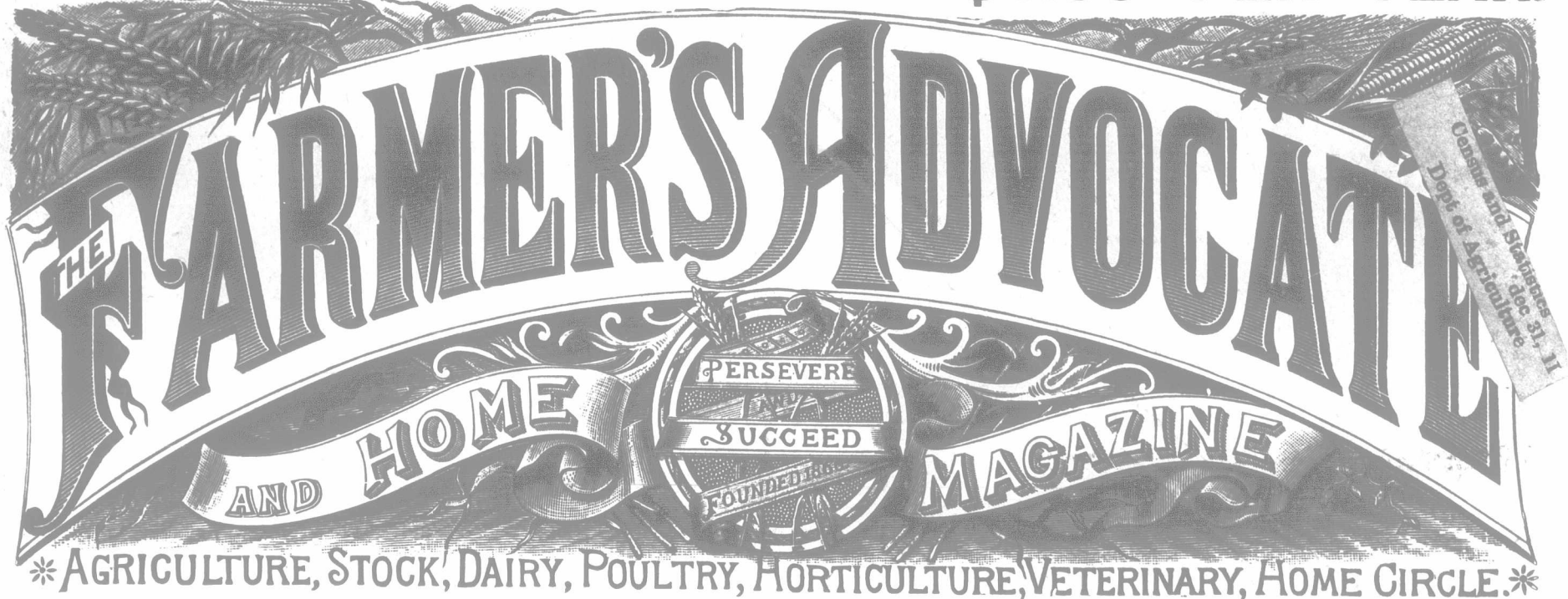


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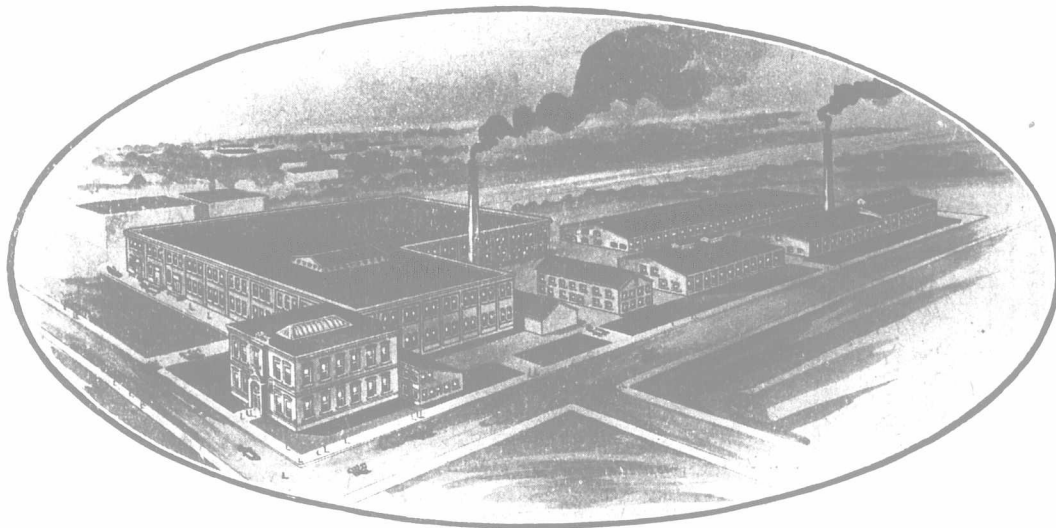


Vol. XLVI.

