, Brownsville Creamery.

The Four Great Dairy Breeds in America.

(Continued.)

By Valancey E. Fuller.

IV.

JERSEYS.

Jerseys and Guernseys, which are often called the sister breeds, unquestionably have the same origin. Some say that the Brittany cow, and others say the Normandy, was the source of their origin, but the preponderance of evidence is that they are descended from the latter breed. As far back as 1734 the Jerseys were, according to the authority of Rev. Philip Falle, recognized as a distinct breed, and were esteemed as superior to French cattle. The system of management of the Normandy, Brittany and Guernsey stock was almost identical.

IMPORTATIONS INTO LOWER CANADA.

Early in the fifteenth century emigrants to Lower Canada went from Dieppe, St. Malo and Rochelle, and brought their own cows with them from Normandy and Brittany. Being very tenacious of their own customs, and assimilating very little with the English-speaking population, they handed down the breed comparatively pure. There was constant trading between Brittany, Normandy and Lower Canada, and, like the Ayrshires, the Brittany and Normandy cattle were introduced into Lower Canada by captains of sailing vessels. These cattle of Lower Canada are now recognized as a distinct breed—"French Canadian"—and have their own Herd Register. There is little doubt that the Jerseys, Guernseys and French-Canadian cattle had one common ancestry. The milk of the latter is as rich as that of the Jersey, but they do not give so much of it, nor are they as large in stature as the Jersey or Guernsey. This may be easily accounted for from the fact that the French-Canadian cattle have not had the same care or as good handling as the Jerseys or Guernseys.

IMPORTATION TO JERSEY PROHIBITED IN 1763.

As far back as July 16th, 1763, an act was passed by the States of Jersey prohibiting importation of any live cattle from France, except for slaughtering. Ever since the year 1763 the breeders of the Island have been alert to maintain the purity of the breed.

ROYAL JERSEY AGRICULTURAL SOCIETY FORMED.

The Royal Jersey Agricultural Society played a very important part in the early development in Jerseys, and still continues to do so. This society was organized on January 18th, 1834, and immediately drew up a scale of points. I know of no organization which has shown as great foresight as has this society, especially in the rules they have passed to keep the prize bull on the Island for one year, or forfeit the prize-money; to make the services of the prize bulls available to members for a nominal fee; to permit final registration, or qualification, as it is called, of females only after they come in milk and their superior individuality has been approved by a committee especially appointed for that purpose, thereby preventing "qualification" and the entry in the herdbook of undesirable animals, even where the sire and dam were qualified; to compel the showing of the dam in the ring, in awarding prizes to bulls, and increasing or decreasing the number of points accorded to the

bull according to the good or poor qualities of the dam.

SIGNIFICANCE OF H. C. OR C., P. S. AND F. S.

When an animal is "qualified" by a committee, the designation of H. C. (Highly Commended), or C. (Commended), is attached to its register, according to the individuality of the animal entered. If the sire and dam of such animals are "qualified" in the herdbook, the designation of P. S. (Pedigree Stock) is attached; if sire or dam are not qualified, F. S. (Foundation Stock) is attached.

In the first scale of points (1834) much stress was laid on the straight back. Out of the total of twenty-seven points four were given for this feature, and eight for head, eyes, ears and horns. This scale was revised in 1845, 1849, 1851, and 1858.

MOVEMENT TO IMPROVE THE BREED.

The first concerted movement to improve the breed was made in 1834. Col. Le Couteur, Secretary of the Royal Agricultural Society of England (but a Jersey man by birth), describes the Jerseys in 1834 as "Too slightly formed behind, and cat-hammed. The udder was ill-formed, the tail coarse and thick, the head coarse and ill-shaped; many were without that golden or yellow tinge within the ears which denotes a property to produce yellow and rich butter; some had short, bull necks; some had too much flesh, or dewlap, under the throat, and some were too heavy in the shoulders."

I fear that some of these defects apply to too many Jerseys exhibited at the fairs on this continent.

The first test was made by Mr. Hume, president of the R. J. A. S., in 1845, of three two-year-old heifers, and was for a year. They showed an average profit of £15 5s. 2d. each, but this included a credit of £4 10s. to each heifer for the



Blue Bell, Imp.

Typical Jersey cow. Aged 14 years. Photographed six months after calving.

value of her manure. The test of the same heifers was continued the following year, with an increased profit of 33 per cent.

IMPORTATIONS TO THE U. S.

An Alderney cow was known to have been imported to Penn., U. S., in 1817, by Mr. Wm. Works. She yielded 9 $\frac{1}{2}$ pounds of extremely rich, highly-colored butter per week. She was small, and was supported with less food than ordinary stock. She averaged fourteen quarts of milk a day. Less than 17 pounds of her milk were required to one pound of butter. In 1840 Mr. Nicholas Biddle, of Pa., imported three Alderneys. The importations into the U. S. really began in 1850. Mr. John A. Taintor, of Hartford, Connecticut, made the greater number of them in that year, including the bull Splendens 18, and the cows Sisson's Dam 22, Violet 28, and Jessie 28. He and a Mr. David Buck, also of Hartford, Connecticut, imported Dot 7. The great Daniel Webster, imported for "Franklin," Jenny Lind 552. Buttercup was imported by Mr. Sam Henshaw, of Boston, but was sold to D. Buck. The bull, Sailor 169, was also imported by Henshaw. While Mr. John A. Taintor seems to have imported Jerseys for others, he is entitled to the credit of having first introduced them into America. Mr. E. Colt and David Buck, both of Hartford, Connecticut, became the owners of the majority of Jerseys imported in 1850. In 1851 seven males were imported, including Premium 7, Colonel 76, Typhoon 77, John Bull 167, Norfolk 224, Willoughby 231, and George W. Lyman's bull. Taintor imported 1; Thos. Motley, of Mass., 4; and Peter Lawson, of Lowell, Mass., 1. Thirteen females were brought to the U. S. that year. Up to 1860 John A. Taintor continued to be the chief importer, having brought over 50 females, and Thos. Motley 7; but the latter imported more bulls than the former. Hartford, Connecticut, was the great center of Jerseys in the early days of its history in this country. Massachusetts,

around Boston, came next, with Pennsylvania and Maryland following.

IMPORTATIONS INTO CANADA.

The first importation into Canada was made Aug. 17th, 1868, by Mr. S. Sheldon Stephens, of Montreal. It consisted of the bulls Defiance 196, bred at the late Queen's Shaw Farm, Windsor, Eng.; and Victor Hugo 197, bred on the Island. The cows were Victoria 411, Pride of Windsor 483, Amelia 484, and Juliette 485, all bred by her late Majesty the Queen; and Alice 488, Hebe 489, Berthe 490, Bonnie 491, Lisette 492, Ophelia 493, Pauline 494, Lydie 495, Portia 496, Fancy 1318, and Beauty 1319, all bred on the Island of Jersey.

In 1871 the imported cow Taffy 5523, and Topsey of St. Lambert, were added to the herd. Later on Stoke Pogis 3rd 2238 was bought by Mr. Romeo H. Stephens from Mr. Peter Leclair, Winooskie, Vermont. Mr. Leclair had bought Stoke Pogis 1259 (imp.) and Marjoram 2329 (imp.) at public sale in England, and by crossing them at his farm in Vermont, Stoke Pogis 3rd was produced.

Mr. Harrison Stephens, father of S. Sheldon Stephens and Romeo Stephens, really bought the herd above described for Mr. S. Sheldon Stephens through Mr. L. P. Fowler, a celebrated dealer in Jerseys, of Bushey Farm, Herts, England, and Mr. James Duncan Gibbs, a friend of Mr. Harrison Stephens, who accompanied Mr. Fowler when he bought the stock. The herd was first kept on the farm of Mr. S. Sheldon Stephens, on the lower Lachine Road, near Montreal, but was afterward removed to the farm of Mr. Romeo Stephens at Montreal, Que. It was the location of the farm which gave the name of "St. Lambert" to the herd. The St. Lambert herd was retained there for many years, and was destined to become famous the world over. I have been very particular to give the names of the animals imported by Mr. S. S. Stephens, for to-day there are probably more than three times the number of animals recorded in the A. J. C. Herd Register tracing to some members of this herd than to any other herd.

Readers of the "Farmer's Advocate" need not be told that Mary Ann of St. Lambert was the most celebrated animal ever bred at St. Lambert, Que. In the development of the St. Lambert strain the writer played no insignificant part.

FORMATION OF THE A. J. C. C.

The A. J. C. C. was founded in 1868. Its office was first at Newport, R. I. The late Col. Geo. E. Waring was secretary, and Mr. T. J. Hand treasurer. On its removal to New York City, Mr. Hand became secretary. The A. J. C. C. is the most wealthy of all the live-stock dairy associations. There are more Jerseys registered in this country than any of the other pure-bred dairy breeds. Till within the last few years its annual receipts have been far in excess of the other dairy breed associations, but the Holstein-Friesian Association is rapidly catching up. The members of the A. J. C. C. are extremely conservative. Considering its wealth and the great number of Jerseys recorded in its Herdbook, there are those who feel that the Club does not do as much as it might to encourage the breed in this country and Canada, nor as is done by other dairy breed associations. In this view I concur.

CHARACTERISTICS.

There are Jerseys of many colors, though the solid color, black tongue and switch predominate. The head of the Jersey cow is very beautiful, the most beautiful of all dairy breeds. She has a good long neck, a thin wither, usually a straight back, though I regret to say there are far too many with sloping rumps. She usually has very thin thighs, high hip bones, and a wonderfully deep paunch. Her udder is large, but not so large as that of the Holsteins. The imported Jerseys have usually a very long full-front udder, extending well up on the belly. Too many Canadian and American Jerseys are deficient in fore udders. Imported Jerseys are prone to have rather small teats, though beautifully placed. Jerseys have been intensely inbred, and in some strains small teats have resulted from this course. The Jersey cow is the smallest of the four breeds I have described. She is very fine in limb, shows her breeding, and is considered delicate by some. This, however, is not my experience. She possesses a high nervous temperament, which seems to stand her in good stead in case of sickness and in her work as a dairy cow. She is game to the last notch.

MILKING QUALITIES.

The Jersey cow has been noted for 100 years for extreme richness in her milk. A good herd of Jerseys, including those in milk a long time, will average from 4.75 to 6 per cent. fat. They averaged in the Pan-American dairy test 4.58 per cent., and in the St. Louis cow demonstration 4.7 per cent., but none of these cows were in calf. Twenty years ago a Jersey cow that gave 40 pounds of milk a day was considered a phenomenon, but such records are very common today, and the Canadian-bred Jersey cow, Adelaide

of St. Lambert, gave over 82 pounds a day. A well-selected and properly-fed Jersey herd will average 5,000 to 6,000 pounds of milk a year; 350 pounds of butter a year would be a low average for such a herd, and some have averaged 450 pounds per cow per year.

The Jersey cow is a good feeder, and requires considerable concentrated feed to do her best work. She is very fastidious in what she eats, and will not use up so much bulky food as will the Ayrshire or Holstein.

Jerseys breed true to type, more so than the Guernseys.

A Successful Creamery.

A short time ago one of our staff was able to visit the Chilliwack, B. C., creamery, located in that famous district. The output in 12 months amounted to 225,000 pounds, and has not dropped below 10,000 pounds in any month. Patrons number over one hundred, cream being collected thrice a week in summer, semi-weekly in winter. The butter is put on the market in brick form, the Babcock test being used to determine each patron's returns. The temperature of the water at the creamery is 52 degrees F. Any ice used is artificial, brought from New Westminster, costing \$9.00 a ton there, the creamery standing the loss of the waste. The butter is marketed at Vancouver, and brings 30c. in winter, 25c. in summer; the grocer's margin is 5c., which is considered a large one. The farmers own the cream cans; a ten-gallon can cost \$4.50. Last year the farmers netted 24.75c. a pound for their butter. Hauling costs 1/2c. pound of butter-fat.

GARDEN AND ORCHARD.

The Ontario Horticultural Exhibition.

The second annual Ontario Horticultural Exhibition and Honey Show was held in Massey Hall, Toronto, Nov. 14th to 18th. In 1904 the exhibition was called a Fruit, Flower and Honey Show; this year vegetables were added, and the more comprehensive name adopted. It is under the joint management of the Ontario Fruit-growers', Ontario Beekeepers', Toronto Gardeners' and Florists', and Ontario Vegetable-growers' Associations, the Toronto Horticultural and Toronto Electoral and District Agricultural Societies, and the Ontario Department of Agriculture, the Department granting \$1,000 towards financing it, the Toronto city council also coming up with \$250. The amounts contributed by the various organizations were all pooled this year and the total applied towards a general fund. The management consists of a staff of officers elected from among representatives of the several organizations.

From a visitor's standpoint, the show was a great success, although the meagre attendance was altogether unworthy of the magnificent display. The chrysanthemums were a wonder and delight, and, being interspersed with the fruits and other exhibits, made the scene fairly entrancing. The audience room of Massey Hall held the major portion of the exhibits, 'mums being ranged with particularly imposing effect upon the stage. In the center of the floor was an exhibit of fruits by the Chatham Fruit-growers' Association, the feature of it being a variegated column of apples arrayed concentrically about a concealed centerpiece, the apples being twenty-nine tiers high, and forming a pleasing color pattern. On this floor, also, was the St. Catharines Cold Storage & Forwarding Co.'s exhibit of pears packed in boxes, as put up for long-distance shipment. Each fruit was wrapped in tissue paper, and some ideas in packing boxes were graphically illustrated. On this floor, also, were the county and the amateur exhibits of fruit, as well as the apian products. Beneath the balcony at the rear was an exhibit of fruits in jars, some of which, put up two years ago without sugar and in cold water, had apparently been perfectly preserved. It is a matter of information to know that fruits for cooking or baking may be thus kept, as these had been, with practically all their natural freshness. Your reporter had no opportunity of observing the process, but was agreeably surprised on sampling the results. Here, also, were the instructive exhibits of the Fruit Experiment Stations of the Province. From Craighurst, Mr. G. C. Caster had a couple of pyramids of enormous Wolfe River apples, that must have averaged about fourteen inches in circumference. One, by actual measurement, took 15 1/2 inches of string to go around it, and then we were by no means certain that we had the biggest.

Additional floor space was found in the basement, where were the competitive exhibits of commercial packages (boxes and barrels) packed for domestic and export trade. Entries were: Barrels, export, 33; boxes, export, 70; barrels, domestic, 6; boxes, domestic, 19. The total entries in fruit (apples, pears, grapes, etc.), exclusive of the Experiment Station displays, the Ontario Agricul-

tural College assortment, etc., were 625, being about double those of last year.

The packing showed a very great improvement. Mr. P. J. Carey, Dominion Fruit Inspector, who with Mr. H. W. Dawson, judged the commercial packages of apples and pears, stated that about 75 per cent. of the boxes this year were properly packed, as against 5 per cent. last year. The improvement is ascribed to the educative influence of last year's show, to the demonstrations this fall of Mr. Boies, the Ottawa Fruit Division's expert packer from British Columbia, and to a laudable disposition on the part of growers to avail themselves of opportunities to improve their packing. There is still, however, a tendency to cling to the habit of putting in excelsior and "blocking up" with newspapers. This is very undesirable, for a properly-packed box of fruit will be firm without such filling, and as the trade objects to it decidedly, boxes thus packed were sharply discriminated against in awarding the prizes. A box of Baxters, as fine as anything in the show, was undecked with prize cards on account of newspapers having been used between the layers of fruit, the exhibitor's idea being, presumably, to make them carry better. Growers are not all "on" yet to the various wrinkles in filling boxes. As most are aware, these must be packed in layers. Some try to fill the box by putting the layers in so that every apple will be directly above the one below it. This is not necessary; indeed, it is to be eschewed in favor of arrangements which will allow each apple to rest on several others. Some of the arrangements which look as though they left large spaces at the sides, are really the most compact methods. There are at least sixty-four distinct ways of packing a box of apples, and the ingenuity of the packer is tested in putting the apples in compactly without excelsior or other wadding. A box should be packed with the middle a little higher than the ends, so that when pressure is applied on the ends the spring in the top and bottom will still keep the fruit there snugly compressed as at the ends. Likewise, in packing barrels, the center should be a little fuller, and the pressure should be applied by a circular iron inside the rim, instead of by a block on the center. The Fruit Division, Ottawa, had an instructive exhibit of different kinds of packages, and barrel and box presses. The best thing for barrels is a circular iron such as described, screwed down by a lever on top, the pressure being obtained by means of long hooks which catch under the lower rim of the barrel. A simple but useful-looking home-made box press was also on exhibit.

The vegetable display was of moderate dimensions, but the quality was good. There was quite a fair showing in melons and cauliflower, and a particularly good one of Jerusalem artichokes, seeming to indicate an increasing interest in these. Chrysanthemums were considered ahead of last year's, while the table decoration attracted much attention also. Taken all through, the show would seem to be a great deal more worthy of patronage than some of the other events that from time to time engross Toronto's society. As it is, the attendance was frankly confessed to be disappointing, and unless it is better next year there will probably be a feeling to change it to some other place.

Ontario Fruit-growers' Convention.

During the Horticultural Exhibition, conventions were held in Toronto by three provincial organizations, the Ontario Fruit-growers', the Ontario Beekeepers' and the Ontario Vegetable-growers' Associations, while on the 17th there was a meeting of pomologists and those interested in fruit experiment station work, and the same day delegates from the various horticultural societies of the Province met to form a new Provincial body, known as the Ontario Horticultural Association. The Fruit-growers' annual meeting began on Tuesday evening, November 14th, continuing till the afternoon of Thursday, 16th. On the opening evening there were, besides the president's address, speeches from several others. Hon. Nelson Monteith, Minister of Agriculture for Ontario, in a pleasing address pointed out the advantage of developing Ontario agriculture along intensive lines, such as fruit and vegetable growing. Mr. A. N. Brown, of Wyoming, Delaware, spoke on co-operation, citing some instances of what Americans were doing in that direction. Down in Delaware and Maryland the object has been to bring the buyer to the farmer's door, and sell to him f.o.b. Much has been done by co-operation in the potato industry. Whereas the growers used to get about 50 cents a barrel, they have increased the value of the product fully 100 per cent., by being able to guarantee grade and quality. Last year an organization known as the East Shore Potato Exchange, sold 350,000 barrels. Seventy-five per cent. of the California fruit-growers are co-operatively organized, and under co-operation they have captured the eastern markets. Prof. W. T. Macoun, Horticulturist, C. M. P., Ottawa, spoke briefly, calling attention to the fact that in the British market Ireland would

soon be a competitor to be reckoned with. Their fruit might not be the best for dessert purposes, but it will find a place for cooking. Many orchards are being set out that will soon be bearing, and one advantage the Irish will have over us in production is cheap labor.

PRESIDENT'S ADDRESS.

After anticipating some of the topics expected to come up for consideration during the convention, President A. McNeill, better known as the Chief of the Fruit Division, Ottawa, referred to the season's crops and prices, noting that it opened with a remarkable show of bloom, which, however, did not materialize in fruit, the failure being probably due, among other causes, to cold and prolonged rains, and to weakening of the trees by a succession of heavy crops, or by the severity of the last two or three winters. He pointed out the desirability, financially and otherwise, of a systematic investigation of these phenomena, partly with a view of discovering some means of securing a more regular crop by more perfect pollination. He referred to the good prices for apples, and deprecated the practice among growers of selling their crops early to operators, who, knowing market conditions and prospects better as a rule than those they buy from, have the advantage of the latter in such bargains, which at best are of the nature of a gamble. He referred to an unfortunate widely-copied newspaper report, occurring at a time when the market was depressed with the remnants of the inferior early varieties, and predicting a great abundance of peaches, and low prices therefor. For want of prompt explanation and denial, the public expected cheap peaches, and refused to buy in full quantities when the fruit could have been obtained reasonably, and some housewives were still looking for those cheap peaches. As a matter of fact, there has been so much loss from winter-killing in the last few years that the crop, though good on bearing trees, was not excessive, but tardy demand resulted in unwarrantably low prices, and in some cases disappointment to would-be purchasers. The experience illustrated the need of fruit statistics.

The fruit trade of the Province was never in a more healthy condition. The outlook is good, though grave problems loom up for solution. The local markets for small fruits are now well supplied, and any further expansion must be in the direction of long-distance shipments. These will require a distinction on the part of growers and shippers between nearby markets in point of maturity, varieties, packages and packing, and in methods of doing business. For Western, Quebec or Maritime markets it will be necessary to encourage the growing of these fruits in large plantations, and the concentration of the business at a few points where the growers will undertake to make a specialty of long-distance shipments. It appears to be an almost hopeless task to assemble the small lots of many different growers who depend upon the local market for their chief outlet.

To a somewhat less degree the same remarks apply to peaches and plums. Ontario has the soil and climate to produce an enormous quantity of these, and we must work out the problem of long-distance transportation for them. There should be every year regular trial shipments to Great Britain. There is no reasonable doubt that with the splendid steamship facilities now at the disposal of the fruit-grower we can land peaches in England in the best of condition. The outlook is not quite so hopeful for plums, but even here fruit-growers will have to look at the question in a broad light and appreciate the fact that the ramification of the trade in canned fruits, jams and jellies is one in which they will have to take a lively interest.

The problems in apple-growing are somewhat different. The export trade has been developed till it completely overshadows the local trade, large as this is. Steamship facilities and export demand are excellent, but a pressing need is a better system of marketing. The middlemen engaged in the trade are excellent business men, but the present system is bad. A barrel of apples, for which in a normal year the grower would be glad to receive one dollar, is shipped to England or Calgary, and the consumer pays five dollars for it. While the perishable nature of fruit is an excuse for many of the bad methods in selling, it will not account for the system of buying in vogue in the greater part of Ontario, which is responsible for much of the waste and the want of proper grading and packing, for the serious deterioration between picking and selling, for the exorbitant price of packages, and for the unfortunate condition of affairs that will enable men, if so disposed, to get a product without paying a proper price for it. The large number of reputable apple dealers, he was ready to assert, would be glad to see a better system. He, therefore, heartily commended the work of the co-operative committee, and trusted the Association would give the movement every assistance, morally and financially.

Those who had followed the fruit trade would have noticed that in the change that must take place from the local to the long-distance markets

there comes the distinct question of the matter of varieties. This is so intertwined with the question of soil, climate and modes of handling that we had reached the point where we should ask the Government to bring to our aid an expert who could give his whole time to the development of the fruit industry of the Province. Good work has been and is being done by our fruit experiment stations, which, however, are in the hands of men who have business of their own to attend to, and have not had any special training for anything but elementary work. We have confined ourselves to a few variety tests, a few climatic tests, and have been eminently successful, but we must now look at the broader side of horticulture, and note what is being done in other countries for the development of new and profitable lines of fruit-growing.

The expert required would be fully informed as to the latest and best methods practiced in the experiment stations of the Republic and in the Old Country, and might be very properly attached to the agricultural college, using the several local experiment stations for the development of his plans, and supplementing the excellent work of the present Professor of Horticulture, unhampered by the routine of class work.

Referring, in conclusion, to the death of one of the oldest members, Mr. D. W. Beadle, Mr. McNeill indulged in a little reminiscence and horticultural history, and commended the appointment of a standing committee, whose duty it would be to make compilations from year to year, recommend memorials, and provide for suitable records in Provincial horticulture.

A REVISION OF THE CONSTITUTION.

Part of the Wednesday morning session was spent in considering the report of the committee on revision of the constitution. A feeling obtains that the association as at present constituted is too much of a cut-and-dried affair, a few enthusiastic fruit-growers of means, many of them directors, meeting from year to year and re-electing themselves to office. While much good has been accomplished, and a great deal of valuable information distributed through the press and annual reports, it is felt that the organization is not so truly representative as it should be of the fruit interests of the Province. The opinion was expressed that the central or provincial association should comprise representatives of local fruit-growers' associations and horticultural societies. The amended constitution accordingly enjoins the officers and directors of the provincial association to encourage the formation of them. The membership fee in the aforesaid affiliated associations or societies shall be the sum of one dollar per annum, payable in advance. Of this sum the local secretary is to transmit to the Secretary-Treasurer of the Association seventy-five cents for each member, payment of which shall entitle members of the local society to all the advantages of membership in the provincial association. The proceedings of the affiliated societies shall, on or before the first of November, be forwarded to the secretary of the association, who may use such portions for the annual report as may seem of general interest and value. Each affiliated society is further expected to send at least one duly-accredited delegate to the annual meeting of the provincial association for each 50 members or more, the actual expenses to be paid by the provincial association. The directors of the association for the agricultural district in which any society is formed shall be, ex-officio, members of the directorates of such societies affiliated.

Some little discussion ensued over a proposal to change the name of the association, with a view of making it more acceptable to the horticultural societies that are interested in floriculture, etc. It was concluded, however, that as the present name, in addition to being very well known, stands better for the commercial idea than would the term Horticultural Association, the old name, "Fruit-growers' Association of Ontario," be retained.

The membership is one dollar per annum in advance, whether paid to the general secretary or to the secretary of a local affiliated body. The fee for life membership is a single payment of ten dollars to the general secretary.

HON. SYDNEY FISHER.

On Wednesday afternoon the convention was addressed by Mr. A. N. Brown, of Wyoming, Delaware, on "New Ideas in Spraying." He advocated fall spraying for San Jose scale, especially for districts where it is bad. A synopsis of his address will be published later. Following him, Hon. Sydney Fisher, Minister of Agriculture for the Dominion, was called upon, and in the course of his speech took the opportunity to explain fully his reasons for placing the Fruit Division, along with the Cold Storage and Extension of Markets Division, under charge of the Dairy Commissioner. Mr. Fisher held that educational work should be left to the several provinces, and that the commercial aspect of the fruit industry and the various matters affecting the general interest were the only ones with which the Federal De-

partment should busy itself; thus the Fruit Division, being concerned chiefly with work allied to that of the departments aforementioned, might very well, for administrative reasons, come under the purview of the one branch, over which Mr. J. A. Ruddick at present has charge. The Chief of the Fruit Division, however, has a free hand in any work he undertakes. The explanation was given for two reasons; first, that the fruit-growers might know just what to expect; secondly, that the provincial authorities may realize what is being left to them. He was pleased to note that the protest which had been heard in several quarters at the time the rearrangement was made in his Department, had since quieted down.

[We scarcely think that Mr. Fisher has interpreted the signs aright. The question is one of great delicacy, first, because the present Dairy Commissioner, Mr. Ruddick, is personally well liked, and, secondly, because during the past year the President of the Association has been the same person as the Chief of the Fruit Division, and it would not be seemly for him to lead a convention in a protest to elevate his own position. There is, however, among the fruit-growers a strong undercurrent conviction that their industry requires a Commissioner at Ottawa, who may appeal direct to the Minister, instead of reaching him with necessarily diminished eloquence through an indirect channel. The members of the association believe this will all work out in time, but the Minister is mistaken in construing their temporary quiescence as acquiescence.]

While on his recent trip West, Mr. Fisher had observed a remarkable improvement in the selection, grading and packing of British Columbia fruit, which now rivals the best California stuff, and is driving the latter out of the market.

Referring to the Fruit Marks Act, he noted that in few or no cases had there been failure to secure conviction when the machinery of the Act had been put in force. For the first year or so the inspectors had been purposely lenient in prosecution, but the time had now come when the Act might be enforced in all its severity—a remark in which his audience heartily concurred.

REPORT OF COMMITTEE ON NEW FRUITS.

Two of the three members of the above committee reported on new fruits that had come to their notice. In peaches, Prof. H. L. Hutt exhibited a wax model of a very promising thing, called Orr's Seedling, originated by Wm. Orr, of Fruitland. It is a late freestone, coming in about the second or third week in October, and is of exceptionally fine quality, without any astringency about the skin. Prof. Macoun reported comparatively few new varieties this season, though he had received one very large crab of good quality, which he thought would prove valuable for the Northwest.

REPORT OF COMMITTEE ON CO-OPERATION.

Co-operation in shipping and selling fruit is still a live subject. Mr. A. E. Sherrington, of Walkerton, Chairman of this committee, said he was a firmer believer in it than ever. This season several co-operative shipping associations had been organized. Some of the older ones in good standing are at Forest, Walkerton and Chatham. One was organized this spring at Oakville, a joint stock company, that handled nearly all the apples in the district. One of the things to be guarded against is the breaking away of members when buyers offer inducements. More men were needed like President Johnson, of the Forest Association, who refused an offer of 25 cents per barrel more for the product of his orchard than he obtained through the association. Clarksburg also has a splendid association, which the speaker understood had erected a storehouse superior to anything else in the Province. Another co-operative association is at Burford, another in the neighborhood of St. Catharines, others at Burlington, Thedford and Ilderton. The Walkerton associa-

tion is in good standing, but unable to do any business this season for lack of fruit.

During the summer Mr. Sherrington had spent some time in England and Scotland, and his observations convinced him that Canadian produce is not properly handled there, the ways of the commission men and auctioneers being in not a few cases shady. He was not favorably impressed with the system—or lack of it—in the Covent Garden market, where a sort of pandemonium seemed to prevail. His description of the way the auctioneers vied with each other to see who could sell fastest was quite at variance with our ideas of Old Country deliberateness, and would be anything but reassuring to the man who saw his fruit knocked down, apparently without time for a second bid.

Mr. Sherrington cited a case that came under his notice of apples sold in Canada for \$2.50 to \$2.75 a barrel costing the Old Country dealer \$5.00; \$1.50 would pay the freight. Where does all the balance go? The dealer referred to believed that it would be unnecessary for our co-operative associations to even send an agent to Britain; he thought the Old Country dealers would have confidence in goods packed by such organizations, and be willing without canvassing to risk buying direct. Mr. Sherrington had met two Old Country dealers who already buy their fruit f.o.b. in Canada, and during the summer had received stacks of orders.

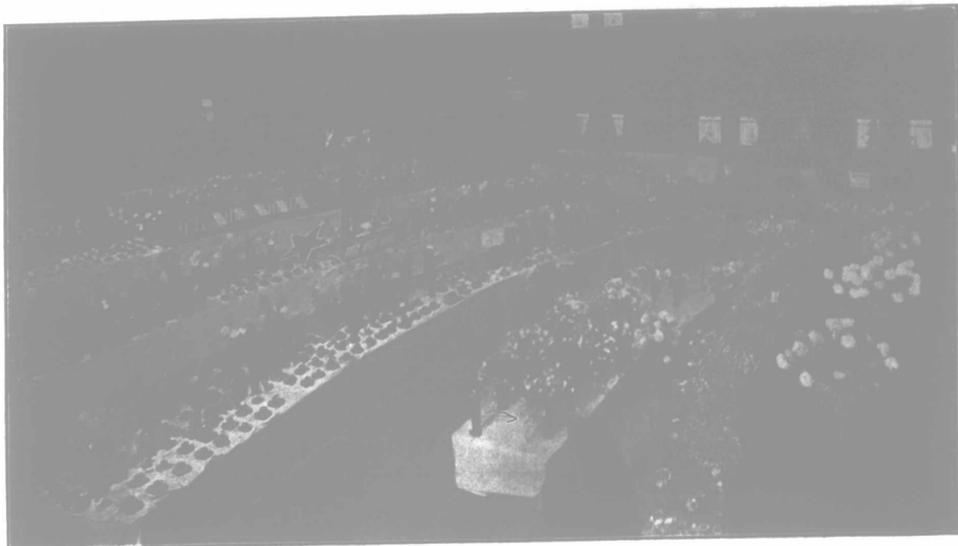
He expressed the opinion that it would pay our growers to convert more of the No. 2 apples into canned stuff, for which he thought a good demand could be worked up. Fruit must be regarded as a luxury in England, for Mr. Sherrington soberly related an experience in a restaurant, where an extra bill had been rendered for eating marmalade with a spoon.

One or two delegates complained that co-operative associations could not be run in their districts, as farmers were so short of labor they would not undertake to pick the fruit. This brought out a suggestion that one association had hired the picking done for a couple co-operators unable to do it themselves. Mr. Sherrington thought that might be done, though he wanted no one but himself looking after the picking in his orchard, and did not see why a farmer could not afford to hire men as well as the regular buyer.

Mr. A. W. Peart said in the Burlington district they had a species of co-operation that has been going on for twenty years. They have a manager, paid according to the number of boxes he handles. Each grower packs his own fruit and puts his name on it, but they also have a common brand under which they ship. They ship in boxes, and 99% of all the good shipping fruit they send over in that package arrives in good condition.