LONDON, ONTARIO, NOVEMBER 23, 1911.

No. 1000

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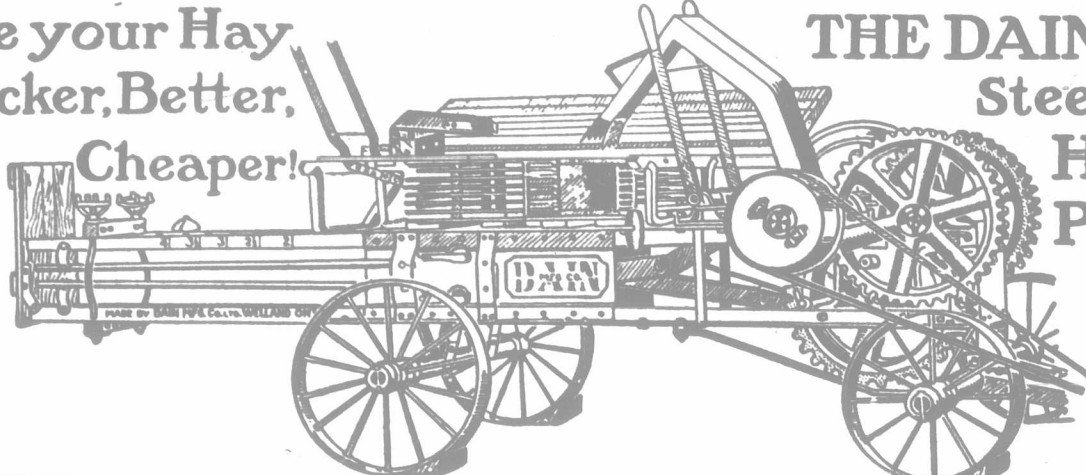
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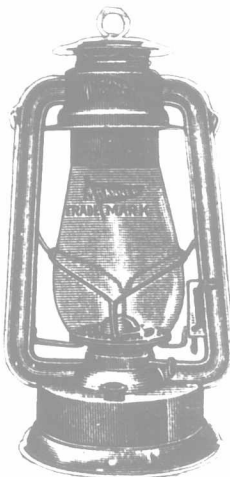
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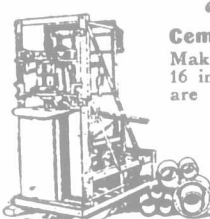
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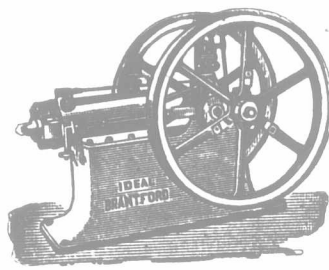