Mr. D. Johnson, President of the Forest Fruit-growers and Forwarding Association, reported a very satisfactory season's outcome. They had any number of orders from the West, where they sold in 1904, but chose instead to sell this year to an English firm, which took the whole output, paying \$2.50 for No. 1's and \$2 for No. 2's, spot cash, f.o.b. Mr. Johnson is an enthusiast on orchard culture, and very truly says we must successfully grow fruit before we can successfully co-operate in selling it. This year their association had a by-law, compelling its members to spray twice before and twice after blossoming. As a result all the members had good crops, many the best they ever had, while their neighbors, excepting one or two good fruit-growers, had practically nothing.

Mr. W. D. A. Ross, of Chatham, said they had started co-operating nine years ago; five years ago they organized as an association, and this is the fourth season they have packed at a central packing-house. The membership has grown to 75, and they are now going along swimmingly. They have a power sprayer, which nearly all the growers employ. The association advances the money, does the spraying, and deducts the charge in the fall from the returns, which he believes are doubled thereby. In one case a man with an orchard of some 180 fine trees estimated his crop in the



A Glimpse of Fruit and Flowers in Massey Hall.

spring at 50 barrels. A month later he put it at 100, and when his last barrel was turned in he blandly remarked that it made 290. Another man in the spring thought it wouldn't pay to have his orchard sprayed, but concluded to have it done after all; he was finally offered \$750 for his crop.

They have employed a salesman for the last eight years, who does the marketing. Net prices this year were \$2 a barrel for No. 1's, and \$1.50 for No. 2's. Some of the fancy fruit sold for \$3.75, f.o.b., Chatham.

FRUIT-GROWERS DISCUSS THE TARIFF.

An interesting discussion on the tariff as affecting the fruit-grower was opened with an effective address by W. L. Smith, of Toronto, who appealed to the fruit-growers not to weaken the hand of the general farmer, who has much to lose by further imposts on things he has to buy, but little to gain by duties on his products, the prices of which are governed by the values of the exported surplus. If the fruit-growers, who form one section of the agricultural community, ask for protection, the manufacturers will use the fact as a powerful and effective lever in working for higher protection on their products. He believed the fruit-growers had little to gain anyway by a tariff on fruits. During the past season all fruits except pears were higher in the United States than in Canada. So far as tender fruits are concerned, practically all our importations occur early in the season, when our growers have nothing to offer. The early fruit serves to get the people into the fruit-eating habit, but as soon as our tender fruits come in the foreign stuff at once goes out.

While a general rise in tariffs would not materially augment the price of what the fruit-grower sells, it would greatly increase the cost of what he buys. For instance, baskets, which represent a considerable item of his expense, are taxed 30%, and one Niagara district grower said he had paid \$300.00 more for baskets than he would have been obliged to pay but for the tariff. Tools, implements, etc., are taxed 25% to 30%, but one of the most serious taxes is that on sugar. There is an intimate relation between the price of sugar and the price of fruit. The canning industry to some extent relieves the surplus in fruit production, but one good big crop would fill the country with enough canned goods for two years to come. Relief should then be found in the export trade, but one of the great obstacles to this is the tax on sugar. The cost of sugar represents about one-third the value of canned goods, and the duty on it is 46%. Regarding a suggested rebate of duties on sugar used for canned goods for export, he said, in the first place, the canners claim that such a thing would not be practicable, but even if it were the principle would be questionable, for we would be thus conferring upon foreign consumers a boon denied to our own.

Another point was the domestic trade in canned goods. There was no reason why we should not greatly increase the Canadian consumption of preserves and canned fruits; this could be done by reducing the cost of sugar. Sugar should be cheap. Raw sugar can be produced in other countries for 1½ cents a pound, and give the growers of it good returns per acre. The refined sugar, but for tariffs, could be put on the market at 2½ cents wholesale, and retailed for 3 cents a pound. He considered it a great mistake that we attempted to establish the beet-sugar industry in Canada. But sugar cannot be produced in this country for less than 4 cents a pound. In his mind, the fruit-growers should seek not a higher tariff on their products, but a reduction of the tariff on sugar. It was an absolute certainty that any slight advance in tariffs on farm or orchard products would be accompanied by countervailing and oppressive duties on things used or consumed by the farmer. Instead of levelling up the present tariff we should try to level it down.

In the ensuing discussion it was urged that a lowering of transportation rates should be worked for rather than increase in tariff. It was also recommended that wherever possible specific be substituted for ad valorem duties on fruit, so as to eliminate the temptation to undervaluation and shut out the inferior stuff, which checks consumption and depresses markets.

With an apt reference to the point of a previous speaker, one man humorously applied his minister's previous Sabbath text, "Am I my brother's keeper?" Who, he asked, is benefited by this miserable stuff (green-picked Southern fruit, Southern vegetables, etc.) unless it be the doctors? In the interests of public health we should shut it out. Years ago it was a rare thing to have a case of inflammation of the bowels, now we had 40 cases of appendicitis in Toronto last week.

Mr. L. B. Rice, of Michigan, interposed a few words in favor of freer trade relations between the two countries. In an earlier session he had indulged in a little good-natured raillery about our wanting a duty on early vegetables. God made that great southern country, he said, to supply us with cheap early cucumbers and the like, and here we were asking for a duty on these things to try to make it profitable for our pickles under glass.

After some desultory debate on the general resolution was passed and got into the lobby, but on more mature deliberation it was decided that it scarcely represented the feeling of the assembly, and was reconsidered among some of the speakers, and the man who drew it up.

A LONG AFTERNOON.

The long concluding session on Thursday afternoon was a wearisome one for the reporters.

up for consideration were too important to "cut," and so they listened more or less patiently from two o'clock till a quarter to six. The first item on the programme was an instructive paper by Prof. Frank T. Shutt, of Ottawa, on cover crops, their relation to the moisture content and fertility of orchard soils. A synopsis of this will be published in a later issue of the "Farmer's Advocate."

REPORT OF COMMITTEE ON PACKAGES.

Mr. Robt. Thompson presented the report of the committee on packages. The 11-quart basket was approved as to size, but at the present time these were not uniform in shape, nor do the manufacturers all make them of the exact size. The 6 2-3-quart basket was not a satisfactory size, and the committee recommended instead the adoption of a 5½-quart basket, which is a half size. A grape-basket of 8 or 9 pounds was to be preferred to one of 10 or 11 pounds. A number of basket manufacturers, present by invitation, spoke after this report, intimating their willingness to make all baskets to a standard dimension. They were now in some cases shading the size of their packages to meet the demands of the growers, but they seemed willing to confine their output to legal standard sizes. A reference in the committee's report to the size of apple barrels afforded an opportunity for some picking at that enduring bone of contention. The opinion seemed to prevail that there should be a law specifying a legal dimension instead of prescribing merely a minimum size as at present. The difference was as to what that size should be. A minority favored the Nova Scotia barrel. The matter is one for the Dominion conference, to be held at Ottawa this winter, but to test the opinion of the convention, Mr. G. C. Caston moved a resolution that carried, recommending a barrel of the following dimensions: 27 inches between heads, 17-inch head, and an inside diameter of about 19 inches at the bilge. This is practically the Ontario barrel at present in use.

SHIPMENTS OF FRUIT TO WINNIPEG.

Mr. Robert Thompson, St. Catharines, presented a report on the results of the season's shipments of apples, tomatoes and tender fruits to Winnipeg, by some members of the St. Catharines Cold Storage and Forwarding Co., Ltd., who met last spring and agreed to co-operate to see if an arrangement could not be carried out whereby a market for tender fruits could be found in the West. The venture was designed to supplement the efforts of Prof. Reynolds in 1904. A review of their difficulties was given, and confidence expressed in the future of this trade. Twenty-seven cars of fruit were handled, and from data at hand, Mr. Thompson estimated that those who stayed with it to the end of the season got prices as good as, or better than, obtained by those shipping elsewhere. In addition, there was the advantage that considerable quantities of fruit had been diverted from other markets, and they had learned many lessons by which they might profit next year.

THERMOGRAPHS AND INSULATING MATERIALS.

Mr. J. A. Ruddick, Dominion Dairy Commissioner, discussing long-distance shipment of tender fruits, emphasized some of the essentials in refrigeration of cars, and exhibited a thermograph, explaining its workings. It is a sensitive instrument, that makes a continuous record of the temperature in which it is placed. Protected with a perforated wooden case, it may be placed in a car of fruit, and thus a record is kept of the hourly fluctuations in temperature. Incidentally, it reveals when a car has been delayed in transit, for while the car is in motion its vibration causes the instrument to make a broader mark than when at rest. Thermographs may be bought in England for from \$40 to \$45 complete in case.

During the summer Mr. Ruddick had been conducting experiments with various means of insulation, according to which ordinary planer shavings proved one of the most effective insulating materials known. Six inches of shavings were very much better than six inches of sawdust. Dead-air spaces were not advised, as it is difficult to secure a really dead-air space. Any other than a dead-air space is of little use. For this reason it is better that all interstices be filled with sawdust.

REPORT OF TRANSPORTATION COMMITTEE.

Mr. W. H. Bunting presented the report of the above committee. The past season had been one in which the volume of fruit, especially peaches and plums, and with the single exception of apples, was largely in excess of 1904, taxing at times the ability of the railway companies to move all the perishable fruit that offered. The situation became so critical at one time that the committee was forced to appeal to the Railway Commission, presenting the claims of fruit-growers, and asking that provision be made for reasonably prompt handling of perishable fruits. They had reason to believe the appeal was not without results.

There was still, however, a great lack of equipment suitable for the carriage of fruit on all our railroads. While the refrigerator car service is fairly good when the cars can be obtained, and an icing station is near the shipping point, it is often extremely difficult to secure these cars when required, and considerable loss and disappointment have arisen.

A series of investigations has been instituted under the auspices of the Railway Commission for the past several months with the purpose of ascertaining what type of ventilated car is likely to be most suitable for this service, and no doubt some recommendations based

on the results would be made to the railroad companies.

The committee is still of opinion that the present rate for the carriage of apples is excessive. The express companies have had a very prosperous season so far as the fruit trade is concerned, and the time has come when a material reduction in express rates on fruit must be made. While the railroad companies have to some extent recognized the claim of the fruit-growers for a reduction in rate by freight service, the express companies have continued in many instances to absorb by far the larger portion of the gross sales of large quantities of fruit. All possible pressure should be brought to bear to have the express business brought under the control of the Railway Commission.

RESOLUTIONS.

The following resolutions were submitted by the resolution committee:

1. That Messrs. McNeill, Race, Woolverton, Groff and Dempsey be appointed a standing historical committee; that it be the duty of this committee (a) to prepare, as occasion arises, for publication in the annual reports of the association, sketches of the life work of those who have rendered distinguished service to the cause of horticulture; (b) to provide for the erection of suitable tablets to mark the place of origin of varieties of fruits which have proved of special value; (c) to prepare for our next annual report a biographical sketch of the late D. W. Beadle, who during his life distinguished himself as a fruit-grower, nurseryman, and officer in the Ontario Fruit-growers' Association; (d) to prepare a like sketch of our esteemed member, A. M. Smith, the father of the commercial peach-growing industry of Ontario; (e) to arrange for the erection of a tablet, marking the site on which the original McIntosh Red apple still stands, and that whereon the first Windsor cherry tree sprang into life, grew, and died.

2. That we express our most sincere appreciation of the value of the work done during the past season by the Fruit Division of the Dominion Department of Agriculture, in arranging for the publication, at frequent intervals, while the growing season was on, of reports upon the fruit crop prospects as they appeared from time to time. We trust this system of crop reporting will be continued and extended, as the effect of it is to place the rank and file of producers, so far as regards knowledge of the situation, on a footing of comparative equality with those to whom they sell.

3. That we desire also to congratulate the Dominion Department of Agriculture on arranging for informal but effective supervision of the work of transferring fruit shipments from rail to steamer at Montreal. This work, so well done, has been of inestimable benefit to fruit-growers in preventing serious loss by damage in course of transit.

4. That we desire to put on record an expression of our sincere thanks to the railway companies for the courtesy which they have shown to the representatives of this association from time to time and for the earnest effort they have made during this year to provide an efficient and prompt service in the carriage of our perishable fruits.

5. That it be a specific instruction to the delegates who go from this association to the Dominion Fruit Conference, to be held in Ottawa early next year, to bring before that Conference the desirability of securing at the forthcoming session of Parliament legislation under which express rates will be placed within the control of the Railway Commission, and that our delegates to said Conference be urged to endeavor to arrange for a deputation from the whole Conference to wait upon the Government to urge the adoption of that which is herein recommended.

6. That our delegates to said Conference be urged to bring before the body to which they are accredited the desirability of securing legislation under which provision will be made that will ensure just returns from the commission men for the fruit consigned to their care.

7. That the executive of this association be instructed to wait upon the proper railway official with a view of securing the privilege, now accorded other agricultural societies, of free return tickets from our annual convention without regard to the number in attendance.

8. That the thanks of this association be tendered to those organizations which have sent delegates to the present convention; among these organizations being Quebec Pomological Society, represented by Norman E. Jack, and the Michigan Horticultural Society, represented by L. B. Rice.

9. That we heartily approve of the educational work carried on in connection with fruit-growing through the Farmers' Institute and Fairs system of Ontario, and express the hope that Messrs. Putnam and Cowan may be able to see their way clear to continue and extend this work along the same lines in future.

10. That we desire to express in a special manner our appreciation of the services rendered the whole fruit-growing industry of Canada by Alexander McNeill, an officer of this association for many years and also as Chief of the Fruit Division at Ottawa. We believe the prominence our industry now occupies in the public is very largely the result of the efficient, unselfish and never-ending labor of our retiring president.

11. That your delegates to the Dominion Conference be instructed to gather all information possible with regard to the workings of the Fruit Marks Act in the past, and to give careful consideration to the advisability of defining XX apples in barrels and boxes.

12. That we approve the suggestion contained in President McNeill's address, that an expert officer be

appointed to take charge of the work of the Ontario fruit experiment stations and horticultural work of the Province generally.

OFFICERS FOR 1906.

Officers for the ensuing year are: President, Jas. S. Scarff, Woodstock; Vice-President, E. Morris, Fonthill; Secretary-treasurer, P. W. Hodgetts, Parliament Buildings, Toronto. Directors—R. B. Whyte, Ottawa; A. D. Harkness, Irena; Harold Jones, Maitland; W. H. Dempsey, Trenton; Wm. Rickard, Newcastle; Elmer Lick, Oshawa; Murray Pettit, Winona; E. Morris, Fonthill; J. W. Hilborn, Leamington; H. H. Groff, Simcoe; A. E. Sherrington, Walkerton; G. C. Caston, Craighurst; T. H. Race, Mitchell; W. H. Bunting, St. Catharines; A. McNeill, Ottawa; Jas. S. Scarff, Woodstock; representative of the Ontario Agricultural College and Dominion Experimental Farm, H. L. Hutt, O. A. C., and W. T. Macoun, C. E. F., Ottawa. Transportation Committee—W. H. Bunting, St. Catharines; R. J. Graham, Belleville; E. D. Smith, Winona; W. L. Smith, Toronto; Robt. Thompson, St. Catharines; H. W. Dawson, Toronto. Committee on Co-operation—A. E. Sherrington, Walkerton; Robt. Thompson, St. Catharines; D. Johnson, Forest; Elmer Lick, Oshawa; A. W. Peart, Burlington; W. D. A. Ross, Chatham. Committee on New Fruits—H. L. Hutt, O. A. C., Guelph; W. T. Macoun, C. E. F., Ottawa; E. Morris, Fonthill.

A New Horticultural Association.

On November 17th delegates from a number of horticultural societies of the Province met and organized a representative provincial body, to be known as the Ontario Horticultural Association, the object being to promote the interests of flower-growers. Officers were elected whose first duty will be the drafting of a constitution: President, W. B. Burgoyne, St. Catharines; First Vice-President, H. J. Snelgrove, Cobourg; Second Vice-President, Jos. Barker, Kincardine; Secretary-Treasurer, H. B. Cowan, Toronto. In addition to these are nine directors. With a Fruit-growers' Association, a Vegetable-growers' Association, and now an association of florists, the horticultural interests of the Province should certainly not suffer for lack of organization.

APIARY

Ontario Beekeepers' Association.

The Ontario Beekeepers' Association held its annual convention in connection with the Fruit, Flower and Honey Show, Toronto, Nov. 15th, 16th, 17th, 1905. The sessions were very well attended, and in interest and practical value equal to the best that have been held by this Association for some time. In his opening address, President H. G. Sibbald congratulated the members on having had a fairly successful year. The bees came through the exceptionally hard winter of 1904-05 with a comparatively small percentage of loss. Some changes in the inspecting of apiaries were recommended. It was resolved to ask the Minister of Agriculture to bring in and pass at the next session of the Ontario Legislature certain amendments to the Foul Brood Act, by which the Province would be divided into three districts, with an inspector for each. The treasurer reported the finances of the Association to be in a healthy condition.

The Hon. Nelson Monteith addressed the convention. He said he felt the efforts of beekeepers in the Province were giving good results. We have a large Province, over all of which bees could be kept. At present the industry is only carried on in a small section of the Province, yet it represents an investment of about \$1,200,000. The beekeepers are turning out an excellent article, but are too modest to advertise properly. You haven't pushed your business enough, said Mr. Monteith. Honey, as one of the best natural foods, should be used much more by the people than it is. If everyone knew that one pound of honey is equal in food value to about five pounds of pork, much more of it would be substituted for pork. Also in the matter of varieties of bees it is well to be ambitious for something more than what we have. Whenever we think we have reached the ideal we begin to lose ground. Mr. Monteith remarked, further, that the bee business has a wider sphere than honey. It is of immense value to the fruit and seed growers. He stated that it was for this reason he became a beekeeper himself. In this connection the Association passed the following resolution:

That this Association would respectfully solicit the Hon. Nelson Monteith, Minister of Agriculture for Ontario, to have the proper officers of the Department of Agriculture conduct a series of experiments with the object of securing evidence as to the value or otherwise of bees in acting as agents in the fertilization of blossoms, such as fruit bloom, alsike and red clover, and buckwheat, with the object of arriving at the value or detriment of these visits by the bee in increased or decreased value of the crop. That this and other testimony of value upon the subject be published in the form of a Bulletin, and every other available means; and that a special invitation be publicly extended to anyone who has evidence that bees injure crops by gathering nec-

tar from blossoms, and that such evidence, if any, be also published through the above channels."

Mr. R. H. Smith, St. Thomas, gave a paper on "Systematic Advertising and Marketing of Honey."

The marketing of honey, said Mr. Smith, is a simple matter once you have a regular line of

township or county fair. Attend the fair directors' meetings and urge them to improve their prize list, providing for large exhibits of 100 or 200 pounds honey, which will attract attention. Give samples of honey to prospective buyers. Call on local dealers regularly with a supply of honey in packages of various sizes, to suit their class of trade. In shipping honey, do not use "homespun" packages. Happily, in Canada, we have very little adulteration, and, although there is still room for improvement, the demand and use of honey has enormously increased during the past few years, and will continue to increase as its value becomes better known.

Prof. F. T. Shutt, of the Central Exp. Farm, Ottawa, described experiments on the granulation of honey and in clarifying wax. He had raised samples of honey to temperatures of 122 degrees F. and 158 degrees F., and found that in either case they had remained liquid, since Sept. 18th, when the heating was done, while honey which had not been so heated was granulated quite hard. He found that keeping in light or darkness, agitation, or cold storage, seemed to have no effect on the granulation of honey. But that the honey kept in the light, whether granulated or liquid, was quite perceptibly bleached in color, and seemed to have lost in flavor. With reference to flavor, Prof. Shutt had learned that heating honey to a high temperature certainly injures the flavor. He explained this by the fact that neither the levulose nor the glucose give honey its flavor, but certain minute quantities of undetermined volatile oils, which can and do at a high temperature escape. With reference to bleaching wax Prof. Shutt had made exhaustive experiments, and found that one per cent. nitric acid gave best results. To bleach without chemicals, melt the wax in warm water, pour off the water and repeat the operation several times, then shred the wax and expose to a damp atmosphere and sunlight.

OUT APIARIES.

Mr. Denis Nolan, Newton-Robinson, took up this subject, which is of growing importance to beekeepers. As to the value of out apiaries, Mr. Nolan said that in his experience one hundred colonies is all that can be kept profitably in an average location and in an average year. To increase this number might mean that you reduce the yield per colony, increase the desire to swarm, and have a larger amount of brood and bees to sustain on the nectar of the field covered. To reduce the number means you reduce the income on some investments, viz., cost of establishing yard, cost of maintaining yard, etc.. In establishing out apiaries, he would consider locality, with reference to overstocking, flora, etc.; also consider site of yard. It should be sheltered for outdoor wintering and have no live trees. Have good tight house for extracting. Store honey at the out-yard, if possible, instead of hauling it home. In all things, Mr. Nolan said, do your work systematically and reasonably, not putting off till to-morrow what you can do today.

Mr. Morley Pettit, Villa Nova, read a paper on "What Can be Done to Make the Association More Useful to Beekeepers." He said the object of the Association was the advancement of the beekeeping interests of this Province. This is effected by an annual convention where the members meet, and face to face discuss and exchange ideas on both the practical and the business side of beekeeping. Second, by the continual and persistent effort of the directors and officers to develop beekeeping as a business, and overcome the obstacles in its way.

Mr. Pettit proceeded to give the convention some kindly criticism, and to offer suggestions. Other branches of agriculture are receiving strong Government support in the way of opening up markets and the proper grading and distribution of products. Honey is neglected. Other lines are put to the front—beekeeping is crowded back. The fault lies principally with the beekeepers themselves. They do not use to best advantage the Government aid already received, and until they do, cannot hope for more.

Prof. Harrison had already pointed out a line of work for the Association in the way of sending out men to speak at Farmers' Institutes and other farmers' meetings.

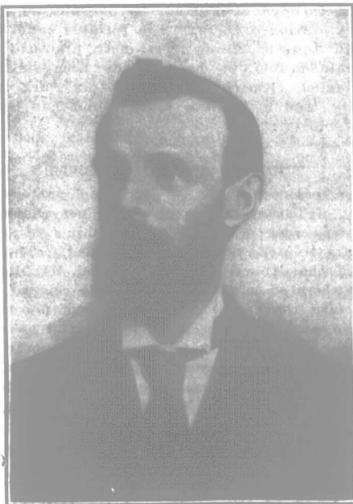
The election of officers resulted as follows:

- President.—H. G. Sibbald, Claude.
- Vice-Presidents.—R. H. Smith, St. Thomas, and F. J. Miller, London.
- Secretary.—Wm. Couse, Streetsville.
- Treasurer.—Martin Emigh, Holbrook.
- Directors.—W. J. Brown, Pendleton; J. K. Darling, Almonte; M. B. Holmes, Athens; R. Lowey, Cherry Valley; Mr. John L. Grosjean; Jacob Alpaugh, Galt; Jas. Armstrong, Cheapside; R. H. Smith, St. Thomas; G. A. Deadman, Brussels; F. J. Miller, London; Denis Nolan, Newton-Robinson; Prof. Sherman, O. A. C., Guelph.
- Representatives.—Toronto Fair, E. Grainger; London, J. B. Hall; Ottawa, J. K. Darling.



H. G. Sibbald.

President Ontario Beekeepers' Association.



R. H. Smith.

Vice-president Ontario Beekeepers' Association.



Wm. Couse.

Secretary Ontario Beekeepers' Association.

customers and the reputation for a good article. He then proceeded to emphasize a few points on creating a market. One cannot get up a fancy name or trade-mark, as honey is a natural food product. Do not send honey to large cities where so many seek a market, but make a house-to-house canvass in your own town. Make an exhibit at the

POULTRY.

Winter Layers.

The winter layer is the profitable bird; and it is now that the preparations are made for successful winter egg production—in fact, the preparations began last spring when the chicks were being hatched, or we may say several years ago, when one began breeding up his strain of egg producers. But it is now when the birds will be brought together and everything got ready for the winter's work. It is necessary that extra care be taken in selecting the birds that shall fill the pens for the winter. A few drones among them will cut down the profits quite a lot. Any deformed birds, or any which do not come up to the point of being "good" birds for the purpose for which you are keeping them should be thrown out. It certainly does not pay to keep any which do not show by their looks that they might make layers. There are enough poor ones among those which look all right. Perhaps a number make the mistake of trying to keep too many birds, thinking that the more birds they winter the greater will be their profit, and so they go ahead and keep a lot of undesirable birds, that will not pay for their feed through the winter, forgetting that it takes the profit of one of the best birds to pay the feed bill of one that does not lay any eggs at all, and one that only lays a few eggs will greatly diminish the profit of another good one. Thus a few non-layers will greatly lower the general average of the whole flock. Of course, we cannot tell exactly which will prove to be good layers, but we can throw out those which seem to lack the appearance that goes to mark the "excellent" layer. It is not the number of birds that we keep, but it is the quality that counts. A few really good birds will pay better than twice as many with a number of drones mixed in. It pays to throw out the unprofitable ones as soon as they are found out. Sometimes the best appearing ones fail to make good egg producers.

In arranging the interior of the poultry-house the very best plan is to make all the fixtures movable. Have the nests, roosts, dropping boards and all the dishes so they may be taken out when you wish to have a general cleaning up of the poultry-house (which should be one of the items of your fall work in preparing for winter); you may have an easier job of it, as the fixtures may be taken outside for cleaning and leave only a bare coop inside, with nothing in the way to prevent a thorough cleaning. It pays to have everything as simple as possible, and still furnish the necessary advantages. Why unnecessary fixtures will only be in the way. A whole lot of study is needed, and should be given before one begins to build. This might save the changing of the building later.—[Percy W. Shepard, in American Poultry Advocate.]

NEWS OF THE DAY.

Canadian.

Fred J. McLeod, formerly of Charlottetown, P. E. I., has been elected Senator for Massachusetts.

Miss Laura Rose, who has just finished her summer's work conducting a travelling dairy school in Nova Scotia, has returned home to Guelph.

Major Frederick Dixon, formerly of the Q. O. R., who had served in the Fenian Raids of '66, was found dead in his chair at his Toronto home.

Large crowds on the Halifax wharf witnessed the departure on the Dominion Liner, Canada, of the Fifth Royal Garrison Regiment, which sailed at midnight, November 14th, for England.

The failure of the fisheries and the consequent dullness of trade has caused great destitution among the six thousand inhabitants of the islands of St. Pierre and Miquelon, in the St. Lawrence. Many are emigrating, some coming to Canada, and some returning to France.

British and Foreign.

Queen Alexandra has made an appeal for the unemployed poor of England, and has herself given \$10,000 toward their aid.

An anvil used by John Bunyan when he was a tinker has been found, and will be sold by auction. It is stamped with Bunyan's name, residence, and the date 1647.

The Government employees at the dock ends in French ports have struck. About 6,000 men are out of work, but there is hope the strike may be settled quickly.

On the occasion of the visit of the Prince of Wales to Indore, India, one motto ran, "Tell father we are

happy." The Canadian mission, which was passed immediately after, bore the words, "Canada is, too."

The prize offered by the League of the Empire to the school children of the Empire for the best design for a cover for their magazine was won by a Natal girl. In the best dozen selected were two from Canada.

Eleven whaling vessels, which sailed from San Francisco last spring, have been caught in the ice in the Arctic, and will have to remain there until next August. The U. S. Government has asked that the Canadian Mounted Police Department forward letters to the imprisoned crews.

Once the manufacture of paper was a tedious process, but it is no longer. Some time ago at Elsenhals, in Norway, three trees were felled as an experiment in the presence of a notary, who was charged to certify the time taken. The cutting began at 7.35 a.m., the wood was reduced to small pieces, converted into pulp, and at 9.24 the first sheet of paper was finished. The sheets were then driven two miles to a printing office, and just after 10 o'clock a paper was printed, so that in two hours and twenty-five minutes the wood of a standing tree was converted into a journal ready for delivery.

Doings Among the Nations.

RUSSIA.

Poland is now the center of the disturbances in Russia, the Poles having taken advantage of the disorders to urge again their claims to national independence. The Russian Government has refused to entertain the idea of a separation, and martial law has been proclaimed throughout Poland, to be enforced by 600,000 soldiers stationed there. The pitiable condition of the Russian Jews is calling forth much practical sympathy. In England £65,000 has already been subscribed for their relief, American contributors are responding liberally, and a Russian Relief Fund has been started in Ontario.

TURKEY AND THE POWERS.

The patience of the European nations with the cruelty of Turkey to the people of her possessions, and the evasiveness with which the claims of other countries are treated, has seemingly ended. The particular demand that the Government of the Macedonian Provinces, where so much oppression has reigned, should be given into the hands of the European powers has met with no response from the Sultan; and as a result of his delay in replying, a joint naval demonstration is to be made against Constantinople. Warships from the various nations will compose the fleet, which will be commanded by Admiral Ritter von Jedine, of Austria.

THE FARM BULLETIN

A report of the meeting of the Ontario Vegetable-growers' Association, held in Toronto, November 15th to 16th, will appear next issue.

Japan's flour imports are creeping up to the \$10,000,000 mark. She has now thirty ports open to foreign trade.

A Prince Edward Island farmer has shipped over 5,000 lambs into United States markets since the middle of October.

A. P. Stevenson, of Morden, who has proved that many varieties of apples may successfully be grown in Manitoba, has had a crop of seventy barrels this year from his orchard.

The Railway Commission finds that the complaint of the Dominion Millers' Association against the G. T. R. for discrimination in the matter of providing cars for grain carriage was well founded. The Commission has issued an order to stop the injustice.

Mr. Harry C. Airth, Capetown, S. A., writes us: "South African trade is improving, and the recent heavy rains have made the whole country look very well indeed. The outlook for the farmers—both stock, grain and fruit growing—is better this season than it has ever been since the late war."

To the cattle-breeders of Lincolnshire, the President of the Board of Agriculture in Great Britain announced his firm determination to oppose to the uttermost the repeal of the embargo on Canadian cattle, and deplored the possibility of someone taking his position after the decisions who favors the removal of the restriction.

Our Ottawa correspondent writes: "Mr. F. W. Hodson, Dominion Live-stock Commissioner, denies the report that he had resigned his position. A few days ago it was reported on reliable authority here that Mr. Hodson had sent in his resignation. He was in Toronto at the time, and could not be seen regarding the matter. When seen, since agent his reported resignation, he stated emphatically that he had not resigned."

The farmers of Canada are thirty million dollars richer by the exports of butter and cheese from Canada this year. Never in Canada's history have there been such immense shipments, nor such sustained high prices. Of cheese, 2,631,767 boxes were shipped, which at the average price of ten cents a pound means \$21,977,660.

The butter shipments amounted to 701,803 packages, which at the average price of 21½ cents means \$8,412,000.

The Association of Farmers' Institute Workers.

[Specially reported for the "Farmer's Advocate."]

The tenth annual meeting of the American Association of Farmers' Institute Workers was formally opened in the City of Washington, on Thursday, November 9th, by an address of welcome by Hon. James Wilson, Secretary of Agriculture for the United States. The meeting was the most successful held by the organization since its inception ten years ago, 55 States and Provinces being represented by over 100 delegates.

Five-minute reports from the several States and Provinces were read, which contained a synopsis of the work of the past year, and indicated the progress that is being made in this phase of agricultural education.

Among the principal subjects discussed were "Institute Organization and Methods," "Institute Lectures," "Co-operation with Other Educational Agencies," "Boys' and Girls' Institutes," and "Co-operation with the National Department of Agriculture."

The President of the Association, J. C. Hardy, President of the Mississippi Agricultural College, discussed Federal support for Farmers' Institutes. He considered that the time had come when the value and importance of this work should be brought to the attention of the National law-makers. He urged the adoption of permanent committees to do continuous work from year to year, as it was infinitely more important that the work as a whole should be put upon a broader and more permanent foundation by being unified, nationalized, and supported by federal appropriation. Congress had to a limited extent recognized the claims of this work, and for several years past included in the agricultural bill an item for the salaries of our Farmers' Institute specialists, and he (Mr. Hardy) felt sure as they had once recognized the claims of the work, no difficulty would be experienced in showing them how inadequate is this help. He recommended that the association appoint a strong committee to present this matter to Secretary Wilson, and to urge that he ask Congress for a sufficient appropriation to place the work on a progressive basis; that a committee be appointed to consider the advisability of asking for affiliation in the Association of Agricultural Colleges and Experiment Stations. The plan to assist in widening the scope of the work and placing it on a more progressive basis, by a requisition from the States for the necessary funds, was favorably received by the meeting.

EDUCATIONAL EFFORTS.

Prof. F. H. Hall, of Aurora, Ill., and Supt. of Farmers' Institutes for that State, addressed the association on the "Co-operation of Farmers' Institutes with Other Educational Agencies." He said that the true measure of value of an institute did not depend so much upon the amount of teaching done as the degree of interest aroused. There must be teaching, but its main purpose must be first to create the desire to learn, and, second, to point to the sources of information. For the purpose of arousing interest, one interesting newly-discovered fact, of unquestioned economic value, so presented as to challenge attention and convince the listener of its importance, is worth a hundred commonplace truths, even though the latter may be essential and presented in a most attractive manner. It is one function, says Prof. Hall, of the Farmers' Institute, to assist in finding what Supt. Bayliss happily calls "the trail from the rural school to the college of agriculture." It must not only find its existing trails, but it must help to make new ones, and stimulate young people to enter upon them. It must create a sentiment in favor of teaching the elements of agricultural science in all the schools, in favor of rural consolidation, rural high schools, agricultural high schools, with curricula suggested by the agricultural college, and including a department of domestic science. In no way can this be so rapidly accomplished as by the co-operation of Farmers' Institute officers with school officers and teachers. The combined farmers' and teachers' institute is the most effective agency for bringing about this educational reform.

There are a few people yet who oppose what they term early specialization in the educative process. They plead for "a liberal education" as a foundation for the economic and special education. But what is a liberal education? says Prof. Hall. It is the education that makes a man free, that emancipates him not only from the bondage of ignorance, but from the bondage of dependence upon other people for his bread and butter, and from a parasitic livelihood; that gives him the power to earn his own living—really earn it, by doing something that must be done—and thereby contribute something to the general uplift of the race. That education is the best, the most liberal in the best sense of the term, for your boy or mine, that will make him worth the most to the world, able to contribute in the largest possible degree (for him) to human well-being. Hence the thoughts of the boys should be early turned toward some honorable occupation. This is the purpose of agriculture in the public schools. It is best that nearly one-half of the boys in the schools, probably more than half in the public schools, should select agriculture as a life vocation, and, having selected it, they should be given the widest possible opportunity to fit themselves for this honorable occupation.

The Farmers' Institute, by seeking the co-operation of teachers and school officers, can become an important

factor in giving character to the new education, the aim of which is not "culture for culture's sake," not "art for art's sake," not philosophic leisure, but success through useful activity, through large contribution to human needs, through personal effort in doing a share of the world's work.

CO-OPERATION WITH OTHER EDUCATIONAL AGENCIES.

Geo. A. Putnam, Supt. of Farmers' Institutes for Ontario, outlined the relation of agriculture to the great manufacturing and producing establishments in U. S. and Canada. Co-operation had done much for the agriculture of Denmark and other European and Australasian countries, and it is to co-operation in its true sense, each working for the benefit of all, that we on this side of the Atlantic must look for progress in the future. The Farmers' Institute is in its nature the very essence of a sifting and scientific investigation of experimental work and practical experience, its whole life being dependent upon the educational agencies which go to make it up. Among the educational organizations which combine to perfect the work of the Institute in Ontario are the agricultural college and experiment stations, the different live-stock associations (cattle, sheep, swine, horse-breeders, etc.), fruit-growers' associations, dairymen's associations, poultry-keepers' associations, beekeepers' associations, etc. These societies are independent of the Institute as far as organization is concerned, but we find that by co-operating with these educational agencies the efficiency of agricultural education can be more easily established and maintained. The aim of the Department is to so arrange the field of educational work that the Institute officers will be composed of representatives from all societies which have members in the district. Then each of these phases of agriculture will receive its due proportion of attention at the regular meetings, and the members of the various societies will have an opportunity of lending their assistance to the Institute officers to further the special meeting in which they are interested.

INSTITUTE LECTURERS.

Dr. Tait Butler, Supt. of Farmers' Institutes for North Carolina, discussed the question of Institute Workers. He emphasized the fact that this was the most important question confronting those engaged in directing Farmers' Institute work, and it is yet unsolved. The partial solution indicated by the optimistic reports of directors, were, when taken at their full face value, merely a short and unsatisfactory truce with a difficulty which certainly yet remains to be met and overcome before the Institute work can be said to be on anything like a sound and satisfactory basis. Too much concern has been given to getting out a large attendance to devote sufficient attention to the more important matter of furnishing those who did come with the right sort of information in an acceptable form.

What is the right sort of an Institute man, is, therefore, says Dr. Butler, the question that naturally arises. The diversity of opinion re this question is great, and the standard is by no means well defined. "Personally, I do not care whether Institute lecturers are scientific men or practical farmers, and I don't believe Institute audiences do either. The question is not, how the man obtained his information, but, has he the right sort of information, and does he present it in an acceptable manner?" Because a man is a great scientist or a careful and skilled investigator is no reason for supposing he is a good teacher. Not one in fifty of the best farmers makes a good Institute lecturer: then, why should we expect all college and station men to be a success at Institute work?

The Institute lecturer must, first of all, be an educator. The day of the agitator should have passed long ago. It is education, not agitation, that is demanded. The information given must be specific and definite—generalities are no longer of value in Institute work. The chief fault I have to find with the so-called practical farmer as an Institute worker, is that he insists on giving only his own results and opinions, instead of a definite statement of the average results of the best authorities interpreted by his own experiences or observations. The experience of no man is sufficiently broad, nor his judgment so accurate, that he can afford to disregard the work of others if he is to be a safe teacher.

The Institute lecturer must also be a pleasing and interesting speaker. He must have a terse, incisive, forcible and attractive way of presenting his facts. To instruct his hearers he must interest them, but, says Dr. Butler, "to my mind the man who must resort to funny stories and anecdotes to interest and instruct his hearers is, to just that extent, short of an ideal Institute lecturer."

The most important part of an Institute is the questions and discussions, therefore the lecturer should be quick to correctly see and interpret the force and import of a question. No Institute man should attempt to answer questions out of his particular lines, as the field of agriculture is too large for any human mind to cover accurately. You know this, and so do the intelligent farmers, and they consequently lose faith, just as you do in the accuracy of any man who presumes to cover the whole field of agriculture. In conclusion, Dr. Butler suggested that to supply Institute lecturers in sufficient numbers, special schools connected with our experiment station farms would be the only solution to the problem. More money must be had to secure the services of the class of men able to develop the possibilities of this educational work. We must awaken to an appreciation of the full value and possibilities of

this work, and demand the money to prosecute it on a scale commensurate with its importance.

The final adjournment took place at 11.30 o'clock Saturday, when the members of the delegation went directly to the executive offices of the White House, where they were received by President Roosevelt. G. C. Creelman, O. A. C., introduced the members of the delegation to President Roosevelt.

THE NEW OFFICERS.

The election of officers resulted as follows: G. C. Creelman, B.S.A., M.S., President; W. W. Miller, Ohio, Vice-President; John Hamilton, Scientist, Dept. of Agriculture, Washington, Secretary-Treasurer. Executive Committee—J. G. Lee, Louisiana; Prof. W. Amos, Maryland; Prof. H. Hall, Illinois.

This is the first time in the history of the American Association of Farmers' Institute Workers that a Canadian has been elected to the Presidency. President Creelman has, however, been a veteran worker in this organization, having held the position of Secretary-Treasurer for ten years. He had intended withdrawing from active membership at this meeting, to join the Association of Agricultural Colleges and Experiment Stations, with which he is more directly connected, but the delegates, however, urged upon him to remain, and accept the presidency of this association.

A Record Ayrshire Sale.

The dispersion sale on November 15th of the noted herd of Ayrshire cattle belonging to Messrs. Robert Hunter & Sons, at Springhill Farm, Maxville, Ontario, attracted a very large attendance of dairymen and breeders from many parts of Ontario, Quebec, and the Maritime Provinces, together with a considerable number from the United States, and furnished a splendid example of the potency of the combination of good stock and liberal advertising in ensuring a successful stock sale. The herd was one of the best ever offered at auction on the American continent, having been wisely selected, bred and fitted for utility. The sale was extensively and judiciously advertised, and the result was the most successful disposal of the breed ever recorded in America, or, so far as we are aware, in any other country, being a credit to the owners, to the breed, which is fast gaining popularity among dairymen, and to the enterprising spirit of the bidders and buyers, as well as to the tactful and genial auctioneer, Capt. T. E. Robson, of Ilderton, Ont., who disposed of the whole herd of 65 head in about two and a half hours, so brisk was the bidding and so well managed the sale. The result is a well-deserved tribute to the judgment and skill of the Messrs. Hunter as breeders, and sets the standard of prices for first-class Ayrshires higher than ever before.

The highest price of the day was \$700, for the grand imported four-year-old bull, Lessnessock King of Beauty, the Toronto and Ottawa champion of 1905. The bidding on this bull was very animated, and at times exciting, and he was knocked down to the bid of Mr. W. W. Ballantyne, of Stratford, but was afterwards transferred at a liberal advance, it is said, to Mr. Percival Roberts, of Narbut, Pennsylvania. The highest price for a female, \$675, was paid by Capt. Andrew C. Zabriskie, Barrytown, N. Y., for the six-year-old cow, Garclaugh Queen of the Soncies, winner of first prize for a cow in milk at Toronto this year, and \$590 was realized for the eight-year-old cow, Garclaugh Bloomer 2nd (imp.), first-prize dry cow and female champion at Toronto this year, Mr. P. Roberts, Narbut, Pa., who was represented by Mr. J. B. Ketchen, formerly manager of the Massey farm at East Toronto, being the buyer, his purchases in all amounting to \$4,380. One of the most interesting numbers in the sale was the two-months-old heifer calf, Queen of Beauty 2nd, daughter of the champion bull and cow of this year, which after a spirited contest fell to the bid of Wm. Stewart & Son, Menie, Ont., at \$285. The sale totalled \$9,255, and counting the ten calves under four months with their dams, the average was \$273. Following is the list of those selling for \$100 and over:

COWS AND HEIFERS.

Garclaugh Queen of the Soncies (imp.), 6 years;	
A. C. Zabriskie, Barrytown, N.Y.	\$675
Garclaugh Bloomer 2nd (imp.), 8 years; P. Roberts, Narbut, Pa.	590
Kirkland Sparrow (imp.), 5 years; P. Roberts	410
Lessnessock Stylish Dewdrop (imp.), 4 years; J. G. Clark, Ottawa	250
Lessnessock Queen of Bloom (imp.), 4 years; P. Roberts	380
Lessnessock Stylish Betty, 8 years; P. Roberts	350
Maggie of Springhill, 7 years; A. C. Zabriskie	380
Garclaugh Mayflower (imp.), 2 years; P. Roberts	330
Minnie Douglas of Glenora, 2 years; John McEwen, Smith's Falls	225
Lady Eileen of Springhill, 1 year; P. Roberts	350
Princess Beatrice, 1 year; P. Roberts	255
Princess Ena of Springhill, 1 year; P. Roberts	290
Queen of Beauty 2nd of Springhill, 2 months; Wm. Stewart & Son, Menie	285
Queen Jessie of Springhill, 3 months; H. & J. McKee, Norwich	180
Queen Maggie of Springhill, 3 months; Easton Bros., Charlottetown, P. E. I.	155
Garclaugh Darling (imp.), 3 years; P. Roberts	185
Miss Pringle 1st of Bankend (imp.); Allan Black, Kingston	135
Beauty of Springhill, 10 years; Allan Black	110
Dewdrop of Springhill, 6 years; P. Roberts	155

Eoline of Glenhurst, 8 years; P. Roberts	\$105
Rettie of Springhill, 5 years; Industrial School, Mimico	110
Garclaugh Enchantress (imp.), 2 years; J. G. Clark	150
Garclaugh Lady Mansfield (imp.); Industrial School, Mimico	125
Garclaugh Leading Lady (imp.), 2 years; P. Roberts	275
Lady Kirsty of Glenora, 2 years; Easton Bros.	150
Heather Bell of Glenora, 2 years; J. G. Clark	125
Pearl of Springhill, 1 year; Easton Bros.	185
Lady Dulce of Springhill, 1 year; P. Roberts	170
Lessnessock Grace Darling (imp.), 1 year; J. G. Clark	155
Irene of Springhill, 6 months; P. Roberts	180

BULLS.

Lessnessock King of Beauty (imp.), 4 years; P. Roberts	\$700
King Edward of Springhill, 1 year; J. G. Clark	180
Queen's Messenger, 3 months; Wm. Stewart & Son	210
Royal Favorite, 2 months; J. J. Hill, St. Paul, Minn.	180
Gay Consul; L'Assomption College, Que.	125
Royal Sailor of Springhill, 3 months; W. W. Ogilvie, Lachine Rapids, Que.	140

Rural Literary Societies.

As the long winter nights are upon us again, and farmers are wondering how to spend them to the best advantage, with the maximum of enjoyment, a few lines on the subject of literary societies would, perhaps, not be out of place. If we had more of them established in our school sections or small villages throughout the country, we could not only spend our evenings profitably, but take considerable enjoyment out of them at the same time. There are sections of the country where these societies have been running for a number of years; and the young people are quite enthusiastic over their merits, and take great interest in conducting them; but there are other sections where such societies have never been instituted, and lack of interest is taken in anything pertaining to them. Our school teachers should take this subject up, and have societies established in at least some of the larger school sections of each township, and in a few years we would be surprised the interest that would be taken in them, and the benefit derived by our young people. Competitions could be worked up between these societies, and debates conducted. In this way latent talent would be developed, and farmers' sons and daughters given more confidence in themselves. We should encourage the art of public speaking among our young men, and do away with the bashfulness which we hear so much about. There are a number of difficulties which we would meet with at first in establishing these societies. Some of these are lack of funds and capable members to start them, but I think these could be overcome by getting, say, ten or twelve to pay twenty-five or fifty cents each to meet expenses for the first month—such as supplying lights and getting suitable literature. Regarding the constitution of the club, the school teachers, or whoever instituted them, could agree upon one, and supply each member with a copy, the rules of which should be strictly adhered to. These societies could be conducted once a week, have a concert at the end of each month, with an exchange of officers, so as to give everyone a fair chance.

PETERBORO.

How the "Farmer's Advocate" Helped.

To the Editor "Farmer's Advocate":

You will no doubt be interested to know that during the present season we have brought upwards of 4,000 people to Canada, all English speaking, the majority of whom we have placed on farms in Ontario. At the beginning of the present season we sent out application forms to farmers throughout the country; the newspapers also assisted us by advertising our work, the "Farmer's Advocate" among the number, and I am sure that you will be interested to learn that out of about 2,000 applications received at this office about 70% mentioned that they had seen that we supplied farm laborers through the "Farmer's Advocate." We desire to heartily thank you for the assistance you have rendered us and the men who come through our agency. The first time I am in London I hope to have the pleasure of thanking you in person. We are making our arrangements for next season's work, and hope to supply Canadian farmers with a good class of men. Again thanking you for your co-operation.

T. HOWELL,

Brigadier, Secretary for Immigration.

Winter Fair Programme.

Secretary Westervelt reports the programme of lectures for the Winter Fair as nearing completion, and will be in a position to have it ready for "Farmer's Advocate" readers in our next issue. Everyone interested in making the most out of their farming operations should plan to visit the Winter Fair at Guelph, December 11th to 15th. These few days spent in studying exhibits, listening to lectures and taking part in discussions are sure to be helpful to any farmer. The poultry show in connection with this fair will itself repay the outlay of time and expense of attending. It is a marvellous exhibition of the feathered tribe.

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never stops working, day or night—and no money comes more easily than interest money. You can start an account here with only one dollar.

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MARKETS.

Toronto. LIVE STOCK.

Receipts of live stock at the Western Cattle Market last week included 3,847 cattle, 4,176 sheep and lambs, 1,720 hogs, and 175 calves. At the Union Stockyards, the total was 1,302 cattle, 109 sheep, 1,098 hogs.

COUNTRY PRODUCE.

Butter—Creamery, 22c. to 23c.; solids, 21c. to 21½c.; dairy, lb. rolls, good to choice, 19c. to 20½c., and medium 17c. to 18c.; tubs, good, 17c. to 18c., and inferior, 15c. to 16c.

Eggs—19c. to 20c. Poultry—Fat chickens, 8c. to 10c.; thin, 7c. to 8c. Fat hens, 7c. to 8c.; thin, 6c. to 7c. Ducks, 10c. to 11c.; thin, 8c. to 9c.; turkeys, 12c. to 13c.; geese, 9c. to 10c.

Potatoes—Ontario, 60c. to 70c. per bag, on track; 75c. to 85c., out of store; eastern stock, 75c. to 80c.; 90c. to 95c., out of store.

BREADSTUFFS.

Wheat—Ontario—No. 2 white, 79c.; No. 2 red and mixed, 78c.; goosie, 75c. to 76c.; spring, 74c. to 75c. Manitoba—No. 1 northern, 86c.; No. 2 northern, 84c.

Millfeed—Ontario—Bran, \$12.50 to \$13, in car lots at outside points; shorts, \$16.50 to \$18. Manitoba—Bran, \$15.50 to \$16; shorts, \$17.50 to \$18.50, at Toronto and equal freight points.

Oats—35c. to 36c., at outside points. Barley—No. 2, 58c. to 54c.; No. 3, 46c. to 47c.

Peas—75c. to 76c., outside. Rye—74c. to 75c.

FARMERS' MARKET.

Dressed Hogs—Light, \$8 per cwt.; heavy, \$7.75. Butter, 23c. to 25c. Eggs, new-laid, 35c.; fresh, 25c. to 27c. Spring chickens, dressed, 8c.; live, 6c.; old, dressed, 5c.; live, 3c. Turkeys, dressed, 12c.; live, 11c. Geese, dressed, 8c.; live, 6c. Potatoes, bag, 80c. to 95c.; apples, bbl, \$1.50 to \$2.50; carrots, bag, 60c. to 75c. Beef, hind quarters, 7c. to 8c.; fore quarters, 4c. to 5c.; carcasses, 6½c. to 7c.

THE TORONTO HORSE MARKET.

The horse market was fairly active last week, particularly for commercial classes, such as drafters and other heavy animals suitable for contract and railway construction work. After the excessive marketings for a couple of weeks back, farmers have let up sending their horses into the city sale-rings, and the result is seen in a slightly steadier tone all along the line, though dealers still make the claim that the market is in a weakened state and that farmers are still asking prohibitive prices. Despite this, the fact remains that the sales were good during the week, and the auctioneers had little difficulty in effecting a clearance of supplies. At the Repository, a number of imported Shires were disposed of for breeding purposes, one two-year-old mare selling as high as \$570. The lowest price realized was \$300. Several carloads of mixed workers were sold at the same establishment weighing from 1,350 to 1,700 lbs. for contract and railway work. Already the demand for light drivers for the sleighing season is commencing to develop, though so far there

has, of course, been little business done in these classes.

Single roadsters, 15 to 16 hands ... \$125 to \$175 Single cobs and carriage horses ... 125 to 190 Matched pairs and carriage horses, 15 to 16.1 hands. 300 to 500 Delivery horses, 1,100 to 1,200 lbs. ... 125 to 160 General-purpose and expressers ... 125 to 190 Serviceable second-hand workers ... 50 to 90 Serviceable second-hand drivers ... 50 to 90

Montreal.

Cheese—Quebec, Octobers, 12c. to 12½c.; Townships, 12½c. to 12½c., and Ontarios, 12½c. to 12½c., or 12½c.

Butter—Market firm. Good to fine creamery, 28½c. to 28½c.; choice, 28½c. to 28½c.

Potatoes—Dealers purchasing at 55c. per bag of 90 lbs., carloads on track.

Grain—Oats, steady; No. 2, 39½c. Buckwheat, 58½c., store. Temporary firmness in wheat, owing to reported unfavorable harvest weather in Argentina.

Beans—New primes, \$1.55 to \$1.60 per bushel.

Hay—No. 1 timothy, \$8.50 to \$9; clover, \$6.25 to \$6.50 per ton.

Millfeed—Bran, steady, at \$17 for Manitoba, in bags; shorts, \$20; Ontarios fully \$1 less.

Live Stock—English markets stronger, local markets about steady, except that hog values are a shade firmer, selects, 6c. to 6½c.; mixed stock, 5½c. to 5½c. A few choice cattle, 4c. to 4½c.; good to fine, 3c. to 4c. Sheep, steady, at 8½c. to 4½c.; lambs, 5c. to 5½c.

Seed—Local dealers are offering from \$6.20 to \$7.25 per bushel of 60 lbs. for red clover, and \$4 to \$6.50 per bushel for alsike; timothy being \$2.50 to \$3.50 per cwt. These prices are offered for deliveries at shipping points throughout Ontario.

Eggs—No. 1 fresh selling at about 21c., and select fresh, 24c. to 25c.

Poultry—Finest, fresh-killed, dry-plucked turkeys, 14½c. to 15c.; 13c. to 13½c. for finest ducks; best geese, 9½c. to 10c., and finest chickens, 10c. to 10½c.

Buffalo.

Hogs—Heavy and mixed, \$5.10 to \$5.15; Yorkers, \$5 to \$5.10; pigs, \$5.05 to \$5.10; roughs, \$4.25 to \$4.50; stags, \$8 to \$8.50.

Sheep and Lambs—Lambs, \$5.75 to \$7.35; yearlings, \$5.75 to \$6; wethers, \$5.50 to \$5.75; ewes, \$5 to \$5.25; sheep, mixed, \$2.50 to \$5.50; Canada lambs, \$6.75 to \$7.

Chicago.

Cattle—Common to prime steers, \$2.90 to \$6.55; stockers and feeders, \$2.15 to \$4.15; calves, \$2 to \$7.

Hogs—Choice heavy, \$4.90 to \$5; good, heavy, \$4.85 to \$4.90; butchers', \$4.70 to \$4.90; mixed, \$4.75 to \$4.85.

Sheep—\$3.75 to \$5.60; yearlings, \$5.50 to \$6; spring lambs, \$6.50 to \$7.25.

OLD INDIAN FASHIONS.—Corn used to be ground by pounding it between two stones. This work fell to the women. An up-to-date farmer would laugh at such an old-fashioned mill—would not have such primitive methods on his farm. Once there was no way of skimming milk except to let it stand in something until what cream would rise came to the top. The women did the skimming as well as the milking. Sometimes as much as half the cream was lost by such an unscientific method. Some of the very farmers and dairymen who would laugh at an Indian still are skimming their milk and loosing half the cream just as the Indians did. Modern methods of skimming are as far ahead of the old method as modern mills are ahead of the old grinding-stones. An up-to-date skimming machine is the Sharples Turbine Separator. It often doubles the yield of milk. The milk as soon as drawn from the cow—leaves fresh, warm and sweet. Young stock—requires that only the cream be put away. In use from Maine to California—and far ahead of any other. Ask The Sharples Separator Co., which is plainly written, full illustrated and illustrated. Address them either at West Chester, Pa., or Chicago, Ill., or Toronto, Can. They have large offices at each place.

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GOSSIP.

AN ATTRACTIVE SHORTHORN SALE COMING.

On December 13th, during the Winter Fair, as announced in the advertisement on another page in this issue, a joint sale of 30 head of Shorthorns from the excellent herds of Messrs. A. Edward Meyer, Guelph, and Geo. Amos & Son, Moffat, 10 miles from Guelph, will be held in that city. The offering will comprise representatives of half a score of the best of Scotch families, young, or in the prime of life, and in good healthy breeding condition. These herds have been founded on first-class stock, and bred on sound and intelligent lines, and have been supplemented in recent years by judicious purchases of richly-bred animals. First-class sires have been continuously used, and the progeny of these in young bulls and heifers, with a number of good young cows in calf, or with a calf at foot, are included in the sale. The Amos herd has had the benefit of the services for two seasons of the imported bull, Old Lancaster, winner of the grand championship of the breed at the Canadian National Exhibition at Toronto last year, a good portrait of whom may be looked for in our next issue. Most of the young things in the herd of Mr. Meyer have been sired by the richly-bred Cruickshank bull, Chief of Stars (imp.), and Lovely Prince, a Cruickshank Lovely, bred by John Gardhouse & Sons, Highfield. This sale will be an additional attraction to visitors to Guelph the week of the fair, and as reduced railway rates are provided for that event, breeders and farmers desirous of improving their stock should not fail to take in the sale. Write early for the catalogue to Mr. A. Edward Meyer, Box 378, Guelph, Ont., and bring it with you to the sale, as the probability is there will be a big demand for it.

Beals C. Wright, the tennis champion, was eating reed birds. "When the reed bird season comes round," he said, "I think of my cousin, an enthusiastic sportsman. My cousin once went on a reed bird hunt, and had excellent luck. The family, on his return, feasted. His wife, a week or so later, said to him: 'How many reed birds was it that you shot, do you remember?' 'Just two dozen,' said my cousin, 'and all beauties.' 'Then the grocer,' said his wife, 'has made a mistake. He charges for only 18.'"

Many amusing stories, according to The Rochester Union and Advertiser, are told of Theodore C. Weeks, the banker and broker, who died a short time ago. One Saturday, many years ago, Mr. Weeks went into the office of the late Irving A. Evans, in the Fiske building, and said to Mr. Evans: "I wish you would lend me \$5 until Monday."

Mr. Evans, who was somewhat hard of hearing, put his hand to his ear and said, "What?" Mr. Weeks, taking courage, said, "I wish you would lend me \$10 until Monday."

Mr. Evans handed out the money with the remark: "I wish I had heard you the first time."

A gentleman riding with an Irishman came within sight of an old gallows, and, to display his wit, said: "Pat, do you see that?" "To be sure Oi do," replied Pat. "And where would you be to-day if the gallows had its due?" "O'd be riding alone," replied Pat.



Capital Authorized, \$2,000,000.00.

HEAD OFFICE: TORONTO, ONT.

EDWARD GURNEY, President

Special attention given to accounts of Cheese Factories, Drovers and Grain Dealers, and all out-of-town accounts. Farmers' Notes discounted, Farmers' Sales Notes collected and advances made against their security. Municipal and School Section accounts received on favorable terms.

SAVINGS BANK DEPARTMENT.

Deposits of twenty cents and upwards received, and interest compounded four times a year, or quarterly, without presentation of passbook. No delay in the withdrawal of any part of the deposits.

G. de C. O'GRADY, General Manager.



Life, Literature and Education.



George Eliot.

The early half of the nineteenth century was less kind to the woman who essayed literary work than later years have been. The feminine brain was not supposed to be of sufficient strength to produce anything worthy of consideration, and so we find the woman filled with a desire to write out her thoughts must needs masquerade under a masculine name.

One of these, Mary Ann Evans, is known but little to the world under her real name, but is familiar to almost every English-speaking man and woman as George Eliot, and under this name she won a lasting fame.

She was born at Arbury Farm, in Warwickshire, November 22nd, 1819, her father, at the time of her birth, being forester and land-agent for the owner of Arbury Hall. Here she lived for twenty years, these scenes of her childhood being woven into many of her books, especially in the Mill on the Floss, where Tom and Maggie Tulliver preserve the impressions of her childhood. At school she was a great favorite, and so highly was the privilege of walking and talking with her esteemed that the teacher is said to have arranged that the scholars accompany her in alphabetical order.

In the spring of 1841 she and her father removed to Coventry, where she made the acquaintances who confirmed in her the convictions that separated her from the orthodox church, whose services she attended only at the express wish of her father. She studied earnestly and systematically, taking French, German, Italian, Latin and Greek from tutors, and undertaking Hebrew by herself. In 1846 her first work appeared, being a translation of Strauss's "Life of Jesus," a careful and scholarly piece of work, and this was followed by other translations of equal merit.

Among the clever men in whose society she found delight was George Henry Lewes, a clever journalist, something of a philosopher, and a man of science, and, though not a writer, an excellent critic, and the expression of her genius is largely due to his encouragement and friendly criticism. That strange docility of mind, so strong and yet so yielding, was moulded by him to work that he himself had not the mental capacity to achieve. Her inexplicable

life with him was unsanctified by the marriage ceremony, yet for twenty-five years they rendered cheerfully the obligations which the tie enjoins. Strange to say, in all her books, no principle is more insisted upon than the sanctity of marriage, and no other violation of law receives such condemnation, so that it would seem that her conduct in her own eyes was not justified entirely.

Her first original work was "Scenes from Clerical Life," which some good judges have declared was stamped with the writer's individuality, as none of her subsequent writings were, though "Adam Bede" and "The Mill on the Floss" have greatly exceeded her first work in popularity, and most firmly established Miss Evans' right to a position among the great English novelists. "Silas Marner," a short but very strong piece of work, followed these; then "Romola," "Felix Holt," "Middlemarch," and "Daniel Deronda."

In 1878 a great sorrow came upon her in the death of Mr. Lewes, and for many weeks she saw no one, but devoted herself to the preparation of his unfinished writings. An entry—the only one for a month—in her diary said, "Here I and Sorrow sit."

In the spring of 1880 she was married quietly to John Cross, who had been one of her friends for many years, and who had greatly assisted her in the editing of Mr. Lewes' papers. Their life together was a short one, for, after returning from a European tour, she was taken ill with a heavy cold, and died on the 22nd of December, 1880.

Perhaps no juster appreciation of her work can be given than the criticism written by one of our Canadian authors, Bliss Carman: "George Eliot is pre-eminently one of those to whom nothing human can ever be alien. For abstract wrong she has no pity, but whenever her fellow-beings are concerned, or the almost living creatures of her brain, she is all mercy and sympathy and loving kindness. Not once does she ridicule their foibles nor belittle the meanness of them all. She loves them too well ever to make fun of them behind their backs. And when she would move us to smiles there is no malice in her voice, as we seem to hear her say, 'How delightful, how absurd a thing is humanity!' A large intelligence was her dominant characteristic. However keenly she might feel, she could always see more keenly still. To insist on the value of character, on the absolute necessity of right conduct, the untainted culture of the heart as the only aim of life, the only assurance of happiness, is the whole of George Eliot's teaching."

"THE ADOPTION OF THE BABY," FROM "SILAS MARNER."

"Thank you kindly," said Silas, hesitating a little. "I'll be glad if you will tell me things. But," he added, uneasily, leaning forward to look at Baby with some jealousy as she was resting her head against Dolly's arm and eyeing him contentedly from a distance, "but I want to do things for it myself, else it may get fond o' somebody else and not fond o' me. I've been used to fending for myself in the house—I can learn, I can learn."

"Eh, to be sure," said Dolly,

gently, "I've seen men as are wonderfully handy with children, though they be awkward and contrary mostly, God help 'em. You see this goes first, next to her skin," proceeded Dolly, taking up the little shirt and putting it on.

"Yes," said Marner, docilely, bringing his eyes very close that they might be initiated into the mysteries; whereupon Baby seized his head with both her small arms and put her lips against his face with purring noises.

"See there," said Dolly, with a woman's tender tact, "she's fond of you. She wants to go on your lap, I'll be bound. Go, then; taker her, Master Marner; you can put the things on her, and then you can say as you've done for her from the first of her coming to you."

Marner took her on his lap, trembling with an emotion mysterious to himself, at something unknown dawning in his life. Thought and feeling were so confused within him that if he had tried to give them utterance he could only have said that the child was come to him instead of the gold he had lost—that the gold had turned into the child. He took the garments from Dolly and put them on according to her teaching, interrupted, of course, by Baby's gymnastics.

"There, then! Why, you take to it quite easy, Master Marner," said Dolly, "but what shall you do when you're forced to sit at your loom? For she'll get busier and mischievous every day—she will, bless her!"

Silas meditated a little while in some perplexity. "I'll tie her to the leg o' the loom," he said at last, "tie her with a good long strip o' something."

"Well, mayhap that'll do as it's a little gell, for they'r easier persuaded to sit in one place nor the lads. I know what the lads are, for I've had four—four I've had, God knows—and if you was to take 'em and tie 'em up they'd make a-fighting and a-crying as if you was ringing the pigs. Eh, if it wasn't a sin to the lads to wish 'em made different, bless 'em, I should have been glad for one of 'em to be a little gell—and to think as I could ha' taught her to scour and mend and the knitting and everything. But I can teach this little un, Master Marner, when she gets old enough."