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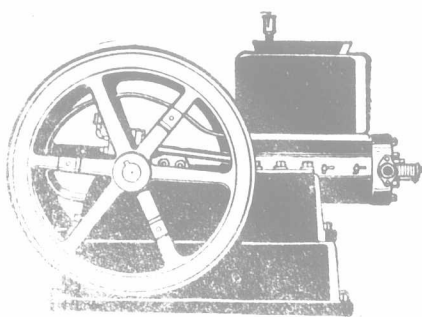
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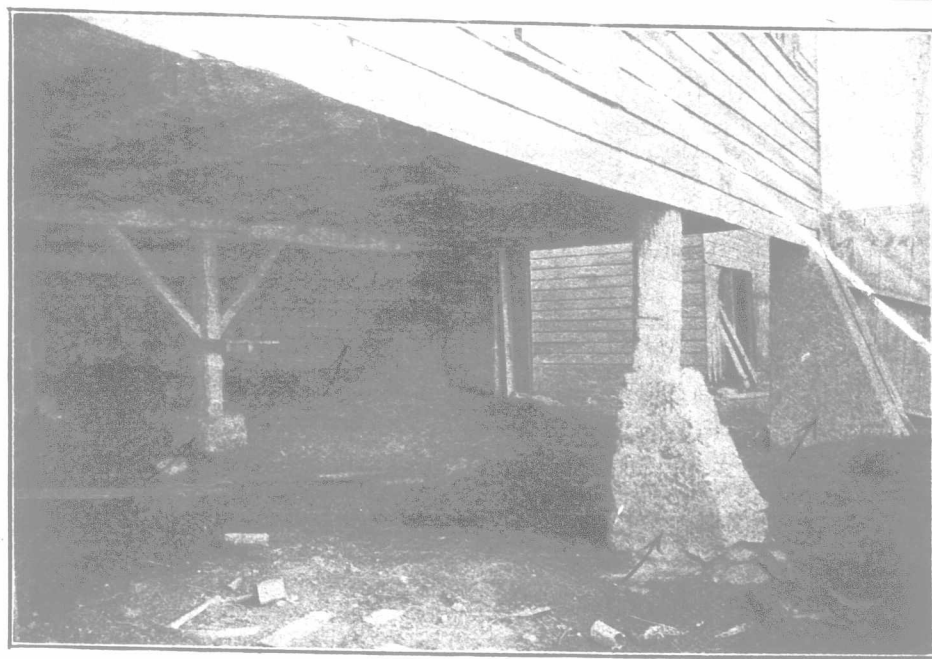
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Repairing a Barn Foundation.
Page 12, from "What the Farmer Can Do with Concrete."

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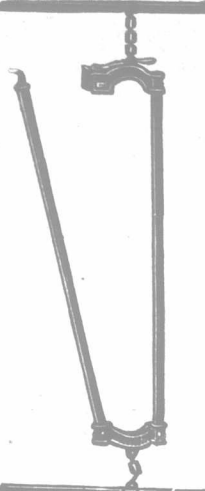
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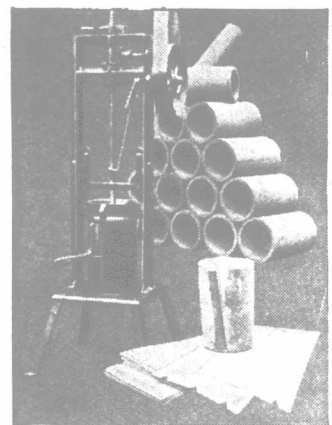


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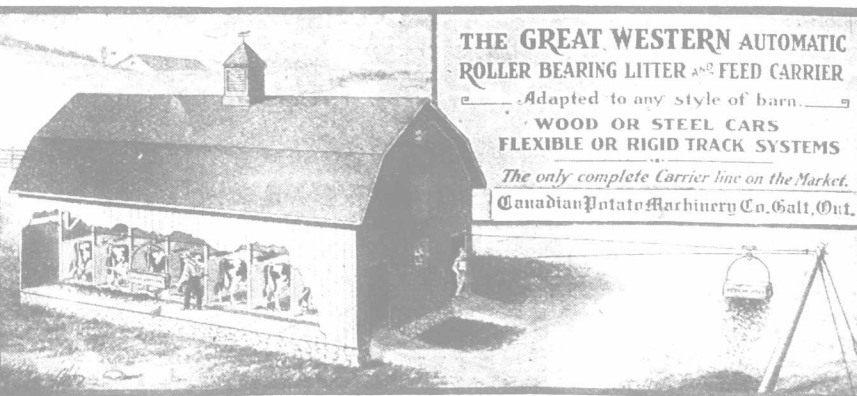
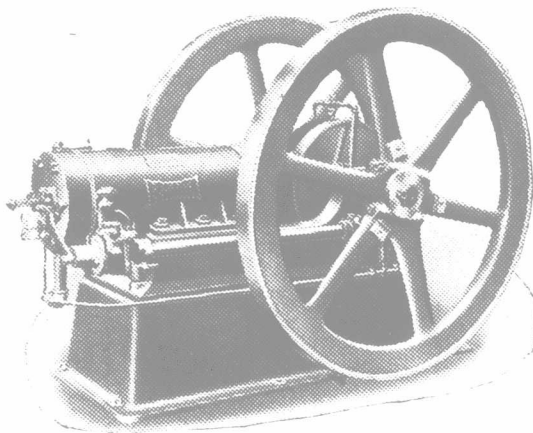
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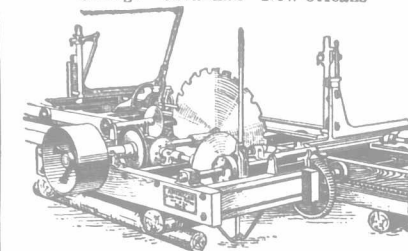
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Vol. XLVI.

LONDON, ONTARIO, NOVEMBER 23, 1911

No. 1000

EDITORIAL.

The land should be made to produce live stock, and the crops to feed them. There is no better method of insuring a full crop from the soil than by feeding animals on that soil. Are you going to sell your feed this winter, or will you feed it on your farm? Feed prices are high, but robbing the soil is poor economy.

There can be no doubt that the stock farmer must look for his profit to the manure heap. In a year like the present, much larger cash return could be obtained from the sale of grain and hay than from the conversion of these into milk at a cent and a quarter a pound, or meat at six cents. But the inevitable fact stares one in the face, that such a policy must eventuate in diminished yields and unprofitable cropping. The difference between profitable and unprofitable cropping represents the value of manure. That value, calculated on a ton basis, must be high. Under ordinary Eastern conditions, manure at a dollar a ton in the field is reckoned too low.

An esteemed correspondent, in a letter incidentally commending the suggestions of the article in last week's issue of "The Farmer's Advocate," regarding the regeneration of the Dominion Department of Agriculture, favors the gradual employment of more specialists on the staff of the Experimental Farms in connection with the work of crop and cultural methods. The advantage of specializing on some one grain, he points out, is illustrated by the success of Dr. Chas. E. Saunders in producing the Marquis spring wheat, "which," he adds, "is worth more to Canada than all the salary he will ever receive," accomplished by concentrating his efforts on the improvement of wheat for Canadian soil and climate. The wheat in question is a beardless variety, very much like Red Fife, but earlier in ripening, producing flour of the same excellent quality, and producing large crops. The kernels are smaller than Red Fife. It is the result of a cross of a wheat procured from India and Red Fife.

It is said that there never was a time when Canada's agriculture was so progressive and on such a firm basis as it is at present. It is true, however, that there never was a time when other enterprises were more progressive than during the first decade of the twentieth century. Is agriculture keeping pace with the vast strides being made by commercial enterprises? Are all things being done which might be done to further the calling in which the major portion of our population is engaged? There never was a time in the history of the world when larger returns could be made from the farms of the country than at the present. There never was a time when honest endeavor, coupled with a scientific and practical knowledge of the business, causing intelligent application of approved principles, yielded more handsome returns than at the present. Agriculture is not dead—far from it. Yet, there are many places in which much work could be done to promote the interests of farming communities. Our Governments should realize that, in furthering the interests of the agriculturists, they are doing good to the most people, and at the same time to the people who form the backbone of our country.

Greater Agricultural Advancement Possible.

WHY NOT A DISTRICT REPRESENTATIVE IN EVERY COUNTY IN ONTARIO?

There are at the present time, in eighteen of the counties of the Province of Ontario, District Offices of the Ontario Department of Agriculture, and during the summer months some three or four of the northern districts were favored with the services of a Representative. The men in charge of these offices are all graduates of the Ontario Agricultural College, and men who, previous to their scientific training, have had a more or less wide experience in practical agriculture. These men are, as Dr. Creelman, President of the Ontario Agricultural College very aptly terms them, real "Doctors of Agriculture." They, with their assistants, who also are scientifically trained, practical men, are prepared to render first aid and permanent cures in some of the prevalent ills from which agriculture suffers. Dr. Creelman also compares the changing of the heads of these offices with the changing of the family physician. Everyone knows that a medical man is helped very materially in his diagnosis, treatment and prognosis of an illness if he has an intimate acquaintance with the condition of the vital organs of the body of his patient, such an acquaintance resulting from years of the practice of his profession in the family of the ailing subject. Just so with the Agricultural Representative. He opens an office in a small town in the country. He is in the best position to study the condition of everything which pertains to agriculture in that county. He is on the spot, and should know what is needed. He grows up with the work and teaches the application of science in practice. He aids in curing sour and wet soils by inducing the owners to underdrain. He can make himself a strong factor in successfully combating the various insects and diseases of the different fruit trees by advocating thorough spraying, which restores the trees to health and vigor, and the fruit borne by them is free from blemishes. He can advance up-to-date methods of weed eradication of much worry and labor. He is a recognized authority on the best methods in all agriculture, and instills into the youth of his district a love for farm work and a desire to obtain all the scientific information they can, in order that they may get the most out of life financially and, better yet, out of life itself. It is, therefore, important that a man, after becoming thoroughly conversant with a district, understanding its needs and knowing the people, should be retained in that district, even though a little more salary be required to hold him.