"But she'll be my little un," said Marner, rather hastily, "she'll be nobody else's."

"No, to be sure, you'll have a right to her if you're going to be a father to her and bring her up according. But," added Mrs. Winthrop, coming to a point which she had determined beforehand to touch upon, "you must bring her up like christened folks' children, and take her to church, and let her learn her catechise, as my little Aaron can say off—the 'I believe' and 'hurt nobody by word or deed,' and everything, as well as if he was the clerk. That's what you must do, Master Marner, if you do the right thing by the orphim child."

The Choir Invisible.

Oh, may I join the choir invisible
Of those immortal dead who live again
In minds made better by their presence—
live

In pulses stirred to generosity,
In deeds of daring rectitude, in scorn
For miserable aims that end with self,
In thoughts sublime that pierce the night
like stars,

And with their mild persistence urge
man's search
To vaster issues.

So to live is heaven;
To make undying music in the world,
Breathing the beautiful order that controls

With growing sway the growing life of
man.

So we inherit that sweet purity
For which we struggled, failed and
agonized

With widening retrospect that bred
despair.

Rebellious flesh that would not be sub-
dued,—

A vicious parent shaming still its child,
Poor anxious penitence—is quick dissolved;
Its discords, quenched by meeting
harmonies,

Die in the large and charitable air;
And all our rarer, better, truer self,
That sobbed religiously in yearning song,
That watched to ease the burden of the
world,

Laboriously tracing what must be,
And what may yet be better—saw within
A worthier image for the sanctuary,
And shaped it forth before the multitude,
Divinely human, raising worship so
To higher reverence more mixed with
love.

That better self shall live till human
Time
Shall fold its eyelids, and the human sky
Be gathered like a small scroll within the
tomb
Unread forever.

This is the life to come,
Which martyred men have made more
glorious

For us who strive to follow. May I
reach

That purest heaven, be to other souls
The cup of strength in some great agony,
Enkindle generous ardor, feed pure love,
Beget the smiles that have no cruelty,
Be the sweet presence of a good diffused,
And in diffusion ever more intense!
So shall I join the choir invisible,
Whose music is the gladness of the
world.
—George Eliot.

Tribute from a Leading Educationist.

"Since boyhood on the old farm I have followed the career of your excellent "Farmer's Advocate and Home Magazine" with great interest—as it has developed from a monthly to a semi-monthly, and then to a weekly, with its many departments, all so ably edited, and all so good. I must now express my appreciation of it all, and especially of the latest department begun—"Life, Literature and Education." True greatness in a nation and greatness in literature develop, together, thought, and language to express that thought. The prosperity of Canada for many generations will depend on those who till the soil, and no one can estimate the benefit to our "Fair Canada" of the cultivation of a good literary taste by this department in your Magazine, which goes into so many thousands of the homes of Canada, from ocean to ocean. You have struck a happy vein in your selections—not too deep, popular, and yet so good. "Glen-garry School Days" is a good story for Canadians. Its characters are sturdy and strong, and several false

ideas are swept away. Wishing your magazine ever-increasing prosperity and usefulness,

Yours very sincerely,
W. R. MANNING, Principal.
Bruce Co. Model School.
Walkerton, Ont., Nov. 11th, 1905.

Magnifying Lenses.

There are but few inexpensive articles capable of contributing more to a family's pleasure and profit than a magnifying lens; and such an article is simply indispensable to a pupil in one of the higher classes in the public school for nature-study work. Around the farm, garden and

orchard it is useful for the detection of impurities in small seeds and the observation of the eggs and certain stages of small insects that are injurious to garden and field crops. In the household it frequently comes handy to examine fabrics, food ingredients, thistles in the fingers, etc.

The most serviceable kind of lens, after one has learned how to use it, is the form known as the watch-maker's. It fits under the eyebrow like a monocle, and leaves both hands free to manipulate the object under study.

The tripod is a generally convenient and satisfactory instrument. Placed on its legs over small objects lying on the table or a piece of paper or cardboard, such objects are in focus, and the hands are free to dis-

sect them, if necessary. The legs can be removed and the lens supported in a handle of twisted wire. In this mounting it can be carried in the pocket, and used in the orchard or field quite conveniently.

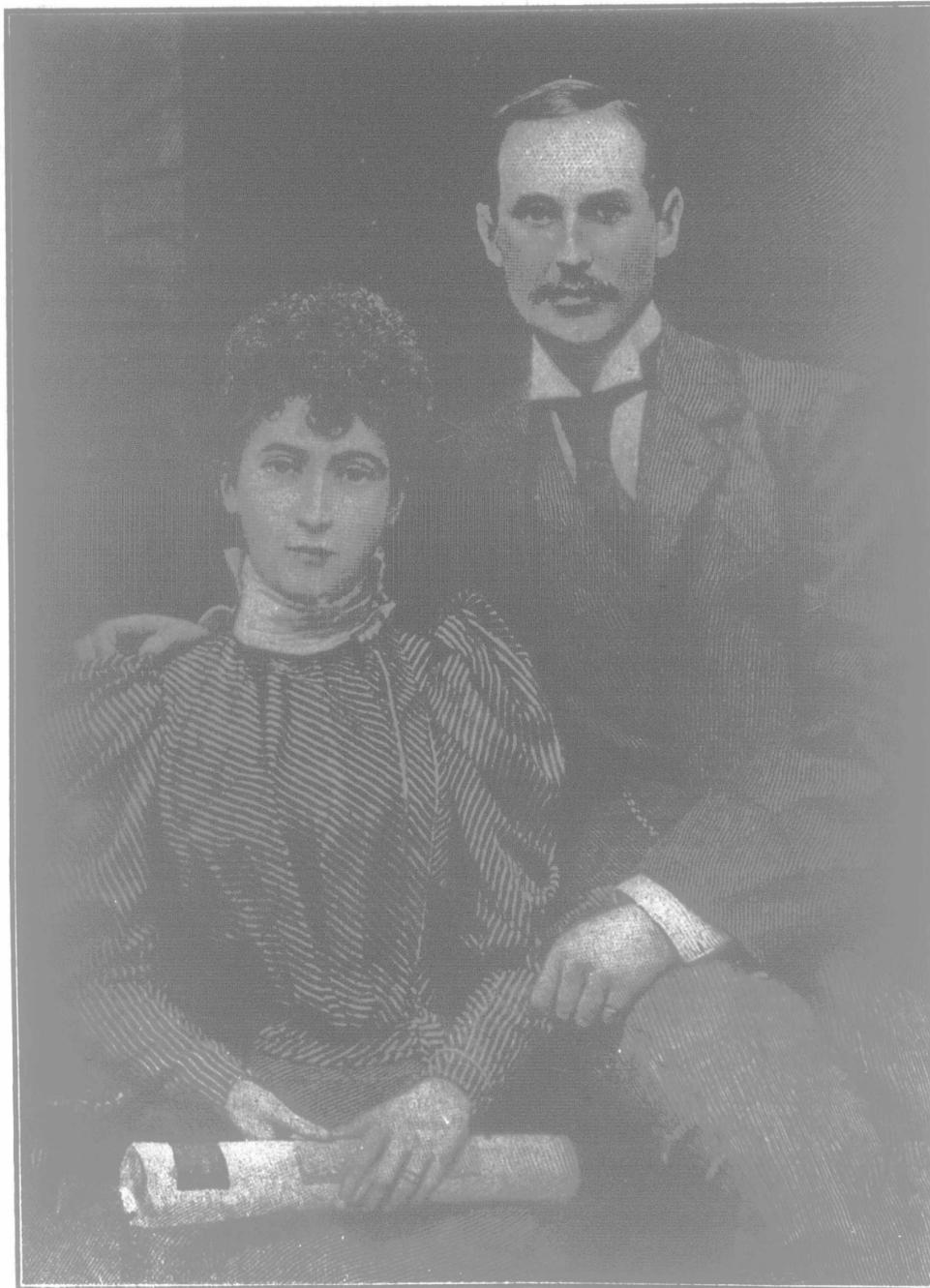
An inexpensive form of lens that is convenient for carrying in the pocket is known as the bellows lens. One or two lenses are mounted on a pivot that can for use be turned out from an upper and lower plate of vulcanite. When closed the vulcanite plates protect them from dust or scratching. Students sometimes mount this kind as a dissecting lens, so that both hands may be free, by inserting a piece of cork that fits in the bellows, leaving enough of the cork outside to receive a wire upon which the lens can be adjusted,

when it will be in focus. The lower end of the wire is inserted in a bit of board that serves for a table.

Thomas H. Russell, L.L. B., the editor-in-chief of Webster's Imperial Dictionary, has compiled a little book (Geo. W. Ogilvie & Co., Chicago, Ill., publishers) called "Faulty Fiction, or Errors in the Use of the English Language." This little book, of a size that will fit the pocket conveniently, is well arranged for ordinary use, and in it will be found, "boiled down," a great deal of valuable information for those who wish to use correct English in their ordinary speech or in writing. The most common errors are pointed out and the correct form indicated. A very useful little book, indeed.

NORWAY'S NEW KING AND QUEEN.

When the Norwegians had finally decided that it was to their best interests to have a king and government independent of Sweden, they began to look about them for some member of royalty worthy of holding the sceptre of the Vikings. A few of the citizens were in favor of doing away with the kingly office entirely and establishing a republican form of government, but the majority were desirous of being ruled over by a monarch. The son of Sweden's king was thought of and an invitation given him, but it was not accepted, as the arrangement did not meet with his father's approval. Then the offer of a throne was made to Charles, Prince of Denmark, the grandson of old King Christian, whose daughter is our own beloved Queen Alexandra. He accepted on condition that a plebiscite vote of Norwegians should be in his favor. On Nov. 12th this plebiscite was taken, giving a large majority in favor of this popular prince. Prince Charles should prove a king well suited to the freedom-loving Norwegians, for he is almost as democratic in his ideas as they are, the result, no doubt, of marrying an English wife. His mother, the Crown Princess of Denmark, was very anxious that he should wear a crown, and would have been pleased if he had married the young Queen of Holland, but now that he is king in his own right, her disappointment over the failure of her plans will be forgotten. Since marrying the Princess Maude of Wales, third daughter of the King of England, the Prince has spent much of his time in England, and has been granted honorary rank in the British army. The Prince, who will be known as Haakon VII., will be crowned in July, but already great preparations are being made in Norway for the reception of the new king, who will receive a hearty welcome.



Prince Charles of Denmark and Princess Maude of Wales.

Typhoid Fever and its Causes.

Yours' Companion. The question is often propounded, "Why is typhoid fever so prevalent in summer?" It might as well be asked, "Why does typhoid fever prevail at all?" since the answer is much the same in both cases, namely, because the measures employed

to prevent typhoid are inefficient, neglected, or ignored.

Improper disposal of sewage lies at the root of the matter, for, although all sewage may not contain typhoid germs, it is possible that it may contain them at any time. Thus it is safest to regard all sewage as contaminated with typhoid germs.

If sewage is allowed to contaminate the

water supply or food, it is but a question of time when typhoid germs will reach the stomach through the water supply or food.

The germs of typhoid, like the seeds of other vegetable organisms, often prove more vigorous when transplanted to a new soil. This was illustrated in the various camps established during the war with Spain. While no soldiers evidently ill with typhoid fever were received in them, men suffering from attacks so mild that they did not appear ill brought the infection. By not regarding all sewage as capable of conveying infection, and by omitting disinfection of all waste materials, the conditions of camp life furnished abundant means for the contamination of drinking water and of food, and typhoid of a virulent type became alarmingly frequent.

No doubt many cases of typhoid fever are contracted in country districts, especially by those who leave the city in the summer.

If all sewage were promptly disinfected, typhoid fever would become extinct. This is most difficult except where, by a system of perfect piping, it is possible to carry the waste directly into the sea. In inland cities and in country districts there is still need for the introduction of improved methods of sewage.

In country districts and towns where no plumbing is employed, but where sewage is deposited in open wells, vaults or drains, typhoid fever is a constant menace. In such cases the antiseptic value of wood ashes may be utilized. Coal ashes may likewise be used, but the effects are not so markedly germicidal.

The germs of typhoid are also killed by prolonged exposure to direct sunlight, but in a watery medium they sink into the soil, and in soil of certain kinds they may remain unexposed to the sun and in a state capable of transmitting infection for years.

Killing the germs of this disease by some simple process of antiseptics would prevent the infection of water with this disease. Until this is generally done, boiling all water of which there is any question is essential to healthfulness and peace of mind.

Stories of the wealth you used to have will not pay to-day's rent.—Small Lights.



BY ROYAL WARRANT, MILLERS TO H.R.H. THE PRINCE OF WALES

What Flour Granulation Means in Bread-Making

Flour is composed of myriads of tiny granules.

To make good bread these granules must be uniform in size.

In poorly milled flour some granules are large, some small.

The small ones absorb yeast, "rise" and "ripen" before the large ones—the result is bread of coarse, poor texture.

The large granules are not developed into "sponge," they bake into heavy hard particles, spoil the texture of the bread and make it harder to digest.

ROYAL HOUSEHOLD FLOUR is perfectly milled—all the flour granules are uniform in size—the sponge rises uniformly—the bread is even in texture—perfect in flavor—good-looking, appetising bread—easily digested.

Ogilvies back it with their reputation by branding it

Ogilvie's Royal Household Flour.

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THAT has attained a prominent place as leader.
 THAT gives the best satisfaction.
 THAT is chastely artistic in design.
 THAT is simplicity itself in construction.
 THAT, in fact, combines all the essentials of a high-grade organ.
 THAT organ is

THE SHERLOCK-MANNING

The Sherlock-Manning Organ Co.
 LONDON, CANADA.

TO SECURE THE BEST RESULTS
 Place an Ad. in the Farmer's Advocate



Keeping "In Touch" with Christ.

And Jesus said, somebody hath touched Me: for I perceive that virtue is gone out of Me.—S. Luke VIII: 46.

"Only a smile, yes, only a smile,
 That a woman o'erburdened with grief
 Expected from you; 'twould have given
 relief,
 For her heart ached sore the while.
 But, weary and cheerless, she went
 away,
 Because, as it happened, that very day
 You were 'out of touch' with your
 Lord."

The account given by three evangelists of the woman who was healed simply by touching the hem of our Lord's garment, is a very strange one; the miracle seems to stand in a class by itself. Although we are told in a general way that people were healed of disease by touching His garment, this is the only particular instance recorded of a cure in which He was, apparently, a passive instrument. In other miracles He actively exerted miraculous power, in this He submitted to have "virtue" taken from Him. Instead of His hand outstretched to help, we find the woman's hand stretched out in determined faith. Touching Him in that way she could not fail to win the health she wanted, although the multitudes thronging and touching Him on every side gained no advantage from that nearness to God Incarnate. Have things changed in these days? See how many throng into our churches, pressing close to their Lord in His own House. Some go because it is the common custom, some because they have nothing else to do, others to meet their friends—but only those who, with earnest purpose, are reaching out to touch their unseen Master come away strengthened and refreshed for the battle of life. It is the same way when we approach Him in private prayer. One earnest sentence really spoken to Him brings a swift and glad answer, and we can go away feeling, like the woman, that He has helped us, that prayer is not speaking only into blank space. It is the same with hymn singing. You may sing hymn after hymn—and enjoy the singing too—and yet never give a thought to the listening Lord. Then, perhaps, you rouse yourself and send a strong "Abide with me" straight up to the Throne, and you are thrilled through and through with the wonderful thought that you have touched the hem of Christ's garment, that His glorious quickening power has been poured afresh into you.

Strange, is it not? that we who know by happy experience the gladness of an upward look to Him, and the sense of renewed strength it never fails to bring, should drag along so wearily without it hour after hour—perhaps day after day. Baring Gould says that Noah had a window in the roof of the ark, so that when he got troubled and discouraged he could look up towards Heaven. He could not see the waves or the drowning people, but his thoughts were lifted up after his eyes—up to God—and he goes on to say: "It is very true that you have your home duties set you by God. You wives have got the cooking and washing and mending for your husbands and children. You have the cradles to rock, and stockings to darn, and the floors to scrub, and the potatoes to peel. Well, well, well! Of course you must do this. God expects you to do this. It is your duty to do this. But then, don't occupy your minds only with the cradle, and the stockings, and the floors, and the potatoes. Have a hole in the roof of your house. Look up! Look up to God! Think of Heaven. Set your affections on things above. Let your heart be there. Your spiritual nature will be smothered if there be no opening for it. Never allow your minds to be engrossed by the cares and duties of the things of earth. Always keep an opening towards Heaven, through which you can look up to God's throne."

It is wonderful how helpful a literal window is—a window through which one can see the sky. I always find it easier to make prayer a real speaking to a listening God when, like Daniel, I am looking through a window, up, up into infinite space. One can find God more certainly when gazing up to the solemn stars than when the head is buried in the hands—at least it is often so.

But there is another reason for keeping "in touch" with our unseen Head besides the help and happiness it always gives to ourselves. The Body of Christ is like our own bodies—each member must be in constant communication with Him or it is helpless. Destroy the nerve along which messages flash from head or foot to the controlling brain, and they are paralyzed at once. So, if we want to give others any real help in their spiritual life, let us see to it that we are channels of power from Christ to them. To work on our own account would be as fruitless as to attempt to move a car with a wire which had been cut off from the central power-house. The wire does not, cannot, move a machine or light a room; it is only a channel for the invisible force which we call electricity. So it is in spiritual matters. God chooses to touch men through men, but all the power is His, the men are only channels. We are warned that no one can even "pray" without the help of the Holy Spirit, much less can a "power-word" be spoken without His help. Though angels proclaimed the good tidings of great joy on one occasion, for the most part it is man's high privilege to proclaim the good news of God's love to a sinful world. Angels may well wonder that men seem so indifferent to that great privilege. But to get into helpful "touch" with men it is most necessary to keep "in touch" with God, otherwise mission work at home or abroad will most surely be a dead failure, no matter how prosperous it may appear on the outside. And it is encouraging to remember that if you really are "in touch" with Him, if you lay all your schemes before Him, asking advice in simple, practical fashion, as you would of any wise earthly friend, then your words and influence will surely tell for good in the end, though you may think the outlook is very discouraging at first. Time is very precious; don't let us waste it by letting days and years slip away without actively touching Christ, so that we may reflect His light. The face turned up to Him must shine, and men who see the good works which are the natural result will be led to glorify the Father in heaven, because it is very plain that a light which no sorrow or pain can quench is not an earthly and natural, but a heavenly and supernatural glory.

"Only a day, yes, only a day,
 But, oh! can you guess, my friend,
 Where the influence reaches and where
 it will end
 Of the hours that you frittered away?
 The Master's command is, 'Abide in
 Me.'
 And fruitless and vain will your service
 be
 If 'out of touch' with your Lord."

It is a very solemn thing to be living a life here in a world full of immortal souls, because no one can possibly measure the influence his life has on others—an influence which must tell for time and for eternity. A very talented Canadian author, Gilbert Parker, describes in one of his books how a clever lawyer in Montreal who had lost his own faith deliberately helped to destroy the faith of a younger man. Years after, when he had repented of his own sins, he was appalled to find that the seeds he had sown so recklessly had taken root and borne bitter fruit in the life of the other man, and he was utterly, unable to undo the mischief he had done. That is the sad side of the power of influence, but think of its mighty power for good. Think of the healing power of that life lived nearly 2,000 years ago, in a country

so small that it is hardly considered worth mentioning to the children in our day schools. Only a very short life, ending in a shameful death—apparently a failure. But it has been working like an invisible leaven through society ever since, not because of the wonderful works that were done—miracles are considered more of a hindrance than a help to belief in these days—but simply and solely

because no one has been able to find a flaw in the character so simply described in the Gospels. A holy life can only be lived by one in touch with the Holy One—morality may be attained without it, but holiness stands on a far higher level. Our aim, surely, is holiness; so let us continually lift up our hearts and put out the hand of faith to touch and draw "virtue" from the Great Healer, not for-

getting that even the power to touch Him must come from Him alone. "The Master came and touched my hands (And might was in His own!), But mine since then have powerless been. Save His are laid thereon. 'And it is only thus,' said He, 'That I can work My works through Thee.'" HOPE.

GLENGARRY SCHOOL DAYS.

A STORY OF EARLY DAYS IN GLENGARRY.

By Ralph Connor — Rev. C. W. Gordon.

CHAPTER III.—Continued.

"O-h!" said little Aleck Sinclair, who had been enjoying Jimmie's prank hugely; he was—

"That'll do, Aleck, I didn't ask you. James is quite able to tell me himself. Now, James!"

"I-I-I was only just doing that," said Jimmie, sober enough now, and terrified at the results of his mischief.

"Doing what?" said the master, repressing a smile at Jimmie's woe-begone face.

"Just-just that!" and Jimmie touched gingerly with the point of his finger the bows of Betsy Dan's apron-strings.

"Oh, I see. You were annoying Elizabeth while she was reading. No wonder she found it difficult. Now, do you think that was very nice?"

Jimmie twisted himself into a semi-circle.

"N-o-o." "Come here, James!" Jimmie looked frightened, came round the class, and up to the master.

"Now, then," continued the master, facing Jimmie round in front of Betsy Dan, who was still using her apron upon her eyes, "tell Elizabeth you are sorry."

Jimmie stood in an agony of silent awkwardness, curving himself in varying directions.

"Are you sorry?"

"Y-e-e-s."

"Well, tell her so."

Jimmie drew a long breath and braced himself for the ordeal. He stood a moment or two, working his eyes up shyly from Betsy Dan's shoes to her face, caught her glancing at him from behind her apron, and began, "I-I-I'm (tchik! tchik!) sor-ry," (tchik). Betsy Dan's look was too much for the little chap's gravity.

A roar swept over the school-house. Even the grim dominie's face relaxed.

"Go to your seat and behave yourself," said the master, giving Jimmie a slight cuff. "Now, Margaret, let us go on."

Margaret's was the difficult verse. But to Margaret's quiet voice and gentle heart, anything like shriek or battle-cry was foreign enough, so with even tone, and unmodulated by any shade of passion, she read the cry, "To arms! They come! The Greek! The Greek!" nor was her voice to be moved from its gentle, monotonous flow even by the battle-cry of Bozzaris, "Strike! till the last armed foe expires!"

"Next," said the dominie, glad to get on with his task.

The master breathed freely, when, alas for his hopes, the minister spoke up.

"But, Margaret, do you think Bozzaris cheered his men in so gentle a voice as that?"

Margaret smiled sweetly, but remained silent, glad to get over the verse.

"Wouldn't you like to try it again?" suggested the minister.

Margaret flushed up at once.

"Oh, no," said his wife, who had noticed Margaret's flushing face. "Girls are not supposed to be soldiers, are they, Margaret?"

Margaret flashed a grateful look at her.

"That's a boy's verse."

"Ay! that it is," said the old dominie; "and I would wish very much that Mrs. Murray would conduct this class."

But the minister's wife would not hear of it, protesting that the dom-

inie could do it much better. The old man, however, insisted, saying that he had no great liking for this part of the examination, and would wish to reserve himself, with the master's permission, for the "arithmetical" class.

Mrs. Murray, seeing that it would please the dominie, took the book, with a spot of color coming in her delicate, high-bred face.

"You must all do your best now, to help me," she said, with a smile that brought an answering smile flashing along the line. Even Thomas Finch allowed his stolid face a gleam of intelligent sympathy, which, however, he immediately suppressed, for he remembered that the next turn was his, and that he must be getting himself into the appearance of dogged desperation which he considered suitable to a reading exercise.

"Now Thomas," said the minister's wife sweetly, and Thomas plunged heavily.

"They fought like brave men, long—"

"Oh, Thomas, I think we will try that man's verse again, with the cries of battle in it, you know. I am sure you can do that well."

It was all the same to Thomas. There were no words he could not spell, and he saw no reason why he should not do that verse as well as any other. So, with an extra knitting of his eyebrows, he set forth doggedly.

"An - hour - passed - on - the - Turk - awoke - that - bright - dream - was - his - last."

Thomas's voice fell with the unvarying regularity of the beat of a trip-hammer.

"He - woke - to - hear - his - sentries - shriek - to - arms - they - come - the - Greek - the - Greek - he - woke—"

"But, Thomas, wait a minute. You see you must speak these words, 'To arms! They come!' differently from the others. These words were shrieked by the sentries, and you must show that in your reading."

"Speak them out, man," said the minister, sharply, and a little nervously, fearing that his wife had undertaken too great a task, and hating to see her defeated.

"Now, Thomas," said Mrs. Murray, "try again. And remember the sentries shrieked these words, 'To arms!' and so on."

Thomas squared his shoulders, spread his feet apart, added a wrinkle to his brow, and a deeper note of desperation to his tone, and began again.

"An - hour - passed - on - the - Turk - awoke - that - bright - dream - was - his - last."

"Now, Thomas, wait a minute. That's better, but wait a minute yet!" Mrs. Murray said, and she beamed. The attention of the school, even to Jimmie, was all as that of the visitor, and he congratulated upon the result.

"An - hour - passed - on - the - Turk - awoke - that - bright - dream - was - his - last."

"Ah, that's it, Thomas. I was sure you could do it!"

Thomas relaxed a little, but not unduly. He was not sure what was yet before him.

"Now we will get that 'sentries shriek.' See, Thomas, like this a little," and she read the words with fine expression.

"You must put more pith, more force, into those words, Thomas. Speak out, man!" interjected the minister, who was wishing it was all over.

"Now, Thomas, I think this will be the last time. You have done very well, but I feel sure you can do better."

The minister's wife looked at Thomas as she said this, with so fascinating a smile that the frown on Thomas' face deepened into a hideous scowl, and he planted himself with a do-or-die expression in every angle of his solid frame. Realizing the extreme necessity of the moment, he pitched his voice several tones higher than ever before in his life inside a house and before people, and made his final attempt.

"An - hour - passed - on - the - Turk - awoke - that - bright - dream - WAS - his - last."

And now, feeling that the crisis was upon him, and confusing speed with intensity, and sound with passion, he rushed his words, with ever-increasing speed, into a wild yell.

"He - woke - to - hear - his - sentries - shriek - to - arms - they - come - the - Greek - THE - GREEK!"

There was a moment of startled stillness, then, "tchik! tchik!" It was Jimmie again, holding his nose and swaying in a vain effort to control a paroxysm of snickers at Thomas' unusual outburst.

It was like a match to powder. Again the whole school burst into a roar of uncontrollable laughter. Even the minister, the master, and the dominie, could not resist. The only faces unmoved were those of Thomas Finch and the minister's wife. He had tried his best, and it was to please her, and she knew it.

A swift, shamed glance round, and his eyes rested on her face. That face was sweet and grave and she leaned toward him and said, "Thank you, Thomas. That was well done." And Thomas, still looking at her, flushed to his hair roots and down the back of his neck, while the scowl on his forehead faded into a frown, and then into smoothness.

"And if you always try your best like that, Thomas, you will be a great and good man some day."

Her voice was low and soft, as if intended for him alone, but in the sudden silence that followed the laughter it thrilled to every heart in the room, and Thomas was surprised to find himself trying to swallow a lump in his throat, and to keep his eyes from blinking; and in his face, stolid and heavy, a new expression was struggling for utterance. "Here, take me," it said; "all that I have is thine," and later days brought the opportunity to prove it.

The rest of the reading lesson passed without incident. Indeed, there pervaded the whole school that feeling of reaction which always succeeds an emotional climax. The master decided to omit the geography and grammar classes, which should have immediately followed, and have dinner at once, and so allow both children and visitors time to recover tone for the spelling and arithmetic of the afternoon.

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appalling variety of pies and cakes, served by the big girls and their sisters, who had recently left school, and who consequently bore themselves with all proper dignity and importance. Two of the boys passed round a pail of water and a tin cup, that all the thirsty might drink. From hand to hand, and from lip to lip the cup passed, with a fine contempt of microbes. The only point of etiquette insisted upon was that no "leavings" should be allowed to remain in the cup or thrown back into the pail, but should be carefully flung upon the floor.

There had been examination feasts in pre-historic days in the Twentieth school, when the boys indulged in free fights at long range, using as missiles remnants of pie-crust and cake, whose consistency rendered them deadly enough to "bloody" a nose or black an eye. But these barbaric encounters ceased with Archie Munro's advent, and now the boys vied with each other in "minding their manners." Not only was there no snatching of food or exhibition of greediness, but there was a severe repression of any apparent eagerness for the tempting dainties, lest it should be suspected that such were unusual at home. Even the little boys felt that it would

be bad manners to take a second piece of cake or pie unless specially pressed; but their eager, bulging eyes revealed only too plainly their heart's desire, and the kindly waiters knew their duty sufficiently to urge a second, third, and fourth supply of the toothsome currant or berry pie, the solid fruit cake, or the oily doughnut, till the point was reached where desire failed.

"Have some more, Jimmie. Have a doughnut," said the master, who had been admiring Jimmie's gastronomic achievements.

"He's had ten a'ready," shouted little Aleck Sinclair, Jimmie's special confidant.

Jimmie smiled in conscious pride, but remained silent.

"What! eaten ten doughnuts?" asked the master, feigning alarm.

"He's got four in his pocket, too," said Aleck, in triumph.

"He's got a pie in his own pocket," retorted Jimmie, driven to retaliate.

"A pie!" exclaimed the master. "Better take it out. A pocket's not the best place for a pie. Why don't you eat it, Aleck?"

"I can't," lamented Aleck. "I'm full up."

(Continued on page 1667.)

ON SOME CONTRASTS.

III.

WHAT ONE MAN CAN DO, ANOTHER CAN DO.

And just here comes in another contrast. The writer says:

"With £20 a man here is something of a capitalist. In England all he can do with it is to put it in the post-office savings department at 2½ per cent.; but here it will get him 100 acres, and leave him with £15 with which to build a log house. By working in the summer, partly for himself and partly for other farmers, he can keep himself going in fair comfort; and another winter in the woods should enable him to devote the whole of the following season to the clearing of his own land.

Thus, in a few years he would lay the foundations of independence, as nearly all the men in the camp here have done, for each of them, in one part of New Brunswick or another, has a farm of his own, with wife and children, who keep the cattle fed in his absence. Of course, a man who can bring capital with him has a great advantage; he can buy the best land, with the greatest accessibility to the railway, or a farm which is already cleared and stocked, but, as I have said before, many of the most successful farmers in the Province are men who began without capital, took up land, and by labor in the woods, winter by winter, earned the money for the development of their properties. And what one man can do, another can do. Even if an immigrant does not take up land he can live well—provided that he will work hard and keep away from the drink."

THE EXCEPTION PROVES THE RULE.

"Take the case of the Bristol man I have mentioned. He has been here twenty years, and owns four hundred acres. He does not work them now, because he finds farming lonesome, and is one of those talkative people who cannot live happily without a succession of new faces and unfamiliar voices. Hence, by choice, he follows the life of a laborer—now with an axe in the woods, or, in the summer, behind someone's team.

"Yet, with all his instability of character, he has been seven times across the Atlantic to see his own people. He takes holidays with the frequency of a second-rate actor's "rest" and of as long duration. When his funds run out—I imagine that much of them goes into the publican's till in "treating" friends—he comes out here again to his farm, and gets other work forth-

with. He is going home this year—second-class in a C. P. R. steamer. The fare to Liverpool will cost him £7 10s. Whoever heard of the English laboring man taking seven ocean return voyages for a holiday in 20 years? His imagination would not carry him further than a day trip, once in a lifetime, by a Belle steamer to Boulogne and back. And so far from such a man having land of his own, his only foothold—the only space which he can call his own (so long as he pays rent)—is the single room in the back street in which he lives. I am not deriding him; it is not his fault that his environment is what it is; but I am putting the case of my Bristol friend in this way, in order to bring into clear relief the prosperity of the laboring classes of Canada. It is not to be compared with the want of means and narrow social limitations of the laboring man in England."

The keynote to success, not only in the lumber camps of the Maritime Provinces, but in any part of the Dominion, is a dogged determination to succeed, added to vigorous health and abstemious habits. Some industries call for more knowledge and skill than others, notably that of the lumber trade, but the writer of the article in the English paper from which I have so freely quoted has certainly established his point, not only by precept, but by practice, that even a newcomer, ignorant of the woodman's art, can win his bread at lumbering in New Brunswick and Quebec. Should he find himself stranded therein, and unable, for a time, at least, to attain the goal of his ambition, the building up for himself and family a home upon the fruitful prairies of the limitless Northwest, he knows that everything comes to him who waits especially if while he waits he works. H. A. B.