The Agricultural Representative may be ever so ready to help those engaged in agriculture in his district, but his work will achieve little if he does not secure the co-operation of the people. The real work is, after all, done by the men on the farms, but, in aiding in the education of these men, the Agricultural Representative will in time see the results of his labors, provided the people make the best use of their opportunity and act upon the useful suggestions which he is in a position to throw out from time to time. To make a success of the work, the Representative must be a live, energetic man, not afraid of work, one who believes in agriculture, and one who is ready to devote his life to it.

There are in our fair Province nearly fifty counties, every one of which is of great agricultural importance to the Province and to the Dominion.

When we look at the good work being done in the counties already boasting of an Agricultural Representative, and when we know that they form only a trifle over a third of the counties in the Province, we wonder why the work is not extended more rapidly. There is no reason why each and every county and district which goes to make up this great agricultural Province should not have one, ay, even more than one of these men, for the work is a great work, and a work which demands the attention of the best of our agricultural brains.

Education is one great need of humanity, and the rural population is just as deserving of attention in this direction as are the urban business men. The one best method of educating is by practical demonstration. These men do that. Every county is in need of the information which these men can distribute. It will cost a little to carry on the work, but the cost is not large compared with the increased returns from the farms which will be the ultimate outcome of sound agricultural education. Anything of real value cannot be had for nothing. The best horse, the best machine, in fact the best article of any description, is usually the most economical in the long run, even if its initial cost is high. These men are the best graduates of the best agricultural college, and they will do the best work in the interests of the communities in which they are placed that can be hoped to be done. Let us hope, then, that the time will soon come when every county in Ontario will be able to say, "We have a scientific agriculturist in our county town who is doing great work in the advancement of our cause. He is filled with a contagious enthusiasm, and by his untiring efforts is proving a boon to the county's agriculture."

The Terror of Dust.

That "The Farmer's Advocate" was well within the mark some time ago in commenting upon the annoyance and injury arising from automobile dust in the summer season, is forcibly brought to mind by a recent article in the New York Independent. As the speed of the cars increases, the road filth is ground and caught up, till the dust-laden air is not only disagreeable to breathe, but positively dangerous, being flung over roadside, gardens, and into houses. "One who has no personal knowledge of the danger," says the Independent, "will be astonished at an exhibition of common road dust through spectroscopic analysis. Mineral and vegetable poisons rival each other. The dust-laden air, at five feet above the roadway, in a dust storm, contains, we are told, 200,000 micro-organisms to every ten liters. One thousand horses, in every working day of eight hours, deposit ten tons of manure and five hundred gallons of urine. These substances constitute only a fraction of the poisonous fouling of highway dust, a considerable part of which is picked up by the flying wheels and scattered over the gardens and door-yards. It is estimated that, taking one hundred dry days in a year, 50,000,000 tons of material are thus swept out of the streets and placed where most of it is not wanted."

So bad has the nuisance become that, if some effective measures are not taken for the making of dustless roads or the abatement of the automobile evil, householders will be forced to build further back from the roads and streets and cultivate the growth of lofty, dust-proof hedges to protect their homes.

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IN THE DOMINION.

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Agents for "The Farmer's Advocate and Home Journal,"
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LONDON, CANADA.

City, Heal Thyself.

Again and again, in the press and on the platform, the country is commended as being the source of supply for infusions of new blood to replenish the depleted life of the cities. The industry of the farm is suffering from this perennial drain, and is it not about time the cities were doing something more for the purification of their own conditions and the regeneration of their own life? One of these days someone will call a halt to shutting out sunlight and air with skyscrapers, the huddling of people together in "flats" on crowded streets, and in the mad race of bonusing huge establishments in which thousands of hands are employed.

HORSES.

Don't forget that the horse just in from the pasture is in need of regular exercise; so, also, and even more so, is the horse which has been used to regular work during the summer and is now enjoying the winter rest.