For Every Day.

We should be glad of everything that has come to us, no matter if it is sorrow or pain, when we find that our experience fits someone else's need—that someone else can build on our lives.—M. D. Babcock.

The question is not at what door of fortune's palace shall we enter in, but what doors does she open to us.—Burns.

We must learn to bear and work before we can spare strength to dream.—E. S. Phelps.

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Note—The first car of this year's winter wheat was shipped from Lethbridge on August 19th last.



Advertisements will be inserted under this heading, such as Farm Properties, Help and Situations Wanted, and miscellaneous advertising.

TERMS—Three cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order. No advertisement inserted for less than 50 cents.

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Consignments solicited. Top prices.

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Papa's Calendar.

This is my Sunday head of hair,
All whirly, twirly curls,
A bow of ribbon tied with care,
Like all the other girls.

And this is how on week-a-days
I start to go to school,
My pigtails plaited evenly
The parting drawn by rule.

But spite of all that I can do,
Upon a Saturday,
This is the way my hair will look,
When I come in from play.

I am my papa's calendar;
He often will declare
That he can tell what day it is
By looking at my hair.

Not Stuck Up.

"Well, you do look like a posy, sure enough," said Susan, the maid, as Elsie walked through the hall. "Where are you going this nice morning?"

"I'm going down to poor old Aunt Dinah's, to take her some flowers," said Elsie. "She says she gets 'pow'ful tired in dis Norf country seein' so few flowers."

Susan laughed and Elsie went out in the garden. Anyone who had seen the dear little maiden would surely have agreed with Susan.

She walked about, taking in the full sweetness of the early June day, wondering if ever a day had been quite so perfect before. Every dewdrop added a brightness to the smile with which the darling little flowers looked up in the sunshine. The birds chirped and trilled and twittered as if they were all trying which could say the most about the beautiful day.

"Don't be sorry because I pick you, you beauties!" said Elsie. "I know it's nice to stay here in the sunshine and just look pretty; but mamma says everything ought to be good for something else besides that. And that's what I'm taking you for."

But outside the garden, and down the road, Elsie found some things not so pleasant as the flowers and the birds. Three shabby, unwashed little children—a boy and a girl and a baby—were playing in the sand.

"My, ain't she dressed up nice?" exclaimed the girl, as she looked at Elsie. "I know she's stuck up!" said the boy. "Folks like that always is stuck up. She thinks more of her clean duds 'n anything else in the world."

Elsie thought it very disagreeable for anyone to talk so.

Aunt Dinah was sitting alone in her wee little house, looking wistfully at the beautiful world outside, when Elsie came to her window and held up the flowers.

"You're for all de world jes' like a summer mornin' yo'-self, honey," she said, as Elsie found a vase for the flowers.

"Aunt Dinah," said Elsie, soberly, "is it any harm to like to have on clean clothes and look nice?"

"Any harm! Why, bress your little heart, didn't de good Lord make such as you jes' to go roun' a shinin' an' beamin' like de flowers?"

"I don't know, Aunt Dinah," said the little girl, shaking her head very gravely. "It seems to me that little girls ought to be good for more than flowers. If they weren't meant to be so, they wouldn't have been able to walk about and talk, and do lots of other things, would they?"

"Dat's more'n I can tell, honey. But I don't make no doubt you'll be 'nough sicker better'n a flower some time."

"I'd like to be now," said Elsie, as she walked away, after saying good-bye to Aunt Dinah.

She did not like to go by the rude children again, so she went down a little lane, which brought her out by the river just above the sawmills.

"Ha! ha! There she is again!"

"And just as stuck up as ever."

The other children must have liked the lane and the brook as well as she. There they were, and the saucy boy stooped to pick up a bit of dirt to throw at her as she hurried by.

But it was never thrown, for as he raised his arm he caught sight of something which made his face turn pale.

"The baby!" he screamed.

Elsie looked where he pointed. Down the bank the poor little unkept two-year-old had made his way, and had crept upon a log which lay in the water close to the shore. From this he had climbed to another and another log, until he now stood balancing himself upon one which lay next to the dark water beyond.

With shrieks for help the boy rushed toward the mills, while his sister ran wildly about, screaming, "Mamma! mamma!"

Elsie was older than either of them. Swiftly into her little head came thoughts of stories she had heard about the folly of people allowing themselves to become frightened in times of danger instead of trying to do their best to help. She ran down the bank, and, before the boy had reached the mill, was setting her feet upon the logs.

Her head grew dizzy as they tipped and rolled under, and she half thought of going back. But she heard a pitiful little cry from the baby, and could not find it in her heart to turn her back upon him. Nearer and nearer she came, and had almost reached him, when he slipped into the water. Elsie threw herself at full length on the log, and stretching out her arm could just lay hold of his dress. She grasped it tightly, holding on with all her might as the cruel water seemed determined to sweep her away.

"Hold on a minute longer!" Shouts and footsteps were coming near, and Elsie was seized by a pair of strong arms just as she was being drawn into the water.

"You're a brave little girl," said the man who carried her to the bank, while another brought the baby.

"Someone at the door wishes to see you, Elsie," said her mother to her the next morning.

A very dirty, bareheaded, barefooted little boy stood there with a great bunch of wild flowers which he offered to Elsie, saying:

"You ain't stuck up a mite, and I'm no end o' sorry I said you was. You laid right down on the dirty log with all your clean things on—and if you hadn't—we-we shouldn't a' had any—baby to our house this mornin'."

The Dollies' Drive.

Last Sunday morning I took out my dollies,

They hadn't been well and they wanted fresh air;

There were Dorothy Jane and Rose Anna Amelia,

And Peggy and Polly, an odd little pair.

Now Peggy and Polly my Uncle Dick gave me,

They are made out of wood, and have "make believe" hair—

But Dorothy Jane and Rose Anna Amelia

Are beautiful ladies, so charming and fair.

So down the long alley we quietly trotted,

I pushing the go-cart, they smiling and gay.

When, "Bow-wow!" said Towser, and burst through the bushes!—

Rose Anna Amelia fainted away.

And Dorothy Jane, she went into hysterics;

But never a bit did those other two care—

They're poor, stupid dollies, with no proper feelings;

They shall walk by themselves when we next take the air.

Heart Trouble

The heart itself has no power—no self-control. It is made to beat by a tender nerve so tiny that it is scarcely visible to the naked eye. Yet ten thousand times a day this delicate nerve must assist the heart to expand and contract.

This nerve is only one of the branches of the great sympathetic, or INSIDE, nerve system. Each branch of this system is so closely allied with the others that weakness or irregularity at any point is apt to spread. Heart trouble frequently arises from Stomach trouble through sympathy, and Kidney trouble may also follow. For each of these organs is operated by a branch of these same sympathetic nerves—the INSIDE NERVES.

In Heart, Kidney or Stomach troubles, it is of but little use to attempt to doctor the organ itself—the most permanent relief lies in restoring the INSIDE NERVES. Dr. Shoop regards these nerves to be the real cause of such troubles. The remedy—known by physicians and druggists everywhere as Dr. Shoop's Restorative—is the result of years of endeavor along this very line. It does not dose the organ to deaden the pain—but it aims to go at once to the nerve—the inside nerve—the power nerve—and builds it up, and strengthens it and makes it well.

Every heart sufferer may have Dr. Shoop's book on the Heart. It will be sent free, and with it you will receive the "Health Token," an intended passport to good health.

For the free book and the "Health Token" you must address Dr. Shoop, Box 52, Racine, Wis. State which book you want.

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Book 2 on the Heart.
Book 3 on the Kidneys.
Book 4 for Women.
Book 5 for Men.
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She came all the way down from Wil-lits, in Mendocino County, to buy a wedding present and confessed to the salesman in the jewellery store that she was one of the bridesmaids, and was willing to be set back as much as \$8 for the present.

"Now, that's a pretty thing, and useful," she said, fastening her eyes on a clock. "How much is that?"

"Fourteen dollars," said the salesman.

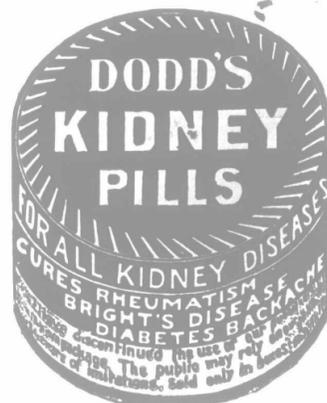
"My, isn't that a good deal for a clock?"

"That's a very fine eight-day clock, madam."

"I guess that's something new, isn't it? I never heard of one of them before."

"Yes, the very latest; runs eight days without winding."

"For the land's sake! What will they be getting up next? Say, how long will it run if you wind it?"



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Condensed advertisements will be inserted under this heading at two cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order for any advertisement under this heading. Parties having good pure-bred poultry and eggs for sale will find plenty of customers by using our advertising columns. No advertisement inserted for less than 30 cents.

BARRED and White Rock cockerels—large and well bred—at \$1 to \$2 each. For sale by Percy Crockett, 36 Gunn St., West London, Ont.

BARRED Plymouth Rock cockerels for sale. I have some extra fine birds, large and finely barred, from a good laying strain. Satisfaction guaranteed or money refunded. Herbert J. Miller, Keene P. O.

BARRED ROCK cockerels. Big blocky birds at farmers' prices. M. C. Herner, Mannheim, Ont.

BARRED WHITE ROCKS: Buff Orpingtons; Brown-Black Leghorns; Black Minorcas; Toulouse and Embden geese. R. J. Laurie, Wolverton.

BARRED ROCKS—Cockerels at \$1 each. Large and well barred. S. L. Anderson, Crossland, Ont.

BARRED ROCK Cockerels for sale; prices low, money back if not satisfied. Write for particulars. W. W. Dods, Alton, Ont.

BROWN LEGHORNS—Single-comb cockerels, hens and pullets, choice specimens, \$1.50, \$2 up. Several cockerels \$1, or 1 cockerel and 4 females \$3.75. W. J. Player, Galt.

FOR SALE—Buff Orpington cockerels; good utility birds. Write for prices. Wm. Kendall, Trowbridge, Ont.

FOR SALE—Choice lot Barred Rock cockerels. Prices reasonable. Write A. S. Werden, Bethel, Ont.

GRAND Mammoth Bronze turkeys (both sexes), sired by London first-prize winning tom. John Carson, Ailsa Craig.

PRIZEWINNERS for sale. One pair large Toulouse geese, \$5, or \$2.50 each. Large Rouen drakes, \$1 each. Satisfaction guaranteed. Alfred Robson, Norwood, Ont.

SPECIAL offer this month only. I will sell cockerels at 75 cents to \$1 each. Buff, Barred and White Rocks, R. I. Reds, Brown Leghorns. Money returned if not satisfied. Gill, Brownsville.

WHITE ROCK cockerels and pullets, large size. Laying strain. One dollar each. C. E. Smith, Scotland, Ont.

Canadian Poultry Grit

Poultrymen who have tried this grit recommend it highly. It is the best in the market; possesses great shell-producing qualities, and keeps the hens healthy and robust. Supplied by

Alex Douglass, St. Mary's, Ont.

November, 1905. I have received my sterling-silver bracelet and two friendship hearts, and I am very well pleased with them.

Yours truly,
JANET A. PRITCHARD,
North Wakefield, Que.

The barber was in an extra talkative mood. He had volunteered twenty-three remarks and questions to his customers, and was not exhausted. At last he said:

"Hair's very thin, sir."
"It was thinner than that thirty years ago."
"Indeed, sir! You surprise me. Why you don't look more than thirty now, sir!"
"Thirty yesterday!"
The barber shut himself up like one of his razors.



Salaried Daughters.

"How to Keep the Boys on the Farm?" was a question much debated a few years ago. Many solutions were offered; none very adequate, if we may judge from the census returns of the growth of cities. "How to Keep the Girls in the Home?" is a very similar and more important problem now demanding attention. That it is desirable that a daughter should remain in her father's house during that period of indefinite length that comes between the end of school life and the beginning of matrimony is generally agreed. She is better protected there, physically and morally, and her parents feel that they have a right to her companionship, since they have, perhaps, deprived themselves of it for years while she was at school, and they must anticipate another and more complete separation in the course of the next few years.

At the same time the feeling that leads the young woman to leave the home to seek economic independence is a normal and creditable one. Every adult, able-bodied and capable individual ought to earn his or her own living and in such a way as to realize it. No matter how useful a daughter is in the home, she usually thinks, and often not without reason, that her work is not appreciated at its full value. To ask a father for money is as disagreeable as to ask a husband. If she earns it, she ought not to have to receive it as a gift. When we are young we clamor for justice; when we get older we are more humble and glad to be treated with generosity. The daughter in the home knows that she will receive the same treatment whether she is good-natured and helpful or disagreeable and lazy, and who has an ethical nature so stout as to resist such a demoralizing influence as this?

At this period of her life, when she is most energetic and ambitious, and most needs work and responsibility, the young woman is either not given anything of importance to do, or receives no specific compensation for her indefinite and voluntary services. Feeling that she is not appreciated or needed at home, she listens favorably to any young man who professes to appreciate her and declares that he needs her. Or she is tempted by her talents into the professional study of art or music, not realizing that fingers that are nimble at the piano can usually be made more useful in other ways, and that she can exercise her gift for acting without going on the stage, in making herself agreeable when she is feeling cross.

If there is nothing for the daughter to do in the home except to amuse herself, she had better get out of it as soon as possible. It must be acknowledged that household industries are being taken away by the factories so fast that it is increasingly difficult to find really profitable employment for women in the home. But in many cases where the daughter leaves home wholly or for the day to do teaching, typewriting, or other work in office, shop or factory, there is need of her work in the home, and often help has to be hired to take her place. In such cases, the daughter should be given a regular salary, approximately the equivalent of what she could earn outside after making allowance for board, room rent and the numberless privileges a girl has in her father's house. The salary should be at least equal to what would have to be paid for the same work if a stranger were called in to do it, and the duties should be as distinctly defined and as promptly and efficiently performed. This is a very different thing from an allowance without definite duties.

We know of several families where this plan has worked successfully. In one instance the daughter, while unmarried, became a capable housekeeper and manager, buying all supplies and relieving both parents of care and annoyance, for which she received a housekeeper's wages at the end of every month. Another, whose mother is an invalid, gets a weekly envelope containing the same amount

that would have been paid a nurse. Both these salaried daughters were happy, contented and efficient, and each had a feeling of independence and self-reliance never to be attained under the "allowance" system or the usual haphazard appeal to father for money to gratify needs or whims.

Her earnings the salaried daughter can use as she pleases, spending it for her clothes, and in gifts, charity and pleasures. If she puts part of it in the savings bank, as she should, she provides her own dowry, just as many girls now do by outside work. This is a return in a novel way to the good old plan of primitive times, when no girl was eligible to marriage until she had a "hatching-chest," full of linen and clothes of her own spinning, weaving and sewing. In those days daughters were thus given an opportunity to earn their own dowry in the home, although they received no cash. Whether the work of the salaried daughter be as house-keeper, nurse or social secretary, it is a better preparation for married life than most outside occupations. The plan does not in any way abrogate filial affection or its implied duties. Where a daughter stays at home from a sense of duty to her mother, the approval of a good conscience and the verbal recognition of her value are not always sufficient to alleviate the feeling of dissatisfaction and unrest caused by her desire to realize her economic entity.

It is, after all, only a phase of the general difficulty that parents, and mothers especially, have in knowing that their children have grown up. Mothers are apt to try to prolong the Little Lord Fauntleroy period as far as possible, and they keep their daughters in short dresses until they look like ostriches. It is a rare woman who can delegate responsibility, even to hired help, and it is much harder for her to take her daughter into partnership than it is for a father to take his son.—[The Independent.

Another Side of the Help Problem.

Dear Dame Durden,—I do not know whether you will publish my letter or not. I hope you will, for it is on the "help problem." I came to Canada from the north of Ireland three years ago—a farmer's daughter—and knowing little of sewing or office work. I came west and went to work for a woman—I cannot say a lady; and I can honestly and truthfully say that she and others do not deserve help. My pen fails to describe my bedroom; it was dirty, and the bed was an old mattress on top of a few boards. I tell you it made me sick, but I'll say no more, as I might say too much.

AN IRISH GIRL.

This letter from Irish Girl certainly gives us a dark-colored view of the domestic situation, and, yet, unhappily, there are enough homes and mistresses of the kind she describes to make the difficulty a very real one. In new homes in a new land both mistress and servant have often to do without many comforts and conveniences to which they were accustomed, but there is nowhere any excuse for dirt and meanness. Cheer up, Irish Girl, the kind you have found are not in the majority, as, we hope, a happy experience may soon teach you. Try to keep sweet in your truly difficult position, and do not form your judgment of Canada and the Canadian home by your experiences up to the present time. Come to the Ingle Nook any time.

DAME DURDEN.

Two Little Girls in Blue, that very mild request of yours was received. It is a pity to disappoint you, but the Ingle Nook is distinctly not a matrimonial bureau. My dears, from your description it is not a mere man who would come up to the standard you raise—an angel is what you want. And if, by any happy chance, one could be found, it would exhaust the supply—there would never be a second, and there are two of you. Besides, if the extraordinary being you portray could be discovered in the flesh, would a mere ordi-

nary human girl content him? However, I'll keep my eyes open for the paragon, for with all those good qualities and accomplishments he will assuredly be worth seeing.

In Celebration of the Apple.

Many and beautiful are our Canadian fruits, but the apple is one of the best and most beautiful, and the apple orchard, in its time either of bloom or harvest, one of the loveliest of all rural scenes. Little wonder that it has in all ages inspired even the untaught rustic to fancies, folk-rhymes and proverbs. The healthfulness of the apple is celebrated by many of them, and its preventive and curative properties are contrasted favorably with the powers of the physician:

Apple a day, keep the doctor away—
Apple at night, starve him outright—
Apple each meal, and one for sleep,
Kill him and shroud him and bury him deep!

A more graceful recommendation—even though the hygiene of its last injunction may be questioned—is that addressed to girls only:

Maids who seek a rosy cheek
Orchard-way go faring.
Apples ruddy, apples sleek,
Six a day seven days a week—
Show nor stint nor sparing,
Pluck and eat, sour or sweet,
Seed and core and paring.

Many rhymes, most of which can be traced to Dorsetshire, and are composed in the Dorset dialect, relate to old customs observed at planting—or harvest-time. Sometimes the first mug of cider from the press was carried to the orchard and drunk to the health of the oldest or finest tree, at the roots of which the lees were poured. One of the briefest and simplest of these curious healths fairly typifies them all. The Dorset farmer, it will be noted, did not transpose his v's and w's, in the fashion made familiar to us by Sam Weller and his father, but whenever he had to deal with an f, he followed Mr. Weller's famous injunction to "Spell it with a We, Samivel, spell it with a We!"

Vaithful and vruitvul and vriendly and vree,
Yere's to the Apple, lads, yere's to the Tree!
Vriend o' the varmer, lads, ne'er may 'e vail
Till turnips be rosy, lad, and cherries be pale—
Huzzay, the Apple Tree!
—Exchange.

Recipes.

Fairy Drops.—Cream well together four ounces butter and four ounces sugar. Beat four eggs, add them gradually to the butter and sugar. Now work in gently four ounces "Five Roses" flour, into which has been sifted one scant teaspoon of baking powder, and add one ounce of cleaned currants. Line a baking tin with buttered paper, drop the mixture into the pan in bits a little larger than a walnut, keeping a space between them. Bake in a quick oven till brown.

Cocoa Tea Cake.—Beat three large eggs, one at a time, into a scant cup of sugar which has been creamed with one-third cup butter. When smooth and light add one-half cup milk, one-half cup "Five Roses" flour, into which has been put one-half teaspoon baking powder. Add one-quarter cup of cocoa, which has been dissolved in a little warm water. Flavor with vanilla, place in muffin pans, and bake in a moderate oven.

Attempt the end, and never stand in doubt;
Nothing's so hard but search will find it out.
—Herrick.

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**Last Mountain
Valley Lands**

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Acres first-class land for sale.
Splendid railroad facilities.

Write for map and price list:
WM. PEARSON & CO.,
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ENGLISH SPAVIN CURE**

For the cure of Spavins, Ringbone, Curbs, Splints, Windgalls, Capped Hock, Strains or Distemper, Ringworm on Cattle, and to remove all unnatural enlargements. This preparation (unlike others) acts by absorbing rather than blistering. This is the only preparation in the world guaranteed to kill a Ringbone or any Spavin, or money refunded, and will not kill the hair. Manufactured by **Dr. Frederick A. Page & Son**, 7 and 9 Yorkshire Road, London, E. C. Mailed to any address upon receipt of price, \$1.00. Canadian agents: **om J. A. JOHNSTON & CO., Druggists, 171 King St. E., Toronto, Ont.**

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No fancy prices, and all delivered free Liverpool landing stage. Correspondence invited. **om Station: Althorp Park, L. & N.-W. Ry.**

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Holdenby, Northampton, England

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Removes the Inflammation and Bunch. Restores the Circulation in any Bruise or Thickened Tissue, without blistering, removing the hair or laying horse up. Pleasant to use, clean and odorless. \$2.00 per bottle delivered. Book 12-B free.
ABSORBINE, JR., for mankind, \$1.00 Bottle. Cures Bunions, Corns, Chilblains, Sprains, Etc., quickly. Genuine mfd. only by
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J. M. GARDHOUSE,
Weston, Ont.
Telephone at house and farm.
Ten miles west of Toronto, on G.T.R., C.P.R. and Electric Ry.

Glengarry School Days.

(Continued from our Home Magazine Department.)

"He said he's nearly busted," said Jimmie, anxiously. "He's got a pain here," pointing to his left eye. The bigger boys and some of the visitors who had gathered round shouted with laughter.

"Oh, pshaw, Aleck!" said the master, encouragingly, "that's all right. As long as the pain is as high up as your eye you'll recover. I tell you what, put your pie down on the desk here, Jimmie will take care of it, and run down to the gate and tell Don I want him."

Aleck, with great care and considerable difficulty, extracted from his pocket a segment of black currant pie, hopelessly battered, but still intact. He regarded it fondly for a moment or two, and then, with a very dubious look at Jimmie, ran away on his errand for the master.

It took him some little time to find Don, and meanwhile the master's attention was drawn away by his duty to the visitors. The pie left to Jimmie's care had an unfortunately tempting fringe of loose pieces about it that marred its symmetry. Jimmie proceeded to trim it into shape. So absorbed did he become in his trimming process that before he realized what he was about, he woke suddenly to the startling fact that the pie had shrunk into comparatively insignificant size. It would have been worse than useless to save the mutilated remains for Aleck; there was nothing for it now but to get the reproachful remnant out of the way. He was so busily occupied with this praiseworthy proceeding that he failed to notice Aleck enter the room, flushed with his race, eager and once more empty.

Arriving at his seat, he came on Jimmie engaged in devouring the pie left in his charge. With a cry of dismay and rage he flung himself upon the little gourmand, and after a short struggle secured the precious pie; but alas, bereft of its most delicious part—it was picked clean of its currants. For a moment he gazed, grief-stricken, at the leathery, viscous remnant in his hand. Then, with a wrathful exclamation, "Here, then, you can just take it, you big pig, you!" He seized Jimmie by the neck, and jammed the sticky pie crust on his face, where it stuck like an adhesive plaster. Jimmie, taken by surprise, and rendered nerveless by the pangs of an accusing conscience, made no resistance, but set up a howl that attracted the attention of the master and the whole company.

"Why, Jimmie!" exclaimed the master, removing the doughy mixture from the little lad's face, "what on earth are you trying to do? What is wrong, Aleck?"

"He ate my pie," said Aleck, defiantly.

"Ate it? Well, apparently not. But never mind, Aleck, we shall get you another pie."

"There isn't any more," said Aleck mournfully; "that was the last piece."

"Oh, well, we shall find something else just as good," said the master, going off after one of the big girls; and returning with a doughnut and a peculiarly deadly looking piece of fruit cake, he succeeded in comforting the disappointed and still indignant Aleck.

The afternoon was given to the more serious part of the school work—writing, arithmetic and spelling, while, for those whose ambitions extended beyond the limits of the public school, the master had begun a Euclid class, which was at once his despair and his pride. In the Twentieth school of that date there was no waste of the children's time in foolish and fantastic branches of study, in showy exercises and accomplishments, whose display was at once ruinous to the nerves of the visitors, and to the self-respect and modesty of the children. The ideal

of the school was to fit the children for the struggle into which their lives would thrust them, so that the boy who could spell and read and cipher was supposed to be ready for his life work. Those whose ambition led them into the subtleties of Euclid's problems and theorems were supposed to be in preparation for somewhat higher spheres of life.

Through the various classes of arithmetic the examination proceeded, the little ones struggling with great seriousness through their addition and subtraction sums, and being wrought up to the highest pitch of excitement by their contest for the first place. By the time the fifth class was reached, the air was heavy with the feeling of battle. Indeed, it was amazing to note how the master had succeeded in arousing in the whole school an intense spirit of emulation. From little Johnnie Aird up to Thomas Finch, the pupils carried the hearts of soldiers.

Through fractions, the "Rule of Three," percentages and stocks, the senior class swept with a trail of glory. In vain old Peter MacRae strewn their path with his favorite posers. The brilliant achievements of the class seemed to sink him deeper and deeper into the gloom of discontent, while the master, the minister and his wife, as well as the visitors, could not conceal their delight. As a last resort the old dominie sought to stem their victorious career with his famous problem in Practice, and to his huge enjoyment, one after another of the class had to acknowledge defeat. The truth was, the master had passed lightly over this rule in the arithmetic, considering the solution of problems by the method of Practice as a little antiquated, and hardly worthy of much study. The failure of the class, however, brought the dominie his hour of triumph, and so complete had been the success of the examination that the master was abundantly willing that he should enjoy it.

Then followed the judging of the copy-books. The best and cleanest book in each class was given the proud distinction of a testimonial written upon the first blank page, with the date of the examination and the signatures of the examiners attached. It was afterwards borne home in triumph by the happy owner, to be stored among the family archives, and perhaps among the sacred things that mothers keep in their holy of holies.

After the copy-books had been duly appraised, there followed an hour in which the excitement of the day reached its highest mark. The whole school, with such of the visitors as could be persuaded to join, were ranged in opposing ranks in the deadly conflict of a spelling-match. The master, the teacher from the Sixteenth, and even the minister's wife, yielded to the tremendous pressure of public demand that they should enter the fray. The contest had a most dramatic finish, and it was felt that the extreme possibility of enthusiasm and excitement was reached when the minister's wife spelled down the teacher from the Sixteenth, who, everyone knew, was the champion speller of all the country that lay toward the Front, and had a special private armory of deadly missiles laid up against just such a conflict as this. The tumultuous triumph of the children was not to be controlled. Again and again they followed Hughie in wild yells, not only because his mother was a great favorite with them all, but because she had wrested a victory from the champion of the Front, for the Front, in all matters pertaining to culture and fashion, thought itself quite superior to the more backwoods country of the Twentieth.

(To be continued.)

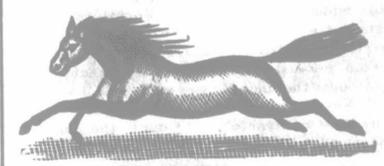
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The safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle. SUPERSEDES ALL CAUSTIC OR FIRING. Impossible to produce scar or blanch. Every bottle sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars.
The Lawrence-Williams Co., Toronto, Ont.

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Consignments solicited. Correspondence will receive prompt attention.
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Also Hackney Stallions for sale.
At reasonable prices. Come and see them, or write to
ADAM DAWSON, Cannington, Ont.

THOS. MERCER, Box 33, Markdale, Ont.
Breeder and importer of
CLYDESDALE HORSES, SHORTHORN CATTLE and YORKSHIRE PIGS.
Car lots a specialty.

Andrew Carnegie tells this as one of his experiences at Skibo Castle. Soon after he had bought Skibo there was a menagerie exhibited in the neighborhood, one of the main attractions of which was the orang-outang. One night the orang-outang got out, fell over the cliff, and was killed. In the morning two of the keepers came across the body of the dead orang-outang. One of them scratched his head and said: "He ain't no 'llander, that's sure." The other said: "He ain't no Lowlander; they ain't got that much hair on 'em." After a while one of them proposed to the other as follows: "I'll go up to the kirk and see the parson, and you go up to Mr. Carnegie and see if any of his American visitors are missing."

**NO DOUBT ABOUT
ROBT. BOND'S CASE**

He was Cured of Bright's Disease by Dodd's Kidney Pills.

Doctors said There was No Hope for Him, but he is a Well Man Now.

Mount Brydges, Ont., Nov. 20.—(Special).—That Dodd's Kidney Pills cure Bright's Disease completely and permanently has been clearly shown in the case of Mr. Robt. Bond, a well-known resident of this place. Mr. Bond does not hesitate to say he owes his life to Dodd's Kidney Pills.

"My attending physician," Mr. Bond states, "said I was in the last stages of Bright's Disease, and that there was no hope for me. I then commenced to use Dodd's Kidney Pills and no other remedy. I used in all about twenty boxes when my doctor pronounced me quite well. I have had no return of the trouble since."

Bright's Disease is Kidney Disease in its worst form. Dodd's Kidney Pills always cure it. They also easily cure milder forms of Kidney Complaint.

GOSSIP.

"A horseshoe is supposed to be a sign of good luck." "And so it is," replied the sport. "If it goes under the wire first on your horse."

A telegram from Mr. Arthur Johnston, Greenwood, asks the "Farmer's Advocate" to claim January 19th, 1906, as the date for an auction sale for the dispersion of the herd of Shorthorn cattle and other farm stock belonging to his son, Mr. Robert Johnston, of Pickering, Ont., near Pickering Station, G.T.R.

FORTHCOMING STOCK SALES.
Dec. 19th.—A. Edward Meyer and Geo. Amos & Son, at Guelph, Shorthorns.
Jan. 10.—W. C. Edwards & Co., Rockland, Ont., Shorthorns.
Jan. 19th.—Robert Johnston, Pickering, Ont., Shorthorns and other stock.

A few years ago a contractor undertook to widen a railway in Yorkshire, and while the men were at work one day a serious landslide occurred. There was much confusion, and the cry went up, "Count the men."
"Never mind the men," cried the thrifty contractor, "Count the wheelbarrows."

An old lady and her two daughters went into a millinery store. The young women wore morning hats. The elder woman said to the clerk: "I want a mourning hat, for I am in mourning. But my darter here," pointing to one of her companions, "is a wider of two years' standing, and she is in light dress. Give her a hat with blue feathers on it."

It was at the railway station and she was trying to buy half tickets for two children.
"How old are they?" asked the ticket seller.
"Only eleven."
"Both of them?"
"They're twins."
"Ah!" exclaimed the man. He eyed them a moment and then remarked:
"Pretty children. Where were they born?"
"This one in New York," answered the proud mother, "and the other one in London."

Former Congressman H. St. George Tucker, of Virginia, according to the Buffalo Commercial, tells a story of a Virginian who had been indulging too freely in the flowing bowl, and who had become overconfident of his own greatness. Looking around at his companions, the Virginian boasted, "Gentlemen, I can lick any man in Richmond." Nobody took up the challenge, and the Virginian returned to the charge. "Gentlemen," he said, "I can lick any man in the whole State of Virginia." The words were hardly uttered, the narrator said, before a tall, lean, sinewy man from the western part of the State gave the boaster a thrust that sent him sprawling on the floor. Like Owen Wiser's nameless hero, this Virginian had a sense of humor, and as he picked himself up, he turned to the group and drawled, "Gentlemen, I'm ready to acknowledge that I kivered too much territory."

New York is laughing over how an artist got even with a prominent millionaire, who, having sat for a crayon drawing of himself, was so dissatisfied with the result that he refused to pay for it.
"It does not bear the slightest resemblance to me," he said, "and I will not take it." The artist protested, but all to no avail.
"All right, sir," he remarked, finally, "if it is not at all like you, of course, I can't reasonably expect to get paid for it." After the gentleman had left, the artist added to the portrait a magnificent pair of ass's ears, and exhibited it to the gaze of the curious public. It had not long been so exposed when the gentleman broke into the artist's studio in a towering rage, and finding that threats availed him nothing, at last offered to buy it at a considerable advance upon the original price.
"It was not strange that you failed to recognize your resemblance to the picture at first," said the artist, determined to be revenged for the slight put upon his work. "But I knew you would notice the likeness as soon as I added those ears."

Hon. Joseph H. Choate tells a story of W. S. Gilbert, the dramatist and wit. Mr. Gilbert was lunching at a country club when he found himself surrounded by six or seven clergymen, who had been on a motor tour of the country thereabout. Pretty soon the author of the "Mikado" was drawn into conversation. When his identity was known, one of the clergymen asked Mr. Gilbert how he felt "in such grave and reverend company."
"Like a lion in a den of Daniels," was the reply.

The new Squire's Wife—And do you enjoy good health generally.
Cottager—Ay, mum, I be wonderfully 'ealthy; never 'ad a doctor an' never 'ad but one day's illness in m' life. An' it's resolution wot does it. Now there's bloaters; them things I be partic'lar fond of, but I 'ardly ever eats 'em. When I was up along o' Cap'n Bangs out 'ere at Muddybank 'abuildin' 'is 'ouse, that's when I ate a bloater fur dinner, an' if you b'lieves me I didn't eat nowt till supper the next night. It didn't agree some'ow, an' it wor," with great emphasis, "years afore I ate another, an' that was in sixty-two!"

Dumas pere, who was proud of the prices he received for his work, was once boasting of the fact.
"Beyond a doubt," he remarked, "I am the best paid of living men of letters; I receive thirty sous a line."
"Indeed, monsieur?" said a bystander, "I have never worked for less than 5,000 pounds a line. What do you think of that?"
"You are joking," responded Dumas, in irritation.
"Not at all."
"For what do you receive such rates per line?"
"For constructing railways," was the answer.

The ship was sinking in mid-ocean, and the women on board all clung to a gentleman of clerical exterior and cried:
"Oh, sir, do pray for us!"
"I am sorry, ladies," the man replied, "but I am not a parson."
"Oh, then, sir, do please let us sing a hymn."
"I am very sorry, ladies, but I am not even a choirmaster."
"Then who are you?" asked every voice.
"I am only a churchwarden," replied the demure looking man.
"Then take up a collection," they all cried, "for the ship is sinking and something must be done."

A PRIZEWINNING TURKEY.—A competition of special interest to farmers engaged in poultry-raising is reported by the Carnefac Stock Food Co. It commenced in May last, when this company wrote the secretaries of several fair boards stating that they would offer three special prizes, to be competed for at the fairs jointly, for the heaviest turkey of this year's hatch, weighed at the fairs, the weight to be reported and certified by the secretary. The prizes they offered were one pair of Bronze turkeys, pair of Plymouth Rock chickens, and pair of Leghorn chickens. Prize birds to be selected and purchased by Prof. Graham, of the Ontario Agricultural College, Guelph. There were plenty of exceptionally heavy birds to carry off the prizes. The heaviest entry was at Russell Fair, a turkey shown by Mr. Cummings weighing eighteen pounds and a half. Mr. Cummings thus receives the Bronze turkeys. The second prize went to A. Midhausen, of Mildmay, for a turkey weighing sixteen pounds, and the third prize to Mr. Reid, of Orangeville, for a turkey weighing fifteen pounds. A remarkable feature is that those birds were all shown at fairs held in September when turkeys have not nearly attained their full growth. The Carnefac Co. have so far only obtained a great deal of attention on the interest taken and the prizes being offered from turkey-raising, but have not yet received any such information as to the results of this very important contest. It is hoped by the corresponding secretary of the contest that the results will be of interest to the poultry-raising community, and that others who are interested in the matter will be able to see the

Trumans' Champion Stud

We are the oldest and largest importers of strictly first-class

Shire, Percheron and Hackney Stallions

IN AMERICA.

Our record at the last four International Exhibitions, and at the World's Fair, St. Louis, has no equal. No firm ever made such a clean sweep as we did at St. Louis, viz.: **\$2,871** in cash, **\$600** in gold medals, and **5** diplomas.

We will sell you a Draft or Coach Stallion of first-class quality for less money than you can buy anywhere in Canada. The dealers' profit that other importers pay in England is all saved by us, and this in itself is a good profit to us. Intending purchasers should call at our new Sale Stables at the Western Hotel, see our horses, and get our prices before buying elsewhere.

We guarantee every horse, and insure them against death, from any cause, if desired. Large importations arrived April 9th, July 8th and Sept. 4th, and another due Nov. 3rd. If a first-class stallion is needed in your vicinity, please write us. Write for new catalogue R.

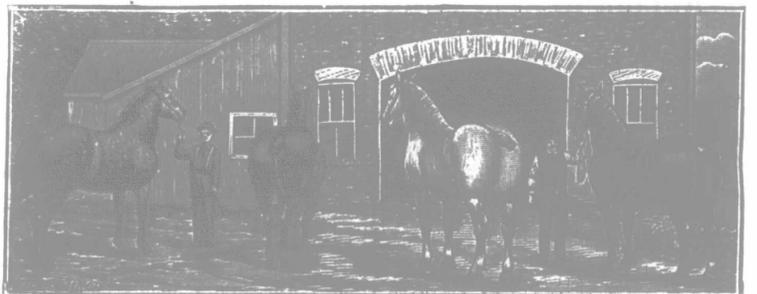
A FEW GOOD RELIABLE SALESMEN WANTED.

TRUMANS' PIONEER STUD FARM

Bushnell, Illinois.

Canadian Branch Stables: Western Hotel, London, Ont.

H. W. TRUMAN, Manager.



25 Percherons, also French Coachers, Hackney and Clyde Stallions

Have just arrived, Aug. 16, 1905, from Great Britain and France with our new importation of high-class stallions, many of them prizewinners in their native lands, bred by the best breeders. The Percherons are large blocky fellows, 3 to 5 years old, descendants of such noted champions as Brilliant, Besique and Romulus. Blacks and dark dapple greys, weighing from 1,600 to 2,100 lbs., with the right kind of legs and feet, and can go like trotters. We personally selected every horse ourselves, using extraordinary caution to select nothing but good sound serviceable horses that will do our customers and the country good. The French Coachers, Hackneys and Clydes are also of the best breeding, some of them prizewinners in England, Ireland and Paris. We will sell you a better stallion for less money than any other importers in America, with a guarantee as good as gold. Intending purchasers should visit our stables before buying elsewhere. Inspect our stock and get our prices. Terms made to suit purchasers.

Hamilton & Hawthorne, Simcoe, Ont. 82 miles S.W. of Toronto, on G.T.R. & Wabash

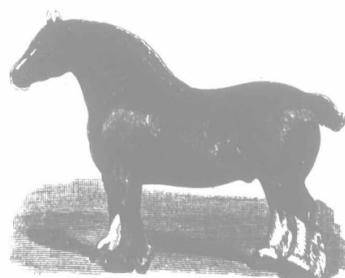
Hackneys and Clydesdales



From such noted champions as Baron's Pride, Hiawatha, Marcellus, Macgregor, Baron Fashion and Lord Lothian, etc. Inspection invited.

For fuller description and prices write:

T. H. Hassard, Millbrook, Ont.



Clydesdales and Hackneys

DALGETY BROS., Dundee, Scotland, and London, Ont., have on hand just now at their stables, London, Ont., a choice selection of above, including several prizewinners in this country and Scotland. All combining size and quality. Come and see them.

JAMES DALGETY, Glencoe, Ont.

HODGKINSON & TISDALE

Breeders of High-Class Clydesdales and Hackneys

BEAVERTON, ONT.

Our present stock of mares and fillies are the best lot we ever had together. Among them are championship, first, second and third prizewinners at Toronto. Our prices are consistent with quality. Look us up at Toronto. We have something that will suit you.

BEAVERTON P. O. & STATION. Long Distance Telephone.

Keep Your Grip On Health

WHEN PHYSICAL BANKRUPTCY
THREATENS BUILD UP WITH

Dr. Chase's Nerve Food.

Gloomy forebodings, fear of the future, apprehension of something dreadful to befall you, worry over little things, restlessness, insomnia, irritability—these are the indications of an exhausted nervous system.

They tell more plainly than words, more plainly than pains and aches, that, gradually but certainly, the nerve force of the body is being consumed more rapidly than it is being created. They point to physical bankruptcy—to helplessness of mind and body—to, prostration, paralysis or locomotor ataxia.

There are certain elements of nature which go to form new blood and new nerve cells—to create new nerve force, the foundation of life, energy and vitality. These elements are so combined in Dr. Chase's Nerve Food as to be easily assimilated by the most weakened human body.

Being composed of such ingredients, Dr. Chase's Nerve Food cannot possibly fail to be of benefit to you, and its regular and persistent use will build up and revitalize the most exhausted and discouraged sufferer.

You cannot compare Dr. Chase's Nerve Food with any medicine you ever used, for it cures by the building-up process, whereas most nerve treatments merely soothe and deaden the nerves. Test this treatment by noting your increase in weight.

Dr. Chase's Nerve Food, 50 cents a box, at all dealers, or Edmanson, Bates & Co., Toronto. Portrait and signature of Dr. A. W. Chase, the famous recipe-book author, are on every box.

ONTARIO'S LARGEST AND FINEST HERD OF HEREFORDS.—We sell our beauties to breeders all over Canada, because we sell our stock at much below their value. Come with the rest and get some of the bargains in 25 bulls a year old and over, 25 heifers and 30 cows, or write to have us save you some. (Farm inside the corporation of the town.) A. S. HUNTER, Durham, Ont.

Broxwood Herefords

Young bulls for sale from 6 to 18 months old, all from imported sire and dams, prizewinning stock at Royal and leading English shows.

R. J. Penhall, Nover P. O., Ont.

THE SUNNYSIDE HEREFORDS
Imp. Onward in service. Six choice bulls of serviceable age; this includes 4 2-year-olds, all of the blocky, heavy type, at prices that will move them. We can yet spare some cows and heifers.
O'NEIL BROS., Ont.
Southgate, Ont.
Hiderton Sta., L. H. & B.; Lucan Sta., G. T. R.

HEREFORD CATTLE

FOR SALE.

A number of nice young bulls, from 6 to 24 months old, low-down, beefy fellows. At rock-bottom prices.

W. BENNETT, Chatham, Ont.
Box 426.
FOREST VIEW FARM HEREFORDS
Four bulls from 8 to 12 months old; prizewinners and from prizewinning stock. Several heifers bred on the same lines; choice individuals for sale.
JOHN A. GOVENLOCK, Forest Sta. and P.O.

HEREFORDS—We are now offering a few thick, smooth young bulls and a number of females—a low-down, even, beefy lot. If in want of something extra good, correspond with us. We can please you.
J. A. LOVERING Coldwater P.O. and Sta.
We are **Aberdeen-Angus** show stock. One offering **Aberdeen-Angus** yearling bull, two bull calves and one yearling heifer that won first last year at Toronto, London and Guelph; also Fat-stock Show.
JAS. BOWMAN, Guelph, Ont.

STAMMERERS

We treat the cause, not simply the habit, and therefore produce natural speech. Write for particulars. THE DE ARNOTT INSTITUTE, BERLIN, ONT.

East Prince, P. E. I.

We have enjoyed autumn the past two months. The roots are all gathered in good shape, and the farmers are now busy turning the last furrows for the season. Although the weather so far is beautiful and mild, yet we are forced to believe that winter, with its storms and cold, is close upon us.

The Winter Fair at Amherst will soon be on again, and it promises to surpass any previous fair held there. The date is much earlier this year than formerly, principally to accommodate the people of this Island, and it is hoped the people, especially the farmers, will turn out in force and attend what is certainly one of the best means of educating and encouraging and stimulating the agriculturists of the Maritime Provinces. We, in the Lower Provinces, are not as far advanced in this matter of winter fairs as our friends in Ontario, yet the fair at Amherst last winter was in many respects, I am told, equal to the Guelph Show.

Stock are coming into winter quarters in pretty good shape, and with a slightly-reduced number, and a large crop of almost everything there should be no want of feed next spring. Cattle at auction sales find ready purchasers, and very many are looking for fresh milk cows. Those having cows of this kind to sell can get good prices for them. In spite of the talk of the price of pork dropping, 7½c. was paid recently by some buyers in this locality, but 7¼c. is the ordinary price. Little pigs are scarce again this fall, and sell for \$2 each at four weeks old. Two of our leading farmers sold each a carcass of pork this fall which weighed 610 and 550 pounds at 7c. per pound. There is a great demand for poultry of all kinds, 12c. a pound is being offered for chickens (dressed), ducks, geese and turkeys from 12c. to 16c. per pound, according to quality. A turkey weighing 30 pounds was sold at the Charlottetown market last week. Lambs, wool and sheep pelts are very high. As high as 5½c. was paid for a few lots of lambs. Wool is worth about 30c. a pound, and a good pelt will bring a dollar. Oats are also holding their own, and gaining a little; 34c. to 35c. for white and black. Wheat and buckwheat flour about 2c. per pound. Potatoes are also looking up a little; 22c. is now the price. Several horses are being shipped away, but the demand is not so brisk as it was. Eggs are 20c. Factory butter is 23c. to 24c. Cheese, if there is any to sell, will bring close on 12c. per pound.

C. C. CRAIG

The J. W. Johnson Holstein Sale.

On Nov. 15th a very successful sale of Holstein-Friesian cattle was held at Ingersoll, Ont., by Mr. J. W. Johnson, of Sylvan, Ont. About one hundred persons were present from points extending from Windsor in the west to east of Toronto. Mr. James Buchanan acted as auctioneer. Most of the buyers were from a radius of 10 miles of Ingersoll, where the dairy cow holds practically undisputed sway. Twenty-five cows and heifers and six young bulls were sold, the former averaging over \$109; the highest price being \$126, and the lowest \$80 for a young heifer.

A circular letter has just been issued by the Shorthorn Association drawing the breeders' attention to the fact that entries for Volume 22 of the Herdbook will be closed on the 31st of December, and if the breeders wish to have their pedigrees appear in that volume they are advised to send them in as soon as possible. The letter also draws attention to the fact that a new form of registration certificate is now being issued with the railway shipping you her attached, and that Volume 21 is now in the press and will be mailed next month. It contains the pedigrees of 4,940 bulls and 5,290 cows, or a total of 10,230 pedigrees, also a list of prizes awarded at the leading exhibitions.

Mr. S. H. Buckler, Raglan, Ont., writes: "Since placing the advertisement with you, I have sold all my yearling Cotswold ewes at good prices, but still have some very choice ewe lambs, which should be a bargain to anyone at the price I am asking. I still have the Shorthorn bull, Prince Gloster, twelve and a half months old now, got by Dry-

den's Prince Gloster, dam a Cruickshank Cecilia. He should go quick to anyone wanting a herd-header, for he has the quality and thickness of his notable sire, and my price is low if he goes quick."

QUESTIONS AND ANSWERS

Veterinary.

SWEENEY.

Give quick and sure cure for sweeney.

A. H.

Ans.—There is no quick cure for sweeney. It requires a long rest, and the muscles of the shoulder blade must be blistered repeatedly. Take 1½ drams each biniodide of mercury and cantharides and mix with 2 ounces vaseline. Clip the hair off the shrunken muscles, and rub well with the ointment once daily for two days. Tie so that she cannot bite the part. Forty-eight hours after the first application wash off and apply sweet oil. Let her loose in a box stall now, and oil every day. Repeat the blistering every four weeks all winter, and it is probable she will be all right in time for farm work next spring. V.

STERILE COWS.

I have two cows that I cannot get in calf. I have bred them five or six times. One had milk fever in May. P. M.

Ans.—The fact that the cow had milk fever has no effect. The usual cause of sterility is a closure of the entrance to the womb (called the os). When they next show oestrus, have the os dilated. This is done by oiling the hand and arm, passing the hand through the vulva and vagina until the os is reached. Then, with a rotary motion force one finger and then two through the passage into the womb. In some cases a blunt sound has to be used, as the fingers are not strong enough. It is usually wise to get a veterinarian to operate. Breed in about two hours after operation. V.

TYMPANITIS.

Cow out on pasture all fall became bloated. We gave her Epsom salts, but the bloating continued, and we cannot dissipate it. We have her in the stable and are feeding lightly. H. P.

Ans.—Give her a purgative of 1½ lbs. Epsom salts and 1 ounce ginger, follow this up with 2 drams each nux vomica, gentian and ginger, two or three times daily, and feed lightly. If this does not cause an improvement, it is probable there is a foreign body in the stomach, which, if it were possible to locate in the rumen, might be removed by an operation. If the above treatment is not successful, it would be better for you to call your veterinarian in to examine her. V.

NEBULA.

Horse got eye injured four months ago, and it became covered with a scum and he was blind. The eye has cleared up, except a small spot, and he has regained his sight. F. H.

Ans.—This small white spot is a portion of the exudation that resulted from the inflammation, remaining between the layers of the cornea. It is called a "nebula," and is hard to remove. Treatment consists in very carefully touching it once every second day with a pencil of nitrate of silver. You must be careful to not touch the caustic to any other part of the eye. V.

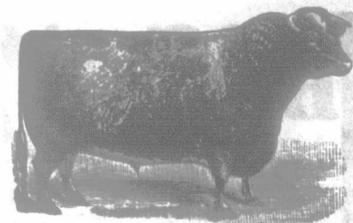
Miscellaneous.

TREATING SHEEP FOR TICKS.

I want to treat my sheep for ticks, but am afraid to use Gillett's dip, as I understand it is very poisonous. Can you recommend some other mode of treatment? Some recommend shaking sulphur on the sheep's back.

NOVA SCOTIAN.

Ans.—It is quite safe to treat sheep for ticks at this season with a solution of any of the proprietary sheep dips such as Zenoleum, McDougall's or Little's, opening the wool at intervals of four or five inches and pouring about a quart of the solution on each sheep from a coffee pot. We have not known the dry sulphur treatment tried, and would have little faith in it, but it is simple and might be tried as an experiment.



ARTHUR JOHNSTON

Greenwood, Ont.

Offers for sale at moderate prices:

8 high-class imp. bulls.
2 excellent yearling bulls, home-bred.
17 first-class bull calves.
Also cows and heifers, imp. and home-bred.
Most of the above imp. or sired by imp. bulls and from imp. dams.

MAPLE SHADE

Cruickshank Shorthorns and Shropshire Sheep
16 choice young bulls of Cruickshank breeding, from which you can select high-class herd-headers. If you wish to see the breeding we shall be pleased to mail a catalogue.

JOHN DRYDEN & SON,

Brooklin, Ont.

Stations { Brooklin, G.T.R. Long-distance
Myrtle, O.P.R. telephone.

SCOTCH SHORTHORNS

9 heifers, yearlings.
29 heifers, calves.
4 bulls, yearlings.
26 bulls, calves.

All out of imported sires and dams.

Prices easy. Catalogue.

John Clancy, H. CARROLL & SON, Manager, Brooklin, Ont.

Maple Lodge Stock Farm

200 Leicester Sheep for sale. Champion winners all over America. Both sexes. Choice Shorthorn bulls and heifers.

A. W. Smith, Maple Lodge, Ont.

T. DOUGLAS & SONS,

Strathroy, Ont.

SHORTHORNS and GLYDESDALES

Present offerings: 19 young bulls, of No. 1 quality, ready for immediate service; also cows and heifers of all ages. Also one imp. stallion and two brood mares. Prices reasonable. Visitors welcome. Farm one mile from town.

Pine Grove Stock Farm

Breeders of High-class Scotch Shorthorns, Choice Shropshire Sheep, Clydesdale and Hackney Horses.

Second annual sale of Shorthorns at farm, on Wednesday, Jan. 10th.

Herd catalogue on application. Address: C. W. WILSON, Supt., Rockland, Ont. W. C. EDWARDS & Co., Limited, Props. om

JOHN GARDHOUSE & SONS, Highfield P.O., Ont.

Breeders of Scotch and Scotch-topped Shorthorns, Lincoln and Leicester Sheep and Shire Horses.

A good selection of young stock of both sexes always on hand for sale. Scottish Prince (imp.), Vol. 49, at head of stud. Royal Albert (imp.) 2097, at head of stud. Farms 3½ miles from Weston, G. T. R. and C. P. R., and electric cars from Toronto.

Scotch Shorthorns

Herd headed by Imp. Royal Champion. Young stock for sale from imp. sires and dams. For particulars write to

Ed. Robinson, Markham Sta. and P. O. Farm within town limits.

Advertise in the Advocate

Ring-Bone



So common nearly every body knows it when he sees it. Lameness and a bony enlargement just above the hoof, or higher and on the upper pastern bone, sometimes extending nearly around the pastern, sometimes in front only, or upon one or both sides. Cases like the latter are called Sidebone.

No matter how old the case, how big the lump, how lame the horse, or what other treatment has failed, use

Fleming's Spavin and Ringbone Paste

Use it under our guarantee—money refunded if it fails to make the horse go sound. Often takes off the lump, but we can't promise that. One to three 45-minute applications required and anyone can use it. Get all the particulars before ordering—write for Free Horse Book that tells you what to use for every kind of blemish that horses have.

FLEMING BROS., Chemists,
45 Front Street, West, Toronto, Can.

Save Half Your Fuel

BY USING THE

ROCHESTER RADIATOR

Fits any Stove or Furnace. Write the booklet on heating homes.

Rochester Radiator Co., 5 Furber St., Rochester, N.Y.

Price from \$2.00 to \$12.00. For hard or soft coal, wood or gas.

Asthma

Climate, wear out, smokes, sprays and "Spasms" relieve only temporarily; they cannot cure. Our CONSTITUTIVE treatment, founded 1893, permanently eliminates the CAUSE of Asthma and Hay Fever, so that nothing brings back the old symptoms or attacks. Write for BOOK OF P. containing reports of many illustrative cases that have OBTAINED CURES for years. Mailed FREE. Write P. HAROLD HAYES, Buffalo, N.Y.

Shorthorns FOR SALE

Two red bull calves; 6 heifers, sired by that grand bull sire of unbeaten Fair Queen and sister, Queen Ideal. First prize senior heifer half at the International, 1904. Also first prize and junior champion, and reserve grand champion at Winnipeg, 1905.

H. K. FAIRBAIRN, - Thedford, Ont.
CHAS. RANKIN, Wyebidge, Ont.

Importer and Breeder of **SHORTHORN CATTLE and OXFORD DOWN SHEEP.**
Herd headed by Pride of Scotland (imp.).

FOR SALE—Females and bulls, of all ages, from noted Scotch families.

Shorthorns, Cotswolds, Berkshires

FOR SALE: Stock Bull, Red King 2nd =41746-. Also calves of both sexes, and cows and heifers. About 60 head on hand. Nothing to offer in Cotswolds. In Berkshires, a few young sows from 3 to 4 months.

CHAS. E. BONNYCASTLE, P.O. & Stn. Campbellford, Ont.

SHORTHORNS FOR SALE

For young bulls, including 22-months son of Mayflower 3rd, champion female at Winnipeg and Toronto, 1904; also a few good heifers of same family. Primrose Day (imp.) at head of herd.

WM. MODERMOTT, Living Springs, Ont. Ferguson Station.

ROWAN HILL STOCK FARM OF SHORTHORNS

Greensill Archer (imp.) 45184, at head of herd. Present offering: Young cows and heifers at reasonable prices. Correspondence or inspection invited.

A. DUNCAN & SONS, Carluke P.O., Ont.

MAPLE + GROVE + STOCK + FARM
Scotch and SHORTHORNS
Sootch - Topped

Present offering: Two choice nine months-old bulls, by Captain Mayfly 2nd; also young cows and heifers at very reasonable prices. For particulars write to

L. B. POWELL, Wallenstein P.O., Elmira Stn. and Tel.

MAPLE LEAF STOCK FARM
4 Choice Young Bulls for Sale. Also some cows and heifers, and prizewinning Berkshire pigs. Terms reasonable.

ISRAEL GROFF, Alma P.O. & Stn., G.T.R.

SHORTHORNS FOR SALE

A few females of different ages, and one red Golden Drop bull, 12 months old. Prices reasonable.

Hugh Thomson, Box 556, St. Mary's, Ont.

SHORTHORNS, LINCOLNS & OXFORD DOWNS

Herd headed by imp. Royal Prince and imp. Abbottsford Star. For sale: Nine bulls, six months to one year, three from imp. dams and imp. sires; also females. Lincoln and Oxford Down sheep; Oxford Down ram lambs; and Barred Rock cockerels. **John McFarlane & W. H. Ford, Dutton, Ont.**

GOSSIP.

"It is well to remember that all of the visions of God and heaven and truth and wonderful spiritual life are not reserved to the performers of great deeds, but the common people, who will never get their names in print or be heard of outside of their own narrow circles of friends, may also see visions of God and heaven and truth. The path leading to the very greatest and most wonderful revelations of God always leads a part of the way along the commonplace in life, and inasmuch as but a few persons in any one generation ever become distinguished, it may be justly concluded that God has particularly intended to bless the commonplace life that he may make his very best blessings reach the greatest number."

William E. Curtis tells an interesting story of the recall, the initiative and referendum in Los Angeles. Los Angeles is an enterprising city. It has all of these so-called socialistic devices, and yet money is fully invested there, the people are prosperous and the city is conservative.

The recall works like this: If an alderman votes against what the people think is right, 25 per cent. of the voters can compel him to resign and stand before all the people for re-election.

This is a plan by which the people and not the office-holders control, and where the public office-holder is a public servant.

If voters cannot keep the rascals from getting in the "recall" at least gives them a chance to turn the rascals out.

"If there is nothing good in Spiritualism," said a widower to the late Bouguereau, the great French painter; "why is it so popular?"

"Why is it so popular? I'll tell you," said Bouguereau.

"A friend of mine lost his wife two years ago. Last week he heard of a beautiful medium in the Square de l'Opera, and attended a couple of her seances. I saw him yesterday. He has already become an enthusiastic Spiritualist."

"Why, it is ridiculous," said I.

"Ridiculous! Indeed, no," he returned. "My friend, do you know that at each seance the spirit of my dear wife returned and kissed me?"

"Nonsense," I exclaimed. "Nonsense. Do you mean to tell me that your dead wife honored those miserable seances enough to come and kiss you in her own person?"

"Well, not exactly in her own person," he replied. "Her spirit took possession of the medium's person, and kissed and embraced me through her."

Senator Crane tells this one: Farmer Dockridge was hastily awakened in the dead of night by Alf, the hired man, who told him the barn was on fire. Instructing Alf to blindfold the horses and lead them out, he hurriedly donned his trousers and rushed into the summer kitchen, grabbed a screw driver and ran out to the barn.

The roof was burning fiercely, but he dashed into the barn and began with frantic haste to unscrew the hinges of the door. Alf had succeeded in getting the horses out safely, but the farmer stuck to his job and finally emerged with the door just as the roof fell in.

"That is a good deal of risk to take for a bit of firewood," said a neighbor, who had come over to see what he could do.

"Firewood," said the farmer, pointing to pencil marks on the door, "see them figures? Well, them's my business accounts for six years, and worth more than the hull darn barn."

This incident occurred in the grammar school on Prospect Street, Gloucester. The principal was provoked at a little boy for not being able to see through a problem in arithmetic. After spending about an hour on the boy he became angry and said: "When Abraham Lincoln was your age he could do almost anything in arithmetic, and he didn't have to go to schooling either."

The little fellow replied: "Well, Mr. Principal, when Abraham Lincoln was your age he was President of the United States."

Messrs. John McFarlane & W. H. Ford, Dutton, Ont., in sending in change of advertisement, write that they have for sale imported and home-bred Shorthorns of both sexes: nine grand bulls of dark red color, from six months to one year old, three of these being out of choice imported cows, and by imported sires. They also offer Lincoln and Oxford Down sheep; Oxford Down ram lambs a specialty. They have also Berkshire boars and Barred Rock cockerels for sale. Write them for prices.

Mr. W. D. Flatt, of Hamilton, Ont., who in the Shorthorn and Clydesdale field, both in the United States and Canada, is known and appreciated by those who admire a manly, broad-minded man in any walk of life, writes the manager of the International Live-stock Exposition, Chicago, Illinois, as follows: "I many say it has been my privilege to attend the greater portion of the live-stock exhibitions on both sides of the Atlantic for the past number of years. I will be frank and say that the International stands pre-eminent. When one considers that about \$280,000 has been expended in erecting a coliseum for this exposition, I say it should give every live-stock breeder greater confidence in the future of the live-stock industry. Knowing many of the men that are at the back of this great undertaking, it is my belief that the live-stock breeders of America will fully understand, and will not fail to appreciate the efforts put forth by the management of the International, and that they will attend this year's exposition and present a solid front, and many of them will bring their friends to show them the future home of the greatest live-stock exposition in the world." This year Dec. 16th to 23rd.

The Elm Park Herd of Aberdeen-Angus cattle, property of Mr. James Bowman, Guelph, Ont., was never in better form than at the present time. Whatever Mr. Bowman undertakes to do, he does well, sparing neither expense nor labor necessary to that end. The use of the great show and stock bull, Prince of Benton (imp.) 58532, has been of great assistance in bringing this herd up to its present position, his calves being winners of first honors wherever shown, against all comers. The great show cow, Mayflower 45948, has again repeated her record of last year by scoring first and female sweepstakes at both Toronto and London exhibitions. This smooth, compact cow has been a first-prize winner ever since she was a calf. Elm Park Rosebud, one of the heifers that stood well up near the top in a very large class at the International at Chicago last fall, and only required heavier fitting (which would not have been a benefit to her as a breeder) to have stood higher, landed this year first prize at the Canadian National Exhibition. Elm Park Raider, the yearling bull that won for Mr. Bowman at Chicago, has gone along nicely since then, and this year captured first at Toronto, first and sweepstakes at London. This young bull promises to make his mark as a show bull as well as a sire. This herd has an almost unprecedented record for winning in the large exhibitions in Canada, especially upon stock bred by the exhibitor, which is the best test of what a herd is producing. We mention only a few of many good things in the Angus line to be seen at Elm Park.

The Clydesdales owned here are by some of the best sires that have been imported into Wellington County, which is saying a good deal. Such horses as Lord Charming (imp.) and Elator (imp.) have been used with marked success, as well as others equally good.

The Suffolk sheep, which have made such remarkable records whenever put into carcass competition with other breeds, are also receiving a fair amount of attention at Elm Park. Bismarck of Stretchworth (imp.), the flock leader, is a typical specimen of the breed, and he's got Mr. Bowman some grand stock. Elm Park farm is only a few minutes' walk from the electric railway, or from Guelph Junction, G. T. R. Take a run out and see the stock, which is advertised in this paper.

GREENGILL HERD of high-class SHORTHORNS

We are now offering for sale 12 bull calves, 2 yearling bulls and high-class females, all ages, at moderate prices. The herd is headed by the great breeding bull (imp.) Lord Roseberry.

R. MITCHELL & SONS, Nelson P.O., Ont.; Burlington Junc. Sta.

Scotch Shorthorns SHROPSHIRE SHEEP.

4 yearling bulls. 12 young bulls, 8 to 13 months, all from imp. sires and dams. 30 heifers under 3 years old. 40 breeding ewes, 20 ewe lambs and 20 ram lambs. 3 imp. Yorkshire brood sows. Prices easy for quick sales.

W. G. PETTIT & SONS, Freeman, Ont.
Burlington Jct. Sta. Long-distance telephone in house.

1864 + HILLHURST FARM + 1905 SHORTHORN CATTLE

Herd of thirty. Stock bull:

Broad Scotch =46315-	Scottish Hero	Scottish Archer (59993), Missie 134th, by William O. Orange.
	Butterfly 49th	Prince Horace, bred by W. S. Marr, Butterfly 46th (Sittytton Butterfly).

JAS. A. COCHRANE, o Compton, P. Q.

HILLYVIEW STOCK FARM SHORTHORNS, CLYDESDALES and COTSWOLDS

Present offerings: Choice young bulls and heifers. Also a few good young cows. Apply to **JOHN E. DISNEY & SON, Greenwood, Ont.**
STATIONS: Claremont, C.P.R.; Pickering, G.T.R.; Brooklyn, G.T.R.

FOR SALE OR EXCHANGE SHORTHORN BULL

GOLDEN ABEL (imp.) 40382, sired by Golden Fame 78786.