Get the old horse's teeth examined. He is now forced to subsist on dry feed, which is more difficult to masticate than the green fodder, and unless the horse's teeth are kept filed even, there is a likelihood that he will not thrive very well.

When horses cannot be protected from the cold, raw winter weather, they should under no consideration be clipped in the fall. It is cruel to deprive an animal of nature's protective coat, and not furnish him with some artificial means of keeping up the necessary body heat.

The horse that is at hard work should get his largest feed at night. He then has more time to eat it, and while his body is at rest his digestive organs are given an opportunity to do their best work. Fill the mangers when feeding up for the night.

The horse's stomach is small. Owing to this, care must be taken in supplying hay, water and grain, that they be given in the best possible order. It has been shown by investigators that the horse's stomach fills and empties several times during the partaking of a large meal. The material first taken is quickly crowded on into the intestines. From this, the logical order of feeding and watering appears to be water first, roughage next, and the concentrate material last, in order that it be acted upon to the fullest extent by the digestive juices of the stomach.

The use of the outdoor blanket is as important as the use of the stable blanket. If the horse is allowed to stand outdoors either for a short or for a long time, he should be well blanketed. If one is going to stop but a short time, the temptation is strong not to blanket the animal. The horse cools off rapidly and may chill, so that it is best to blanket, if only for a moment. Again, in the spring, when the weather is fair, one is likely to think that no ill will result from leaving the animal unblanketed; and yet he may chill as before. It is best, on stopping the animal, to see that he is well protected.—[M. W. Harper, in Manual of Farm Animals.

Abortion in Mares.

A subscriber asks for the causes and treatment for abortion in mares. He also asks if bleeding from the jugular vein, the injection of anti-abortion serum, and the giving of a few drops of carbolic acid in the food will prevent the accident?

Abortion is of two kinds, viz., sporadic or accidental, and infectious or contagious. The infectious form is not uncommon in cows, occasionally seen in the ewes, but very rarely occurs in mares. Hence, we will confine our remarks to accidental abortion. Abortion, or immature birth, may be said to occur when the foetus has not reached that stage of development which will enable it to live external to the parent, but when the foetus is expelled before full term. Yet, with all the organs sufficiently developed to enable it to live at least for a time, it is called premature birth. In the first case, the foetus is either dead when born, or dies soon afterwards; while, in the second, it may be weakly and immature, and succumb after a variable period, or it may continue to live.

The causes of accidental abortion are many, some evident, and some obscure. Very slight and often unnoticed causes produce it. In a large percentage of the cases the causes have been unnoticed, and it is not possible to tell exactly what caused them. Atmospheric influences, bad weather or irregular seasons may cause it. Cold suddenly applied to the skin, in some cases, by causing a contraction of both voluntary and involuntary muscles, is by no means an unknown cause. Hence a sudden change of weather, from hot to cold, is sometimes followed by miscarriages in females exposed of it. Food of bad quality, indigestible, or containing injurious ingredients, is dangerous. After unfavorable seasons for harvesting foods, abortions are more numerous than when the weather has been favorable. Frozen food or water, when taken in large quantities, especially when the organs of digestion are empty, is productive of abortion. Food or herbage covered with snow or frost may produce like effects. Putrid or dirty water may be the exciting cause of the accident. Ergotized grasses or grain have often caused widespread losses from this trouble. Drastic purgatives, as large doses of aloes, have a tendency in the same way. Excessive muscular exertion (especially following a period of rest), as drawing heavy loads, plunging through deep snow, long-continued fast driving, etc., is very liable to produce it. Work under the saddle, especially if spurs are used, may, by causing violent contraction of the abdominal muscles, be followed or accompanied by contraction of the uterine walls and expulsion of its contents; so may slipping and falling, or being cast for an operation or other purposes, give the same results. Contusions or pressure upon the abdomen by kicks, blows, falls, squeezing through narrow doorways or passages; long railway or steamboat travelling, especially if standing in constricted stalls; blows, shocks; keeping mares standing in stalls with inclined floors; ascending and descending tramways, etc., are all exciting causes. Excitement, fear, sudden surprise, anger, etc., are also causes. Abortion has been noticed to follow heavy thunder. Access to the male has also been responsible for miscarriage. Exploration per vagina by an expert, in order to ascertain whether the mare was in foal, has been followed by abortion; so, also, have operations of different kinds. Obnoxious odors are said to operate. It is not uncommon for abortion to occur after the mare has been in the vicinity of a slaughter-house or other places where she has come in contact with fresh-drawn blood. In these cases, the color of the blood is cited as the cause. If odors cause