Golden Abel has headed my herd for three years, and is sure and active, and as a sire, the 20-odd youngsters in my stable will vouch for that.

R. J. DOYLE, Owen Sound, Ont.

R. A. & J. A. WATT

Salem P.O. Elora Station, Telephone in house. C. P. R. and G. T. R.

Our herd of seventy-five head of Scotch-bred

SHORTHORNS

compares favorably with the best. Inspection and correspondence invited.

Shorthorns and Leicesters

Present offering: Some choice young bulls and heifers of the best Scotch families. Also yearling rams and yearling and two-shear ewes, and this season's crop of lambs at reasonable prices. Address:

W. A. DOUGLAS, Tuscarora P.O., Caledonia Station, Tuscarora P.O.

River View Stock Farm

Present offering: A couple of thick, young Shorthorn Bulls; ready for service, of excellent breeding; price extremely low considering quality. For particulars, write to

A. J. ROWLAND, Dumblane P. O., Port Elgin Stn. and Telegraph.

CEDAR VALE SCOTCH SHORTHORNS

Present offering: A few Scotch-bred heifers, sired by Scott's Choice =43670-. For particulars write to

JOHN SCOTT, Dumblane P.O., Port Elgin station and telegraph.

SCOTCH SHORTHORNS FOR SALE

Two young bulls 12 and 16 months old, both royally bred; also fifteen heifers and cows, most of them in calf to a son of Lord Gloucester, No. 26985.

DR. T. S. SPROULE, CEDARDALE FARM, Markdale P.O. and Station.

MAPLE HILL SCOTCH SHORTHORNS STOCK FARM

of best families. Herd headed by the grandly bred Lavender bull, Wanderer's Star =48585-. A few choice young bulls.

Box 425. **WM. R. ELLIOTT & SONS, Guelph, Ont.**

Shorthorns

Will sell or exchange Kinellar Stamp, my famous Golden Drop show bull. Have for sale also young heifers and bulls got by him. Tracing Imp. Pansy Lily and Beauty.

SOLOMON SHANTZ, Haysville, Ont., Plum Grove Stock Farm, Baden Station.

SHORTHORNS

Young bulls for sale, sired by Spectator, imp. Prices reasonable. Apply to

JOHN McCALLUM, Springbank Stock Farm, M. C. R. and P. M. R., Box 21, Iona Station.

Shorthorn Bulls

I have for sale two good young roan SHORTHORN bulls, fit for service, sired by imp. Scottish Peer =4024-. Come and see, or address,

JAMES SNELL, - Clinton, Ont.

J. WATT & SON

Some very superior Bulls and Heifers for sale. Apply for particulars, **Salem P. O., Elora Stn., G. T. R. and C. P. R.**

BELMAR PARO SHORTHORNS

Bulls in service: Merryman, imp. (77963) = 32075; Pride of Windsor, imp. (Vol. 50) = 50071; Nonpareil Archer, imp. (81778) = 45202. Our females have been carefully selected and are of the best Scotch breeding, many of them imported. Address correspondence to PETER WHITE, Jr., Pembroke, Ont.

PLEASANT VALLEY HERD SHORTHORNS

Headed by imp. Old Lancaster. Young stock for sale. For particulars, write or come and see. Visitors met at station, Moffat, C. P. R., 1/2 mile, or Guelph, G. T. R., 11 miles. GEO. AMOS & SON, - Moffat, Ont.

Valley Home Stock Farm Shorthorns, Shropshires and Berkshires

For Sale: Six young Shorthorn bulls, some from imp. sires and dams. Also 10 fine Berkshire sows, from 6 to 10 months old, and a fine lot of young boars and sows, from 4 to 10 weeks old, and Shropshire ram lambs. For particulars write S. J. PEARSON, SON & CO., Meadowvale, Ont. Stations—Streetsville and Meadowvale, C. P. R. Brampton, G. T. R.

Shorthorns and Clydesdales

One pair registered Clyde mares, 3 and 5 years old; one pair Clyde geldings, 4 and 5 years old (show team.) Shorthorn heifers, cows and bulls. JAS. McARTHUR, Gobles, Ont. Pine Grove Stock Farm.

KENWOOD STOCK FARM.

SHORTHORNS.

Headed by (Imp.) Jilt Victor = 45187 =, 10 grand young bulls; also heifers; from imp. and home-bred cows, for sale. Choice Lincoln sheep; Berkshire and Tamworth hogs offered. HAINING BROS., Highgate, Ont., Kent Co.

SHORTHORNS AND LINCOLNS.



Present offerings: 4 choice young bulls 9 to 14 months; also a few good heifers, Lincolns, descended from the best English flocks. JOHN LEE & SONS, Highgate, Ont. 40 miles west St. Thomas, on M.C.R.R. & P.M. Ry.

CLOVER LEA STOCK FARM SHORTHORNS

Imp. Golden Cross at head of herd. 6 young bulls, three reds and three roans, from six to twelve months old. Parties wishing to visit the herd will be met at Ripley station and returned. R. H. REID, Ripley Sta., G.T.R. Pine River, Ont.

Riverview Shorthorns and Oxfords

Shorthorns represent Crimson Flowers, Athelstanes, Lady Janes and Roses. We have for sale eight bulls, including our stock bull, four yearlings, and the balance calves; also a few one, two and three year-old heifers. A thick, straight, mossy lot. Also some spring and one-year-old Oxford rams. Peter Cochran, Almonte P. O. and Sta.

FLETCHER SHORTHORNS.

Our herd of breeding cows, both imported and home-bred, are of the most fashionable Scotch families. Among the really good sires which have been used are Spicy Robin 28259, winner of 3rd prize at Dominion Exhibition, Toronto, and Joy of Morning (imp.) 32070, winning 1st prize at same exhibition, 1904. Stock of either sires for sale. GEORGE D. FLETCHER, Binkham P. O., Ont. Erin shipping station, C. P. R.

FOR SALE OR EXCHANGE

Scottish Baron = 40421 = (imp. in dam). Also several young bulls and heifers. H. GOLDING & SONS, Thamesford, Ont. Stations: Thamesford, C.P.R.; Ingersoll, G.T.R.

Wm. Grainger & Son Hawthorn Herd of deep-milking Shorthorns. Aberdeen Hero (imp.) at head of herd. Eight grand young bulls by Prince Misty = 37864 =. Prices reasonable. Londesboro Sta. and P.O.

Willow Bank Stock Farm | Established 1855 Shorthorn Cattle, Leicester Sheep.

Imp. Rosierucian of Dalmeny = 45230 = at head of herd. Choice young stock for sale. JAMES DOUGLAS, - Caledonia, Ont.

Shorthorn Bull—Provost = 37865 =, 4 years old, in prime condition, sure and active; a grand stock bull. Write or call on RICHARD WILKIN, Springfield Stock Farm, - Harriston, Ont.

SPRING VALLEY SHORTHORNS.

Imp. Bapton Chancellor = 40359 = (78286) heads the herd. We have for sale a choice lot of young bulls of the very best breeding and prices right. Inspection and correspondence invited. Address: KYLE BROS., Ayr, C.P.R.; Paris, G.T.R.

GOSSIP.

A GREAT SALE OF ABERDEEN-ANGUS.

The dispersion sale of the herd of Aberdeen-Angus cattle, property of Mr. M. A. Judy, Beecher, Illinois, which took place at Chicago on Nov. 1st, was a marked success. The Blackbird family was the favorite line of breeding, and all of that tribe were eagerly bid for, \$1,000, the highest price of the day, being paid for the yearling heifer, Blackbird 24th, sired by Blackbird Jim, H. Weissenger & Son, of Kentucky, being the purchaser. The same price was paid by the same buyer for Blackbird 32nd, a yearling heifer, by Engraver of Drumin. Seven other females sold for \$400 to \$700, and one for \$800, and the three-year-old bull, Imp. Del a Court, for \$400. Fifty-six females sold for an average of \$296. Nine bulls averaged \$177; and the whole herd of 65 averaged \$279.50.

QUEER NAMES FOR HORSES.

"Speaking of peculiar names for animals," says a travelling man in the Louisville Courier-Journal, "I know a man who owns no less than twenty-five teams in connection with a large farm in the Blue Grass section, and he has fifty horses. He tries to name them all after prominent characters in the Bible. Several were mares, and with the second crop of colts he found himself in dire straits. He was not a church-goer, in fact I don't suppose he ever saw the inside of a church, and his knowledge of Biblical names was a trifle limited.

"With his second crop of colts he turned to Shakespeare for his names. Finally, he sold several horses, but he still retains his twenty-five teams, and the neighbors have great sport over the curious combination of names. 'Ed,' I heard him saying to his hired man one morning, 'I wish you would hitch Moses up with King Lear and lead Nebuchadnezzar down for a new pair of shoes. Coming back, turn Falstaff over in the lower pasture. He's getting pretty thin, and before you go you might give Solomon a feed.' At times he has Hamlet plodding along dusty roads beside Adam. Eye is often harnessed with Henry VIII. His neighbors have never been able to learn how he keeps all the names straight, but he evidently succeeds."

QUESTIONS AND ANSWERS. Veterinary.

INJURED SPINE.

Last summer one of my horses fell 9 1/2 feet out of a barn I was building. We found her sitting on her haunches, but could not rise. We sent for a veterinarian and he placed her in slings, and kept her there for ten days. She could rise after this. We have worked her some, but she has not good control of her hind quarters, and is not improving as fast as we would like. If we turn her around sharply or back her up, she will fall. F. G. S.

Ans.—The mare's spine became injured, and it will probably take a long time for recovery to take place. You should not work her at all. Give her absolute rest. Work or exercise will retard recovery and probably make it impossible. Put her in a large box stall, and keep her well bedded. Do not take her out of stall at all. Feed her on easily-digested food, as good hay, bran, a few carrots, and a little rolled oats. It is quite probable it will require several months' rest. Treatment will not be of any use, but in all probability nature will effect a cure in time. V.

Miscellaneous.

EARLY RISING.

I have a hired man whom I call at 5.30, or about then, and he won't get up until 6 or 7 o'clock, and sometimes 7.30.

1. Can I charge him with the lost time? 2. I have him hired for a year. Can I discharge him on account of his not getting up? HENPECKED. Ont.

Ans.—1. No. 2. We would say that the ground stated is hardly sufficient to warrant dismissal.

A SHEEP-KILLING DOG.

Four weeks ago I had five sheep killed by a dog or dogs. Last Friday night, my next neighbor had four sheep killed. On Saturday night, I found a dog destroying one of my sheep, and I identified him next morning at his home. His owner will pay for the one sheep, but refuses to destroy the dog. Can I compel him to destroy him? The sheep were all destroyed the same way. Ont. SUBSCRIBER.

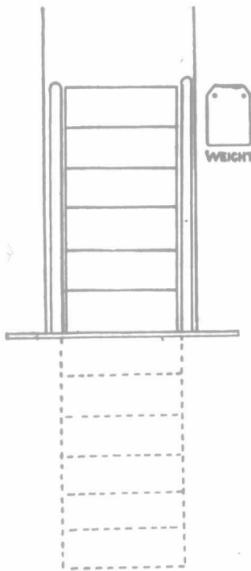
Ans.—Yes; ample provision is made for it by the Revised Statutes of Ontario, chapter 127. See especially sections 13 and 16.

FAILURE TO REMOVE CATTLE BOUGHT.

A cattle buyer bought a certain number of cattle from me and paid a small sum on them, and was to take them away at a certain date mentioned, but failed to take them away at time mentioned. And three weeks after date I wrote him, asking what he was going to do, if he was not going to take them away, and he gave me no answer. Then in a month after date I had a letter delivered at his house telling him that I would keep the cattle for him that week, but after that I would sell them the first chance; and he gave me no reply. The fifth week I sold them for about the same money. The day I was taking them away he happened to come along and wanted the cattle or his money refunded. I would not give him the cattle, but sent him his money a couple of days after. Now, he turns around and demands full value for cattle. He was a stranger to me. 1. What can he do? 2. Can he take full value of cattle from me? Ans.—1. We do not consider that he is in a position to do anything effectively. 2. We think not.

WANTED: PLAN OF DUMB WAITER. Give a description of a good dumb waiter in your valuable paper. J. J. V.

Ans.—The following plan of a dumb waiter was made from a drawing sent us by A. E. Richardson, Middlesex Co., Ont., the plan of whose \$1,800 farmhouse appeared in the "Farmer's Advocate" of March 2nd, 1905. This waiter is 6 ft. high by 1 1/2 ft. wide, and shelves are 14 inches back. The top of waiter



forms the floor when down, and the bottom forms the floor when up. There are four little common window-sash pulleys at the top of boxing of waiter, two at each side, just 7 inches apart, to match the holes in weights, and two ropes fastened to waiter and through two pulleys on one side and then down to the one weight, and the same fixture on the other side. If the two weights, weighing 90 pounds, are too heavy for the amount on waiter, it is easy to put more weight on the waiter to make it work easy. The ropes go through the top shelf, and are tacked to inside of waiter. Weights are 45 pounds each, 12 x 10 in. and 2 in. thick; holes for rope about 7 in. apart.

A hug is a round-about way of showing affection.

Suffered Terrible Agony FROM PAIN ACROSS HIS KIDNEYS. DOAN'S KIDNEY PILLS CURED HIM.

Read the words of praise, Mr. M. A. McInnis, Marion Bridge, N.S., has for Doan's Kidney Pills. (He writes us): "For the past three years I have suffered terrible agony from pain across my kidneys. I was so bad I could not stoop or bend. I consulted and had several doctors treat me, but could get no relief. On the advice of a friend, I procured a box of your valuable, life-giving remedy (Doan's Kidney Pills), and to my surprise and delight, I immediately got better. In my opinion Doan's Kidney Pills have no equal for any form of kidney trouble." Doan's Kidney Pills are 50 cents per box or three boxes for \$1.25. Can be procured at all dealers or will be mailed direct on receipt of price by The Doan Kidney Pill Co., Toronto, Ont. Do not accept a spurious substitute but be sure and get "Doan's."

Queenston Heights Shorthorns

Choice yearling heifers, Straight Scotch. Two bull calves at easy prices. HUDSON USHER, Queenston, Ont.

ELMHEDGE SCOTCH SHORTHORNS. Stamford, Minas, Nonpareils, Crimson Flowers, Marr Floras and Lavinas. Our herd will stand comparison with any. We reserve nothing; 45 head of both sexes, all ages, for sale. James Bewes, Strathairn P.O., Meaford, Ont.

Sunnyside Stock Farm—Scotch Short-horn-bred for sale. For particulars write to JAMES GIBB, Brookdale P.O. and Tel.

BONNIE BURN STOCK FARM Offers Scotch and Scotch-topped bulls, cows and heifers, 50 Shropshire rams and ewes, and Berkshire pigs, from imp. dams and sires, not akin. A bargain for quick sale. D. H. RUSSELL, Stratford, Ont.

Am offering some Shorthorn Cows with calves extra good young at foot, by imp. sires. Also Clydesdale Mares, as good as the best. Come and see them, or write to J. A. LATTIMER, Box 16, Woodstock, Ont.

RIVERSIDE HOLSTEINS

80 head to select from. Six young bulls, from 4 to 7 months old, whose dams have official weekly records from 16 to 21 lbs. butter; sired by Johanna Bue 4th's Lad, a son of Barocatic Lad, Grand Champion prize bull at World's Fair, St. Louis, 1904. MATT. RICHARDSON & SON, Caledonia, Ontario.

WOODBINE HOLSTEINS

Herd headed by Sir Mechtildie Poeh, absolutely the best official-backed sire in Canada. Dam Ianthe Jewel Mechtildie, 25.5 pounds butter in seven days. Champion cow of Canada over all breeds. Sire's dam, Annie Poeh 4th, holds the world's largest two-day public test record—8.5 pounds butter. Young bulls of the choicest quality for sale. A. KENNEDY, Ayr, Ont. Ayr, O.P.R.; Paris, G.T.R.

Maple Glen Holsteins—Select bull calves from producing dams now for sale. Herd now includes one of the best females ever imported from Holland, a cow bred to Canary Mercedes' Son, and one to Mercedes' Pieterie Paul. Secures the best. G. J. GILROY & SON, Glen Buell, Ont.

IMPERIAL STOCK FARM HOLSTEINS

Stock for sale, all ages, imported and home-bred. W. H. SIMMONS, New Durham P.O. Burgessville or Harley Stations.

"GLENAROHY" HOLSTEINS

We have for immediate sale several young bulls, and a number of young females, that for ideal type and superior quality, backed up by glit-tered breeding, are unsurpassed. G. MACINTYRE, Renfrew P.O. and Sta.

Stock Farm for Sale—Burnbrae Stock Farm, containing 149

acres, basement barn, dairy, hen, ice and engine houses, two dwellings, up-to-date in all respects, together with all thoroughbred stock, implements, etc. Holstein and Jersey stock for sale. Write for particulars. Apply, J. W. ROBERTSON, Vankieek Hill, Ont.

Holstein Bulls—Maple Grove still has a few richly-bred bulls of serviceable ages, which are offered at prices that nobody can afford to use a scrub. For particulars address, H. BOLLERT, Cassel, Ont.

Lyndale Holsteins

Stock for sale, any age, either sex. BROWN BROS., - Lyn, Ont.

TUBULAR Starts Fortune
 If you had a gold mine would you waste half the gold? Dairies are rarer than gold mines, yet farmers without separators only half skim their milk. Tubular butter is worth 25 to 35 cents. Cream is worth one cent per lb. to stock. Are you wasting cream?

Sharples TUBULAR CREAM SEPARATORS

Like a Crowbar
 Tubulars are regular crowbars—get right under the trouble. Get the cream—raise the quantity of butter—start a fortune for the owner. Write for catalog U-198.

THE SHARPLES SEPARATOR CO.
 WEST CHESTER, PA.
 TORONTO, CAN. CHICAGO, ILL.

HOLSTEIN BULL

to head your herd, sired by such noted sires as

Piebe De Kol, whose dam and sire's dam records average 619.2 lbs. milk, 37.31 lbs. butter in 7 days, or "Duchess Aggie De Kol Beryl Wayne," grandson of the famous "Beryl Wayne," 92 lbs. milk in one day, 37.87 lbs. butter in 7 days, 17.175 lbs. milk in 10 1/2 months. We have 12 imported and home-bred bulls to offer of such breeding; also heifers and young cows. Just imported, 36 head in the past six months. 72 head from which to select. It will be to your interest to enquire before buying elsewhere.

H. E. GEORGE,
 Seven miles from Ingersoll, Crampton, Ont.

ANNANDALE HOLSTEIN HERD

are the greatest of the breed individually, and backed by great records, viz.:

Brookbank Butter Baron, dam and sire's dam average 22 lbs. butter in 7 days, 4.5 per cent. fat. First-prize bull at Ottawa and Toronto, 1905.
 Prince Posch Calamity, dam and sire's dam average 36.1 lbs. butter in 7 days, 86 lbs. milk in one day, 3.6 per cent. fat. Also a prizewinner at Toronto and Ottawa.
 Wopke Posma, imported in dam from Holland. Sire Wopke, his dam Boss, greatest cow in Holland. Record: 17,160 lbs. milk in 336 days, 734 lbs. butter, 3.97 per cent. fat.
 You don't draw a blank in purchasing a bull from such sires and such dams as are kept at Annandale Stock Farm, Tilsonburg, Ont.

GEO. RICE, Prop.

HOLSTEINS and TAMWOETHS

One choice yearling bull, excellent quality and breeding. Will be sold at a bargain to a quick buyer; also a few bull calves. One boar ready for service. Young pigs ready to wean. Write at once for bargains.

A. C. HALLMAN,
 Waterloo Co., Breslau, Ont.

BARREN COW CURE

makes any animal under 10 years old breed, or refund money. Given in feed twice a day. Particulars from

L. F. SELLECK, Morrisburg, Ont.

Hillview Herd of Prizewinning AYRSHIRE CATTLE

All animals bred and carefully selected for size, constitution, long teats and deep-milking qualities. Select animals of both sexes for sale at reasonable prices. For further information and prices write

A. KENNEDY & SON,
 Hillview Stock Farm, Vernon, Ont.
 Winchester Station, C.P.R.

SHANNON BANK STOCK FARM FOR AYRSHIRES AND YORKSHIRES

Young stock of both sexes for sale from imported stock.

W. H. FRAN,
 Cedar Grove, Ont.

AYRSHIRES FROM A PRIZEWINNING HERD

Have some nice bull and heifer calves for sale at reasonable prices. For particulars, etc., write to

W. M. STEWART & SON,
 Campbellford Stn., Menie P.O., Ont.

Springbrook Ayrshires are heavy milkers and high testers. For sale. Three bulls, 9 months old; 2 bull calves, dropped in January last; also females of all ages.

W. F. STEPHEN,
 P.O. Box 101, Huntingdon, Que.

Meadowside Farm

Ayrshire Cattle, Shropshire sheep, Berkshire pigs, B. P. Rocks and B. Orpingtons. Young stock for sale.

A. R. YULL, Prop., Carleton Place, Ont.

AYRSHIRES—Choice stock of either sex, different ages, for sale. Prices reasonable. For particulars apply to

N. DYMENT, Hickory Hill Stock Farm, Dundas Stn. & Tel., Clappison, Ont.

COSSIP.

The following remarks on Tennyson were recently handed in on an examination paper by a schoolboy in an English literature class: "Lord Alfred Tennyson was a celebrated poet, and he wrote a lot of beautiful poems with long hair. His greatest poem is called 'The Idle King.' He was made a lord, but he was a good man and wrote many oads."

Our English exchanges announce the death, on October 29th, of Mr. Peter Stubbs, of Blaisdon Hall, Gloucestershire, at the age of 75 years. Mr. Stubbs was a prominent and successful breeder of high-class Shire horses, the Blaisdon stud having produced winners at the leading shows in Great Britain; and for his best horse, Blaisdon Conqueror, a London champion, which died last year, he had refused £3,000, or \$15,000.

The third annual meeting of the American Galloway Breeders' Association will be held in the Assembly Hall of the Pure-bred Live-stock Record Building, Union Stock-yards, Chicago, Ill., on December 22nd, 1905. The meeting will be held immediately after the Galloway sale, which occurs on December 22nd. There will be several things of importance to be considered, and officers to elect for the ensuing year, thus it is to be hoped that a good attendance will be in evidence.—Chas. Gray, Secretary.

The next annual meeting of the American Oxford Down Record Association will be held Tuesday, December 19th, 7.30 p. m., in Pure-bred Record Building, Union Stock-yards, Chicago.

The postponement of the International Live-stock Exposition to December 16th-23rd, will give stockmen two weeks more time to prepare for winter before going to the show. And we shall expect to see at this meeting many of our members who would have been too busy to leave home two weeks earlier.—W. A. Shafer, Secretary, Hamilton, Ohio; R. J. Stone, President, Stonington, Ill.

POLITENESS OF IRISH PEASANTRY.

A friend sends me the following delightful bit, cut from some paper: "It is well known that the Irish peasant (no doubt from a sense of politeness) will seldom disagree with a tourist, but likes to give an answer which he thinks will be agreeable to the questioner. Last summer a gentleman from Liverpool, while out for a sail on Carlingford Lough, was caught in a gale. Knowing the danger, Pat made for the shore. 'Why are you going in?' said the visitor; 'there's not much wind.' 'No,' replied the boatman, 'but, sure, what there is av it is mighty powerful.' An angler tells how, when in quest of fish, he asked a small, bare-legged boy if there were any fish in a certain river. 'There is, your honor.' 'What sort of fish?' 'There do be trout and eels, yer honor.' 'Any salmon?' 'There do be an odd one.' 'Any thermometers?' 'Them does be there, too, yer honor; but they comes up lather in the season.'"

TENANT FARM SYSTEM IS WRONG.

The entire tenant system of America is on a wrong basis. The one-year-lease policy, with no provision for the maintenance of live stock and the feeding of grain products on the farm, enables the tenant to put all of the tillable land under the plow and sell the grain for export to distant markets or foreign countries. This system will inevitably deplete even our rich soils of which we boast in the Mississippi Valley. These soils, when once depleted, cannot be profitably restored by the use of commercial fertilizers. As a permanent policy, the fertility and producing capacity of our lands can only be maintained by the growing of live stock to consume a large part of the grain products of the farm. A crop of seventy-five bushels of corn per acre sold at 40 cents per bushel, some times gives better immediate returns than stock raising or feeding, but we cannot go on consistently taking fertility from the farm for export without eventually paying the penalty. The remedy must lie in stock raising with better grades of stock and more economical methods.—Prof. C. F. Curtiss.

There were 11,218 cattle shipped for export during the past week from American and Canadian ports. Of this number all were American but 3,736 head that were sent out from Montreal. The markets abroad have been in a little better shape this week. The situation from the exporters' account is more encouraging than it has been for some time. Eastern States mutton markets were badly glutted with dead meat and also live stuff last week. Buffalo had 110 carloads one day and paid only \$7.10 for choice lambs, while Chicago was giving \$7.25.

What promises to be the greatest Galloway sale ever held in Britain or America in recent years will occur on Dec. 22nd at Chicago during the week of the International Live-stock Exposition.

The following breeders have contributed from their show herds: Brookside Farm Company, Fort Wayne, Ind.; W. M. Brown & Son, Carrollton, Mo.; C. E. Clarke, St. Cloud, Minn.; G. W. Lindsey, Red Cloud, Neb.; O. H. Swigart, White Heath, Ill.; Marion Parr, Harristown, Ill.; A. F. Craymer, Morris, Ill.; Michigan Premium Stock Company, Davisburg, Mich.; T. M. Moody, Atlanta, Mo.

The railways have named low rates for the 1905 International Live-stock Exposition at Chicago, Dec. 16th-23rd. The lines of the Central Passenger Association grant a one-fare plus \$1 rate, selling Dec. 16, 17, 18 and 19, from all territory in their associations, Buffalo west, except where fare and one-third is less; return limit December 24th. The Eastern Canadian Passenger Association lines grant rate of "one-fare plus one" from all stations in their territory west of Kingston, Sharbot Lake, Buffalo, Black Rock, Suspension Bridge and Niagara Falls. Do not wait until the last moment to see that your railway agent understands these rates. "Do it now."

Messrs. Lloyd-Jones Bros., of Burford, Ont., importers and breeders of registered Shropshire sheep, send us a list of recent sales of show and breeding stock too long for publication, but covering a very wide territory in Canada and in the U. S. from Ohio to Minnesota, in lots of one to ten, and to prominent breeders and exhibitors in whose hands they have been very successful in prizewinning. They also send a list of the winnings of their sheep at Toronto and London—Canada's leading shows—and of sheep sold by them at leading U. S. fairs, showing that their flock is being kept up to the highest standard. They report having won 40 first, 20 second and 15 third prizes at eight fairs, and claim that they have had not a dissatisfied customer this year. They have shearing ewes and ram lambs for sale, and they invite correspondence and inspection of their flock, and ask visitors to the Winter Fair at Guelph next month to have a look at their lambs there.

POTATO CULTURE TIPS.

In the paper on "Potato Culture," read before the Horticultural Society last autumn, by Mr. Scarlett, he intimated that, from facts which had come under his notice, he had come to greatly doubt whether it was desirable to earth up the crop at all, seeing that the potato was a sun plant, and that he would have this question fully tested by another year. He has now had abundant proof of the fact that in the case of the early varieties of potatoes it is a great mistake to have them "furrowed" too deep, and that they should either be left without earthing up, or otherwise the earthing up should be of the lightest possible character.

Among all his early varieties he found only one exception to this rule, and that was in the case of the Dalmeny Early, which showed a marked upward habit of growth, so that the plots of this variety which were not earthed up showed a large proportion of "greened" tubers. But all the other early varieties showed the best results when they were either left without earthing up or otherwise had only a mere scratch of a furrow between the rows. In the case of the late varieties, Mr. Scarlett is unable to speak with the same decisiveness as yet, but judging from present appearances he is disposed to believe that the late varieties which have been earthed up will show better results than those which have been grown on the surface.

OGILVIE'S Ayrshires

As quite a number of the cows of this herd have freshened since our auction sale of young stock in March last, we are now able to offer for sale **CALVES**, of both sexes, at reasonable prices, and also a few **COWS**. Apply to

ROBERT HUNTER, Manager
 Lachine Rapids, Que.
 Telephone M. 2228.

Maple Cliff Dairy and Stock Farm
 Breeders of Clydesdale Horses, Ayrshire Cattle, Berkshire and Tamworth Pigs. Young stock for sale at all times.

R. REID & CO., Hintonburg, Ont.
 Farm adjoins Central Experimental Farm.

PORTER'S GOLD & SILVER FAWN St. Lambert Jersey Herd

I have a number of bulls, cows and heifers for sale. No better blood. No better cream-producers. No better lookers.

T. PORTER, Carleton West, Ont.

Brampton Jersey Herd—We have now for immediate sale 10 bulls, from 6 to 18 months old, descended from St. Lambert or imported stock; also females of all ages. In order to reduce our stock, we are making a special offer. For full particulars address

B. H. BULL & SON,
 Phone 68, Brampton, Ont.

Hilgrove Jersey Herd—Our present offering is: 5 young bulls and few females, among them being 1st, 2nd, 3rd and 4th prize winners at Toronto this year. Bred from producers and sired by richly-bred bulls.

ROBT. TUFTS & SON, Tweed P.O. & Sta.

Shropshire & Cotswold Sheep

SCOTCH SHORTHORNS and CLYDESDALES

Choice ram and ewe lambs. Also 50 shearing ewes for sale. Apply to

JOHN BRIGHT, Myrtle Station, Ontario.

FAIRVIEW SHROPSHIRE

I now offer:
 15 shearing ewes, bred to St. Louis Champion ram.
 15 shearing and 2-shear ewes, bred to other choice rams.
 This is a rare opportunity to get the progeny of the best rams at a World's Fair. Considering quality and values of common sheep. Extra good bargains are offered. Send for circular.

JOHN CAMPBELL,
 Fairview Farm, Woodville, Ont.

Farnham Oxford Downs

We are offering 70 ranch rams, 20 flock headers, some of them imported, being St. Louis winners. Also 50 yearling ewes and 50 ram and ewe lambs.

HENRY ARKELL & SON,
 Arkell, Ont.

SOUTHDOWNS

For sale: Babraham Pattern, two years old, the best ram lamb in the second-prize pen at the Royal, and first London Fair.

COLLIES

At stud, imported Wishaw Hero, \$10. Puppies out of dam of first and sweepstakes New York.

ROBERT McEWEN, Byron, Ontario.
DORSET HORN SHEEP and SCOTCH SHORTHORNS

The latter representing the Nonpareil, Miss Ramsden, Missie and Gloster families exclusively, and the former comprising more Royal winners and more St. Louis prizewinners than any other flock in the world. Stock for sale always on hand.

JOHN A. MCGILLIVRAY,
 North Toronto, Ontario.

BROAD LEA OXFORDS.

Present offerings are: Ram and ewe lambs of the low-down, blocky type. Also Yorkshire boar and sows five months old of improved bacon type. A number of nice Banded Plymouth Rock cockerels at reasonable prices. Correspondence promptly answered.

R. R. Stations: Mildmay, G. T. R., Teeswater, C.P.R.

W. H. ARKELL,
 Teeswater, Ont.

SHROPSHIRE RAMS & EWES from imported stock. Also **Buff Rock and White Wyandotte Fowls** for sale. For particulars apply to

J. W. GOSNELL & SON, Ridgeway, Ont.

Fistula and Poll Evil



Do yourself what horse doctors charge big prices for trying to do. Cure Fistula or Poll Evil in 15 to 30 days.

Fleming's
Fistula and Poll Evil Cure
is a wonder—guaranteed to cure any case—money back if it fails. No cutting—no scar. Leaves the horse sound and smooth. Free Book tells all about it—a good book for any horse owner to have. Write for it.

FLEMING BROS., Chemists,
45 Front Street, West, Toronto, Can.

IMPORTED
SHROPSHIRE RAMS AND EWES
From the Best Breeders.

Home-bred Rams and Ewes, both Shropshire and Cotswold, of the best breeding. Great sappy strong fellows that will breed well, and at prices that cannot be anything but satisfactory. Write me.

ROBERT MILLER, Stouffville, Ont.

SHROPSHIRE FOR SALE

A good bunch of lambs of both sexes. A few shearing ewes. The right type. Prices moderate. Come and see.