abortion, it must be from some influence they have upon the sympathetic system of nerves, causing a contraction of the uterine walls. Very lean or very fat animals are prone to abort. In some mares, from causes not understood, there appears to be a special tendency to abort, and in such, a very trifling cause, often no appreciable cause, will induce the accident; while other mares, although exposed to the influences apparently of most powerful causes, will not succumb. This predisposition cannot be recognized in an animal, and it often disappears with age. Many diseases, as influenza, bronchitis, pneumonia, or other diseases which induce coughing or bloating, indigestion, enteritis, or other acute diseases of the digestive organs, are sometimes followed by abortion. It will be seen that there are so many conditions, accidents or diseases which may become the exciting causes of abortion that it is not wonderful that the accident frequently occurs, when the owner or attendant is at a loss to find the cause. Mares readily acquire the habit of aborting, and, after having once suffered from accidental abortion, will abort regularly at about the same period of gestation at which the first accident occurred.

Treatment.—The accident usually occurs without well marked premonitory symptoms, hence treatment cannot be adopted. In other cases, especially when pregnancy is well advanced, the usual symptoms of approaching parturition, viz., the abdomen becoming more pendulous, a swelling of the lips of the vulva and enlargement of the mammae and teats, a tendency to seek solitude, and uneasiness, are more or less marked. When labor pains become well marked, the water bag may become apparent through the lips of the vulva. If these symptoms be noticed, and the foetus still living (which fact is often impossible to determine), it is possible the accident may be averted. The mare should be placed in a partially-darkened, comfortable box stall, her excitability allayed by petting, etc., by her usual attendant. If the water-bag is apparent, but not ruptured, it should be gently pressed back, and she should be given a large dose of laudanum (from two to three ounces, according to size) in a little cold water, as a drench. Hot cloths placed over the loins appear to soothe and quiet. The dose of laudanum may be repeated every two to three hours, until the symptoms disappear, or at least until three or four doses have been given. If the water-bag be ruptured, the accident is imminent; it is the duty of the attendant to assist delivery, if necessary. If successful in averting the accident, the mare should be kept very quiet for a few days, and be fed lightly on easily digested and laxative food. Mares that have acquired the habit should be kept alone and very quiet and lightly fed on laxative food for two or three weeks before and after the period at which they usually abort.

As to the treatments suggested by the inquirer, of course, bleeding must not be practiced, as it is an exciting cause, rather than a preventive. The injection of anti-abortion serum and the administration of carbolic acid are recommended in the treatment of infective abortion, but would have no beneficial action in the accidental form.

"WHIP."

LIVE STOCK.

The cattle-feeder has two purposes in fattening cattle: He desires to increase the weight of the animals, and at the same time improve their condition from a butcher's viewpoint, by adding a larger percentage of fat to the carcass.

From experiments carried on at the Nebraska Experiment Station in growing feed and steers in Western Nebraska, it was found that, in order that cattle pay for their winter feed, it is necessary that the price should be approximately one dollar per hundred pounds more in the spring than in the preceding fall.

It is necessary that the cattle be fattened as rapidly as possible. Experiments have proven that, the longer the feeding period, the more expensive the gains. The most profitable ration is, therefore, that combination of feeds which will produce the highest degree of finish in the shortest time.

Cattle feeders realize that stall feeding can only be successful from a financial viewpoint when the animals are fed a very small or even a minimum grain ration, together with some form of highly palatable roughage which will take the place of grass. Good corn silage, well-cured clover hay and a few roots make very satisfactory substitutes for grass, and in experiments carried on at the Virginia Experiment Station in the feeding of upwards of four hundred cattle, silage showed a material advantage over all other forms of roughage used in the experiments. Only a moderate

amount of dry roughage was found necessary when fed in conjunction with silage to overcome its laxative tendencies and keep the animals in good condition and making uniform gains.

In the feeding of hogs, where soaked feed forms the main portion of the ration, care must be taken that too much water is not used. Pigs compelled to eat food containing too high a percentage of water will not do as well, especially in the cold weather, as if only the required amount of moisture is present in their diet. It will take considerable of the energy derived from the food to raise the cold water to the body temperature, and, besides, an over supply of moisture is not conducive to the most thorough digestion of the solids in the food. In soaking ground feed, it is important that the mixture be made about the consistency of a thick porridge, and that it be soaked about twelve hours before feeding. This will be found more palatable, and is of higher feeding value than if the meal is fed in the same quantity, but in a thinner, more sloppy condition.