WM. D. DYER, - Columbus, Ont.
Brooklin Sta., G.T.R. Myrtle Sta., C.P.R.



SHROPSHIRE.

We are offering 15 shearing ewes, full of quality, sired by Marauder (Imp.). He won 2nd at Chicago, 1904. Also a limited number of ram and ewe lambs by same sire, and 30 useful breeding ewes, which we intend to make with our Chicago winner of 1904, Prolific (Imp.).

W. R. BOWMAN, - Mt. Forest.

Lincolns are Booming

We have only a few more ewe and ram lambs and breeding ewes for sale. We have seven choice young bulls, Scotch-topped, and a grand lot of heifers and young cows for sale at reasonable prices. Write or come and see us.

F. H. NEIL & SONS,
Telegraph & R.R. station, **LUCAN, ONT.**

Sheep Breeders' Associations.

American Shropshire Registry Association, the largest live-stock organization in the world. Hon. John Dryden, President, Toronto, Can. Address correspondence to MORTIMER LEYERLING, Secretary, Lafayette, Indiana.

100 Shropshires & Cotswolds 100

One hundred head for sale. Ten shearing rams, fifty ram lambs, and sixty shearing ewes. Rams are good enough to head any flock. The ewes are a choice lot and will be bred to imp. ram.

John Miller, - Brougham, Ont.

LEICESTERS

We have for sale some good Leicesters. I two-shear ram, shearing and some good ram lambs, two-shear ewes, shearing and ewe lambs, all bred from imp. stock.

DUNNET BROS., Clonbrassil, Ont.

Sheep and Cattle Labels

If you want to improve your flock, these labels will help you. Write for circular and sample.

F. G. JAMES,
Bowmanville, - Ontario

COTSWOLDS

Some good shearing ewes and ewe lambs, and a few choice ram lambs, right type, for sale. Prices moderate.

E. F. PARK, Burgessville, Ont.

Hampshire Downs

We have a few choice ram lambs for sale, from imp. stock. Correspondence invited.

FREEBORN BROS., Denfield Stn. and P.O.

SHROPSHIRE

Choice ram and ewe lambs for sale; also a few aged ewes.

GEO. HINDMARSH, Alisa Craig, Ont.

Leicester Sheep

Choice ram and ewe lambs; also a few yearlings for sale. For particulars write to **CHAS. F. MAW,** Milton Stn. and Tel. **Omagh P.O.**

Champion Dorsets

Dorset ewes in lamb; also ewe lambs for sale. Prices low, considering quality.

R. H. HARDING, Thorndale, Ont.

SHROPSHIRE

Chicely-bred ones at reasonable prices, some in show shape. White Wyandotte cockerels now ready. **W. D. MONKMAN, Bond Head, Ont.**

Oxford Down Sheep

Choice rams and ewes, any age, for sale. Reasonable. For particulars, apply to **PETER ARKELL & SONS,** Mer Hill Stock Farm, **Teesswater, Ont.**

TRADE TOPICS.

THE STORY OF A CUP OF COCOA.

To those whose palates appreciate the delicate flavor of a cup of cocoa, and who have tested and experienced its wholesome, nourishing qualities, the history of this cup, which "cheers, but not inebriates" (and this quotation is more applicable to cocoa than to tea, of which it was originally spoken), may not prove uninteresting. The cocoa plant, or cacao tree, was found native in Mexico, the Indies and those countries of South America in the region of the equator, but has since been cultivated in other tropical countries, but nowhere in the temperate zones, for the plant is a tender one and will not thrive in an exposed position. The chief plantations are found in Ceylon, where it took the place of coffee production to a large extent, in Northern Brazil, Trinidad and Venezuela, and in Western Africa. The credit for introducing it as a beverage to European nations is not easy to assign, some believing that Cortes, the Spanish general, and his followers brought it back from Mexico, and some saying that Columbus first brought it to the attention of Europeans. However that may be, the fact remains that it was introduced and speedily became a favorite and fashionable drink among the rich. A few figures will give you some idea of its advancement in popularity in the British Isles. In 1820, not more than 267,321 pounds were required to supply the demand; in 1880, the home consumption of cocoa was almost eleven million pounds, and in 1902, it had reached the enormous quantity of 45,643,784 pounds. The reason for this is the cheapness, wholesomeness, delicious flavor and nourishing rather than stimulating qualities which cocoa possesses. At one time it was much adulterated with venetian red, amber and peroxide of iron, and even brickdust was found in it. Now, however, the manufacturing of it is in the hands of large, well-established and honorable firms, such as Epps & Co., and the public can be sure that when buying cocoa it is cocoa they get.

The process from the planting of the seed to the filling of the cup with steaming, fragrant cocoa is a long one, requiring much patience and care. The tree in appearance is much like the apple tree, and often attains a height of twenty feet. After being transplanted from the nursery garden, it takes at least three years to bloom, and another two or three years before any fruit is produced. Its most productive years are from its twelfth to its sixtieth years, during which time it will produce from five to fifteen pounds of beans each year. When the pods containing the beans are sufficiently ripe, the harvest begins. The laborers have long bamboo poles, to one end of which a sharpened blade of iron has been fastened. With these, the pods are carefully cut off so as not to injure the tree. The pods are left on the ground until the next day, when they are gathered, cracked, and passed on to a group of women, who take out the beans with a kind of wooden spoon, and place them on a tray made out of a banana leaf. The beans are then transferred from the tray to baskets, carried to the cocoa-house, and deposited in specially-perforated bins. Here they are left to sweat, a process by which a sour liquid, a thin acetic acid, is drained off through the perforations, and in which great care is exercised because the flavor depends on the thoroughness with which this sweating is done. When this has been accomplished satisfactorily, the beans are dried, usually by the heat of the tropical sun, but on a few of the larger plantations artificial means of drying are now used. After drying for a day or two, the beans are put in bags for shipment to all parts of the world.

If you could go into the famous factory of Messrs. Epps & Co., England, to whom we are indebted for much of the information in this article, you would see what happens next. Thousands of these sacks are opened and winnowed and sifted and sorted till only the clean, good beans are left. These are put in hoppers, and by means of high-pressure steam are roasted to a certain degree, the process being watched by specially-experienced workmen, who can easily tell when the moment is right for the contents of the big drums to be passed on to the cooling chambers. The beans are now in a condition for "breaking down," when the shells are cracked and kernels or nibs released. The

waste matter is again screened, the nibs remaining are sorted and taken to the grinding-room. Here are huge horizontal rollers which crush the beans to a liquid mass, melting the "butter" which composes such a large proportion of the bean. The next process is to take out of this syrup-like substance the surplus oil, and this is done by large and powerful presses, which squeeze out the oil, leaving the compressed matter in the form of a dry cake, firm and hard. When this cake has cooled and dried, it is ground to a powder, put into tins or packets and is ready for use.

Messrs. H. Cargill & Son, Cargill, Ontario, report the following sales recently made from their noted Shorthorn herd: "The all-red bull, Golden Carol, calved September, 1904, to James A. Cochrane, of Hillhurst, Que., upon whom has fallen the mantle of the late Hon. Senator Cochrane, whose name is almost a synonym for Shorthorns, and who has contributed very largely to the making of Shorthorn history on this continent, and upon whom devolves the duty of keeping up the high standard of excellence hitherto enjoyed by this world-famous farm. Golden Carol is an excellent bull of the regulation Scotch type—thick, short-legged, of good quality and conformation. He was sired by Golden Drop Victor (Imp.), and out of Caroline 13th (Imp.), an extra good cow, sired by the Duthie-bred Missie bull, My Lord (73126), a grandson of Scottish Archer (59893), her dam by the Cruickshank bull, Cawdor (44506). To W. T. Wiley, of Tara, Ont., we shipped the fine roan heifer, Augusta C., sired by Lavender Star (Imp.), 81438, and out of Augusta 91st (Imp.), one of the good cows purchased at the sale of Inverquhomery, when the famous herd of Mr. Bruce was dispersed. This one should make a valuable breeding cow, as she is equipped with all the requisites. The sanny, thick, low-down white bull, Sunny Victor, goes to Wm. Mason & Son, Oshant, Ont., and we miss our guess if he does not develop into a good one. He is out of the Duthie-bred cow, Sunbeam (Imp.), and sired by our old bull, Golden Drop Victor (Imp.) (76780). The bull calf, Heatherman, we pride ourselves, is well named. The name sounds Scotch to us, and we are perfectly sure the bull is, not only because he looks it, being of regular Scotch pattern, viz., thick, deep, on short legs, with beautiful head and fine character; but because he could not be anything else and bred as he is. He is a Kiblean Beauty, the family which produced the famous 'White Heather,' and other good ones. Nineteen sires in his dam's pedigree are bred by A. Cruickshank, four by Wm. Duthie, three by J. D. Willis, one by Marr. His sire is the Duthie-bred Missie bull, Merchantman, whose sire was Lovat Champion (74948), dam Mistletoe 4th, by Scottish Archer (59893), granddam Missie 134, by William of Orange (50694), almost pure Cruickshank. This fellow goes to Jno Watt & Son, Salem, Ont., in whose very capable hands we hope to see him develop into what he promises at present, i. e., a first-class bull."

"AWL-U-WANT."—Our readers are informed through an advertisement in this issue of a new-patented sewing awl—the "Awl-U-Want." The immense value of this awl in the repairs to boots and shoes is now well known; and in the frequent repairs to bags, belts, straps, etc., it is the "Awl-U-Want." Threaded from the reel, which may be kept in one's pocket, the thread is supplied continuously. The great advantage gained being more apparent in sewing carpets, canvas, shop blinds, tarpaulins, etc. The needles are interchangeable, and extra ones can always be obtained, both stout and fine. It is sold with a straight and bent needle, and brass bobbin, with illustrated instructions. These instructions may be secured by writing to Chas. Parsons & Sons, 79 Front St., E., Toronto, sole agents for this article in Canada. They will be glad to advise any buyer where the "Awl-U-Want" can be bought in his vicinity.

Senator Edwards, of Rockland, Ont., has imported four yearling Hackney pony fillies and one yearling pony colt, selected from the stud of Sir Gilbert Greenall, Bart., of Warrington, England

OBSTINATE COUGHS AND COLDS.

**The Kind That Stick.
The Kind That Turn To
BRONCHITIS.
The Kind That End In
CONSUMPTION.**

Do not give a cold the chance to settle on your lungs, but on the first sign of it go to your druggist and get a bottle of

Dr. Wood's Norway Pine Syrup.

It cures Coughs, Colds, Bronchitis, Sore Throat, Pains in the Chest, Hoarseness, or any affection of the Throat or Lungs. Mrs. Goushaw, 42 Claremont Street, Toronto, writes: "I wish to thank you for the wonderful good Dr. Wood's Norway Pine Syrup has done for my husband and two children. It is a wonderful medicine, it is so healing and soothing to a distressing cough. We are never without a bottle of it in the house."

Don't accept a substitute for Dr. Wood's Norway Pine Syrup. It is put up in a yellow wrapper, three pine trees the trade mark, and price 25 cents, at all dealers.

W.W. CHAPMAN,
Secretary of the National Sheep Breeders' Association.
Secretary of the Kent or Romney Marsh Sheep Breeders' Association,
and late Secretary of the Southdown Sheep Society.

Pedigree Live Stock Agent, Exporter and Shipper. All kinds of registered stock personally selected and exported on commission; quotations given, and all enquiries answered.

Address: **MOWBAY HOUSE, Norfolk St. LONDON, W. C., ENGLAND.**
Cables—Sheepcote, London.

Linden Oxfords

A few good yearling rams still for sale, and a nice lot of ram lambs. Write, or come and see us.

R. J. HINE, - Dutton, Ont.

Lincoln Ewes

Bred to Imported Ram.
Also a few prizewinning yearling rams for sale.

In Shorthorns, Scotch Cows & Heifers.
J. T. GIBSON, Denfield, Ont.

Oxford Down Sheep, Shorthorn Cattle, Yorkshire Hogs.

Present offering: Lambs of either sex. For prices, etc., write to **John Cousins & Sons,** Buena Vista Farm, **Marrieston, Ont.**

GLENN CAIRN KENNELS offers for sale Collie Dogs, Oxford and Lincoln Sheep, at reasonable prices.
R. E. CLARKE, West Lorne, Ont.

SHROPSHIRE—We have for sale a number of choice ram lambs at reasonable prices. Also ewes and ewe lambs; also 4 young Shorthorn bulls, from 6 to 11 months old, and a few yearling heifers.

SELL BROS.,
"The Cedars" Stock Farm, Bradford, Ont.

NEWCASTLE HERD OF Tamworth Swine and Shorthorn Cattle

Still have a lot of beauties to offer in Tamworths of both sexes, from 3 months to 3 years old; a half-dozen March sows that will be bred in October and November. All for sale at moderate prices. Also four young Shorthorn bulls ready for service, and a half-dozen beautiful heifers.

COLWILL BROS., Newcastle, Ontario. TAMWORTHS & HOLSTEINS

Two boars sired by Colwill's Choice, sows bred and ready to breed, and a choice lot ready to wean. Pairs not akin. Also cows and calves of the deep milking strains. All at moderate prices. Write or call on **BERTRAM HOSKIN,** Grafton Sta., G.T.R. **The Gully P.O.**

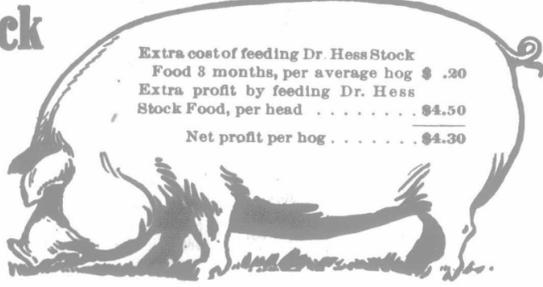
TAMWORTHS
2 fine boars fit for service; also a choice lot of both sexes, from 2 to 4 months old, of good breeding stock. Prices reasonable.
Glenairn Farm, **Jas. Dickson, Orono, Ont.**

Woodstock Herd of Berkshires.
Having purchased the herd of Wm. Wilkeson, Brampton, we offer boars fit for service, winners Toronto and Ottawa; sows in pig or ready to breed; a number of younger ones by imp. boars (both sexes), pairs not akin.

DOUGLAS THOMSON, Woodstock, Ont.

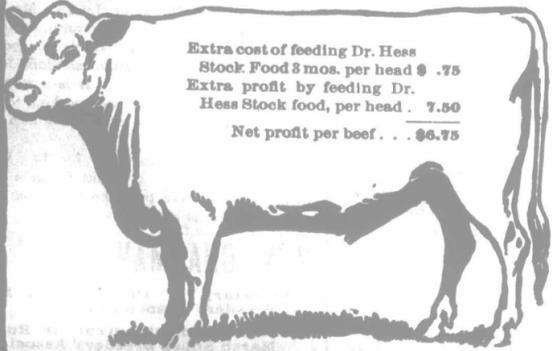
Keep Books on Your Stock

You would not run a bank account without keeping books. You ought not to feed stock without an accurate record of the cost of every pound of feed consumed, and the net profit per animal. You may be feeding some animals at a loss. A change of feed might turn the loss into gain. Some animals thrive better on one kind of ration than on another, and the record will tell. Again you ought to know the nutritive value of animal food and the price at which each food is profitable to feed. When corn is 60 cents a bushel it is more profitable to sell and substitute some other grains of equal nutritive value that are bringing a lower price. But after all the care and attention to such details it must be remembered that the whole profit of stock feeding depends upon the digestion. It is doubtful if more than 80 per cent. of the food is digested where so many other aids are given the animal system, but where medicinal tonics are added to assist nature, iron is supplied the blood, the astringents to expel the poisonous waste materials from the system and laxatives to regulate the bowels, the percent of food digested can be kept at the maximum. Such principles are incorporated into



Extra cost of feeding Dr. Hess Stock Food 8 months, per average hog \$.20
 Extra profit by feeding Dr. Hess Stock Food, per head \$4.50
 Net profit per hog \$4.30

DR. HESS STOCK FOOD



Extra cost of feeding Dr. Hess Stock Food 8 mos. per head \$.75
 Extra profit by feeding Dr. Hess Stock food, per head . . . 7.50
 Net profit per beef . . . \$6.75

the prescription of Dr. Hess (M.D., D.V.S.). It has the recommendation of the Veterinary Colleges, the Farm Papers, is recognized as a medicinal tonic and laxative by our own Government, and is sold on a written guarantee at

7¢ per pound in 100 lb. sacks; 25 lb. pail, \$2.00.
 Smaller quantities at slight advance. Duty paid.

A tablespoonful per day for the average hog. Less than a penny a day for horse, cow, or steer. If your dealer cannot supply you, we will.

Remember that from the 1st to the 10th of each month, Dr. Hess will furnish veterinary advice and prescriptions free if you will mention this paper, state what stock you have, also what stock food you have fed, and enclose two cents for reply. In every package of Dr. Hess Stock Food there is a little yellow card that entitles you to this free service at any time.

Dr. Hess Stock Book Free, if you will mention this paper, state how much stock you have and what kind of stock food you have used

DR. HESS & CLARK, Ashland, Ohio, U. S. A.

Also manufacturers of Dr. Hess Poultry Pan-a-co and Instant Louse Killer.

Instant Louse Killer Kills Lice

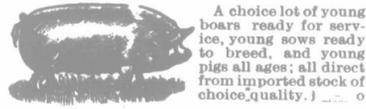
F. A. GARDNER'S SHORTHORNS.
 Prospect Place Stock Farm is the home of Mr. F. A. Gardner, Britannia, Peel Co., Ont., whose herd of Scotch Shorthorns, at the time of our visit, was in prime condition. They represent the Kilblean Beauty, Flora and Missie families, and are a high-class, choice lot. The present stock bull is Gold Mine =50342= (imp. in dam), sired by Sir James, by Lord Lynedoch, by Sittyton Pride, dam Bertha 5th (imp.), by the Duthie-bred Count Sunshine. He is a rich red, and one of exceptionally good quality, a very thick, even bull, and a high-class sire. One of the Kilblean Beauty cows is Scotch Thistle (imp.), a Marr-bred cow, sired by Prince Cruickshank, dam Scotch, by Merry Mason, grandam Touchstone Beauty, by Touchstone. The make-up of this cow is well nigh perfection, as is also a daughter of hers now breeding in the herd. There is also a thirteen-months-old son of hers, a roan, sired by Imp. Scottish Prince, a rare good one, fit to head any herd. Then there is a yearling bull and a dark roan bull calf, both out of Missie 49th, and got by Gold Mine, that are half-brothers to the first-prize two-year-old bull at the Dominion Exhibition, New Westminster, B. C., this year. They are the making of show bulls, and should prove ideal sires. Another yearling roan bull is out of Rose of Peel =29770=, and got by Scottish Lad =40956=, a son of Imp. Scotland's Fame. This is another thick, fleshy bull. In fact the above mentioned bulls are as nice a lot as we have seen for many a day, and from their rich breeding should prove useful sires. In heifers there are several: one a red two-year-old, the other a red one-year-old, both out of Tyrone Rose 49548, the elder got by McKay 4th, the other by Mina Champion, that are of the thick, heavy-fleshed, low-down, ideal type, in fact a pair of extra good ones. Then there is a yearling roan heifer, got by Scottish Lad, and out of Rose of Peel, and a white, ten-months-old heifer, by Bold Briton =20397=, dam Indian Lady 2nd =36371=. As intimated above, Mr. Gardner's offerings, which include the bulls and heifers, are all of a very desirable sort, and are likely to be soon picked up, hence the necessity of quick action if you want them. His post office is Britannia; his station, Brampton, G. T. R., or Streetsville, C. P. R., neither more than five miles distant.

Macdonald Maid.—"And is life really worth the living?"
 Mr.—"It all depends on the liver."
 [O. A. C. Review.]

HILLCREST HERD OF ENGLISH BERKSHIRES

For Sale: A lot of very choice young things of various ages. We prepay express charges and guarantee satisfaction. Enquiries promptly answered.
 Vine Stn., G. T. R., near Barrie. **JOHN LAHMER, Vine P.O., Ont.**

Large White Yorkshires



A choice lot of young boars ready for service, young sows ready to breed, and young pigs all ages; all direct from imported stock of choice quality.

H. J. DAVIS,
 Importer & Breeder of Shorthorns & Yorkshires
 C.P.R. and G.T.R. Woodstock, Ont.

SNEEGROVE BERKSHIRES

A number of large, good sows in farrow; also some choice young pigs for sale. Now is a good time to order. Our herd has won more first prizes at leading shows in Ontario than any other. Pigs of different ages for sale. Write for prices.

SNELL & LYONS, Sneegrove, Ont.

Oakdale Berkshires

Of the largest strains. Imported fresh from England. The produce of these and other noted winners for sale reasonable. Let me book your order for a pair or trio not skin.

L. E. MORGAN, Milliken Stn. and P. O.

Rosebank Herd of LARGE ENGLISH BERKSHIRES

Present offering: Choice stock from 6 weeks to 5 months old, sired by Concord Professor and Willow Lodge Crown 8th. Can supply pairs and trios not skin. Satisfaction guaranteed. Express prepaid.

JOHN BOYES, Jr., Churchill, Ont.

YORKSHIRES AND LEICESTERS

For Sale: Boars and sows, 6 weeks to 5 months old; ram and ewe lambs, of good quality; at moderate prices. Write

C. & J. GARRUTHERS, Cobourg, Ont.

POLAND-CHINAS

Two litters farrowed Oct. 19th; ready to ship Dec. 19th. Price, \$10, registered, crated and f.o.b. here. Order early, as supply is limited.

F. S. WETHERALL, Rushton Farm, Cookshire, Que.

LARGE ENGLISH BERKSHIRES

Young boars of good size and form, ready for use. Also Shorthorn calves and Shropshire shorthorn rams and ram lambs.

JOHN RACEY, Jr., Lennoxville, Que.

CHESTER WHITES

Good bacon type, and SHROP SHIRE SHEEP. Write for prices.

W. E. WRIGHT, Glenworth, Ont.

LARGE ENGLISH YORKSHIRES



Pigs of the most approved type of both sexes all ages, for sale at all times. We have more imported animals in our herd than all other breeders in Canada combined. We won more first prizes at the large shows this year than all other breeders combined. We won every first but one and all silver medals and Bacon prizes at Toronto and London, and at St. Louis we furnished all the first-prize hogs in the breeding classes except two; also supplied both champion and grand champions. Prices reasonable.

D. C. FLATT & SON, Millgrove, Ont.

ENGLISH BERKSHIRES

For Sale the Duchesses of Devonshire's Berkshire Herd. Winners of 102 awards in 1904, including champion against all breeds in carcass competition London Fat-stock Show. The breeding sows are sired by the champion boar, Baron Kitchener 5408. Polegate Decoy, Polegate Dame, Polegate Dawn—winners in England, Canada and United States—were exported from this herd. For prices and particulars apply to:

Compton Estate Office, Eastbourne, or to F. A. Walling, 7 Cavendish Cottages, Eastbourne, Sussex, England.

Large English Yorkshires and Berkshires

Of most approved type, imported and home-bred. A very choice lot of Yorkshire and Berkshire sows five months old, also a few good Yorkshire boars now fit for service. Our stock is giving the utmost satisfaction. We prepay express, furnish registered pedigree and guarantee satisfaction. Our motto: Quality and square dealing. Prices reasonable.

S. D. Crandall & Sons, Cherry Valley, Ont.

Glenburn Herd of YORKSHIRES

winners of gold medal three years in succession offers for sale until New Year's a number of fine young sows and boars, from 3 to 4 months old at \$12 each.

DAVID BARR, JR., Box 3, Renfrew, Ont.

YORKSHIRES

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QUESTIONS AND ANSWERS.

Miscellaneous.

WATER PIPES THROUGH FIRE-BED OF A COOKING RANGE

Is there a satisfactory system of heating a house by means of water pipes passing through the fire-bed of a coal cooking range? I have heard of it being used, and would like very much to know more of it. Can such a system be put in so as to heat a dwelling?

A CONSTANT READER.

Ans.—The above plan has been tried, but found unsatisfactory, as the "water front" is inadequate to supply heat for more than a very small room.

BERRY BUSHES.

I have a number of currants (red and black), also different kinds of berries, which I wish to remove. When would be the best time to do it, now or in spring? Some of the bushes are rather old. Would you advise dividing them or getting new ones?

G.

Ans.—Tear them out any time now when the ground is not frozen, pile them and burn at the first opportunity. We would advise setting a new plantation, preferably on fresh ground.

LITERATURE ON RAISING CHICKENS.

Where can I get some good literature on the best way of raising chickens?

F. W. B.

Ans.—In addition to what you find in the "Farmer's Advocate," you might apply to the Poultry Department of the Ontario Agricultural College, Guelph, and to the Experimental Farm Ottawa, for their publications covering this subject. An excellent illustrated work on the subject is Artificial Incubating and Brooding, which may be obtained through this office for 50 cents. An excellent general work on poultry is Poultry Craft, by John H. Robinson, price \$2, through this office. The latter is used as a textbook in the Ontario Agricultural College.

MUSTARD AND WILD OATS.

Is there any method of cleaning a heavy clay farm of wild mustard or herring and wild oats? Has spraying to kill herring been a success? How would it be to seed with red clover, cut first crop for hay, second for seed? Suppose I sow a field with barley next spring and seed with red clover, would the herring seed that would fall from barley crop germinate and die, or would it come to maturity and ripen the season that clover is being taken off?

X.

Ans.—These are both very noxious weeds, as the seeds of either may be buried for years and germinate when brought to the surface. The best way of dealing with them is to use hoed crops freely and cultivate thoroughly to germinate and kill all the weed seeds possible. For wild oats, it would be well to eliminate spring cereal crops from the rotation, although an early-maturing variety of barley may be sown (seeded with clover as suggested) and cut on the green side, before the wild oats have gone to seed. A better way would be to sow an early mixed grain crop and cut for green feed. Spray the barley or mixed grain about the time the mustard is coming into bloom with a solution of 10 lbs. bluestone dissolved in 40 to 45 gallons of water, prepared according to directions repeatedly given in these columns. Articles on the subject of bluestone spraying for mustard appeared in the 1905 issues of June 15th, July 13th and October 5th. Spraying, if done thoroughly and accompanied with proper cultural methods, is an indisputably effective remedy for herring or common wild mustard (Brassica sinapistrum), though not so effective for the other kinds of mustard. If necessary to do so, make a second spraying the first season, or else pull any plants unkilld so as to prevent seeding. An average mustard plant will produce 15,000 seeds. After taking a crop of clover, plow in August; harrow and cultivate thoroughly till October, then rib up with a double moldboard plow, and next year plant a hoed crop. Cultivate thoroughly and follow with another crop of barley or mixed grain for green feed. Spray the same as with the previous grain crop; take another crop of clover hay from the seeding, then another hoed crop. Six years of this treatment should go far to rid a field of these two pests. Since spraying has come into vogue, mustard is easier to deal with than wild oats.

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We make few claims of what Liquozone will do. And no testimonials are published to show what it has done. We prefer that each sick one should learn its power by a test. That is the quickest way to convince you.

So we offer to buy the first bottle and give it to you to try. Compare it with common remedies; see how much more it does. Don't cling to the old treatments blindly. The scores of diseases which are due to germs call for a germicide. Please learn what Liquozone can do.

What Liquozone Is.

The virtues of Liquozone are derived solely from gases. The formula is sent to each user. The process of making requires large apparatus, and from 8 to 14 days' time. It is directed by chemists of the highest class. The object is to so fix and combine the gases as to carry into the system a powerful tonic-germicide.

Contact with Liquozone kills any form of disease germ, because germs are of vegetable origin. Yet to the body Liquozone is not only harmless, but helpful in the extreme. This is its main distinction. Common germicides are poison when taken internally. That is why medicine has been so helpless in a germ disease. Liquozone is exhilarating, vitalizing, purifying; yet no disease germ can exist in it.

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| Coughs—Colds | Malaria—Neuralgia |
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| Cancer—Catarrh | Scrofula—Syphilis |
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My disease is

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W 414. Give full address—write plainly.

Note that this offer applies to new users only. Any physician or hospital not yet using Liquozone, will be gladly supplied for a test.

Shallow vs. Deep Plowing.

(Ottawa Correspondence.)

Much has been said regarding the advisability of shallow as opposed to deep plowing. The shallow system has had among its advocates some of the leading agriculturists of the country, including among the number some of the professors at a number of the prominent educational institutions. In connection with this question, the result of an experiment, conducted at the experimental farm this season, will be of interest. Two acres, which had been plowed five inches deep, yielded 24 tons 411 lbs., and 26 tons 160 lbs. of roots respectively. Another two acres, plowed seven inches deep, yielded 30 tons 740 lbs., and 29 tons 860 lbs. of roots respectively; that is, one acre yielded 30 tons 740 lbs., and the other 29 tons 860 lbs., or about five tons per acre more than the field that was shallow plowed. This experiment would seem to indicate that for roots at least, deep plowing is to be preferred.

A Good Year in Lincoln County.

The season of 1905 has been a very busy one for the farmers. All the crops have been good, and the tiller of the soil has been well repaid for his labor. Wheat, oats and barley have yielded splendidly in most parts of the country. The root crop is not up to former years. Potatoes in some parts of the country are almost a failure, while in some parts they are quite good. The continued wet weather has delayed some branches of work to a certain extent, but will be a help in other ways no doubt.

Fall plowing is about finished, and a great deal has been done. Farmers are raising more spring grains and less wheat than in former years, as they think wheat at the prices that it has been for a few years does not pay as well as spring grain. An effort is being put forth to improve all lines of live stock. Cattle and hogs are a fairly good price, and quite a number are raised. Sheep are in good demand. Common grade breeding ewes range from \$7.50 to \$8.50 each. The summer has been fine; no severe storms to speak of. Fall pasture is good, and stock is coming into winter quarters looking well. J. E. N.

Corn and Roots Yielded Well.

(Ottawa Correspondence.)

All the crops have been harvested at the Central Experimental Farm, and in all lines the yields were excellent. The total yield of roots was 848 tons 1,775 lbs. This crop was grown on about thirteen acres, or, in other words, the yield was over 25 tons per acre. The total yield of corn was 736 tons, grown on about 40 acres. The varieties grown were the Longfellow, Selected Leaning and Early Mastodon. On one ten-acre field that had grown a crop of grain in 1904, the yield of corn this year was 181 tons 1,840 pounds. On another ten-acre field, which was a meadow in 1904, the yield of corn this year was 199 tons 1,915 lbs. This would seem to indicate that corn does better on sod than on stubble.

Many farmers in Eastern Ontario are not growing as much corn as they were a few years ago, and in some cases silos have been abandoned. Intelligent agriculturists look upon this as a mistake, as they realize that corn is one of the most profitable crops that can be grown.

To ascertain whether a soil is deficient in lime, take a fair representative sample of the soil, dry and crush it. Then put a couple of ounces into a tumbler with a little water so that it forms a thin paste. To this add two ounces of hydrochloric acid, which can be bought cheaply at any chemist's. If the mixture effervesces quickly, it is an indication that lime is not deficient. If there is scarcely any effervescence, the soil may be characterized as poor in lime. If the result of the experiment is doubtful, send a sample of the soil to an agricultural chemist, who should give definite information for a small fee. To get a representative sample of soil, take samples from several parts of the field, but not near the edges, to a depth of 6 inches to 9 inches, and mix the different lots well together.

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Weak Men in every County and Town throughout the Broad Dominion Restored to Robust Manhood by the use of Dr. McLaughlin's Electric Belt.

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Men with small, flabby muscles, thin-chested, dull-eyed, short of breath, without endurance, courage, ambition, sand or grit in their make-up, are WEAK MEN. If they were not born weak, I can make physical giants of them.

HERE IS MORE PROOF OF MY CLAIMS.

- J. LARGESS, Box 53, Vankleek Hill, Ont.,** reports: "The lameness in my back is all gone, the varicocele is better, and I am getting better health generally, and have gained a good deal in weight."
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Where there is any physical constitution to work on my treatment will develop perfect manhood. I will take the slightest spark of manly vigor and fan it into a flame which will encompass the whole structure and charge every nerve and muscle in the body with the vigor of youth.

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JAS. S. BRYSON, Maple Creek, Assa., expresses his gratitude by saying: "Your Belt has done me a world of good. I would not be without it if it cost double the price which you ask."
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