The value of turnips for the winter feeding of sheep was shown by an experiment carried on in England, and cited by "Shepherd Boy," where a number of these were fed on oil meal, clover hay and turnips, while others were fed on oil meal and clover hay, without the addition of succulent roots. In the same time, the sheep receiving the roots made gains of forty-two pounds per head, while those getting the dry food alone made gains of only twenty-six pounds per head. In fattening sheep, succulent food is necessary, if the greatest possible gains are to be expected. Turnips are much relished by this class of stock, and can be safely fed in reasonable quantity to the breeding stock, as well as to the market classes. Care must be taken, in feeding pregnant ewes, that they do not get too large a quantity of roots, as they tend to produce an overlarge and flabby condition of the fetus, often causing difficult parturition and weak lambs at birth.

All domestic animals, whether the milch cow or the fattening steer, should have a reasonable amount of exercise under comfortable conditions. Little sympathy should be shown towards the modern fad of tying cows by their heads in one spot for five or six months, under the plea that exercise is work, and work costs food. The statement had better be in accordance with the experience of all time, that exercise is health and vigor, and that food is well used in maintaining these. The cow is more than a machine; she is a sentient being, susceptible to many of the influences which are essential to the physical welfare of the human species. Let no one take this opinion as an excuse for the cruel and wasteful exposure of farm animals to inclement weather, which is so often observed, for this is simply a violation of the laws of kindness and economy in the other direction—Jordan's "Feeding of Animals."

Silage is one of the cheapest roughages for cattle-feeding. In experiments in feeding stockers at the Virginia Experiment Station, with the silage valued at \$2.00 per ton, the cattle fed silage made a pound of gain for 7.21 cents, those fed silage and stover for 7.15 cents, those receiving stover alone for 42.62 cents, and those receiving hay alone for 62.47 cents. It is thus shown that it cost almost seven times as much to make a pound of gain where hay composed the ration as where silage was fed, and about six times as much where stover was fed as where silage or silage and stover were fed. The authors of the results of these experiments commented upon them thus: "These are facts worth considering, and should bear fruit that would change the practice of feeding stockers on many farms where silos may be erected at a moderate cost, and feed preserved with less waste than is usually the case." Undoubtedly, silage is the most economical roughage for cattle-feeding. Roughage is not too plentiful on many farms this winter, but those who rely upon silage to furnish the major portion of this material are far better off than the feeders who have no silo. This should warrant the erection of a number of silos next season.

Best Paper Printed.

Enclosed find remittance covering my renewal and a year's subscription for one new subscriber. We could not do without "The Farmer's Advocate" if it cost twice as much, as my family look forward to its coming each week. We consider it the best paper printed on agriculture, with a lot of good reading for the children. Hope that you have a good crop on "The Farmer's Advocate" farm this year.
J. BYRON KAYE.
M. Shaka, Ont.

Our Scottish Letter.

Winter presses hard upon a phenomenally warm and dry summer and autumn. October is not yet out, but we have had several plain hints that winter has begun. To-day (28th) we have had frost and fog, and the cold is quite severe. Seeing that little more than a month has passed since we were not disposed to wear any more clothes than respectability rendered imperative, we put up badly with the present conditions. Several depressing facts are present with us. A fortnight ago, Andrew Mitchell, formerly of Barcheskie, one of the best-known men in the Clydesdale and Ayrshire world, died. He had an illness which began in February last, and for several months there was no hope of his recovery. He had almost completed his fifty-second year, his birthday being Hallowe'en, or 31st October. Mr. Mitchell was a general favorite. He was popular with all classes, and was as much at home in the hunting field as in the ring among Clydesdales or Ayrshires. He did a large export trade in pedigree Ayrshires, and shipped extensively not only to Canada, the United States, Sweden and Finland, but also to South Africa and Japan. He had the bon homie which awoke confidence in foreign and colonial buyers, and was undoubtedly a valued asset in the Ayrshire world. Quite a number of notable men in the agricultural world are at present in ill-health, and generally, in spite of fine weather, most of us are inclined to be downhearted.

CABINET CHANGES AND AGRICULTURAL LEGISLATION.

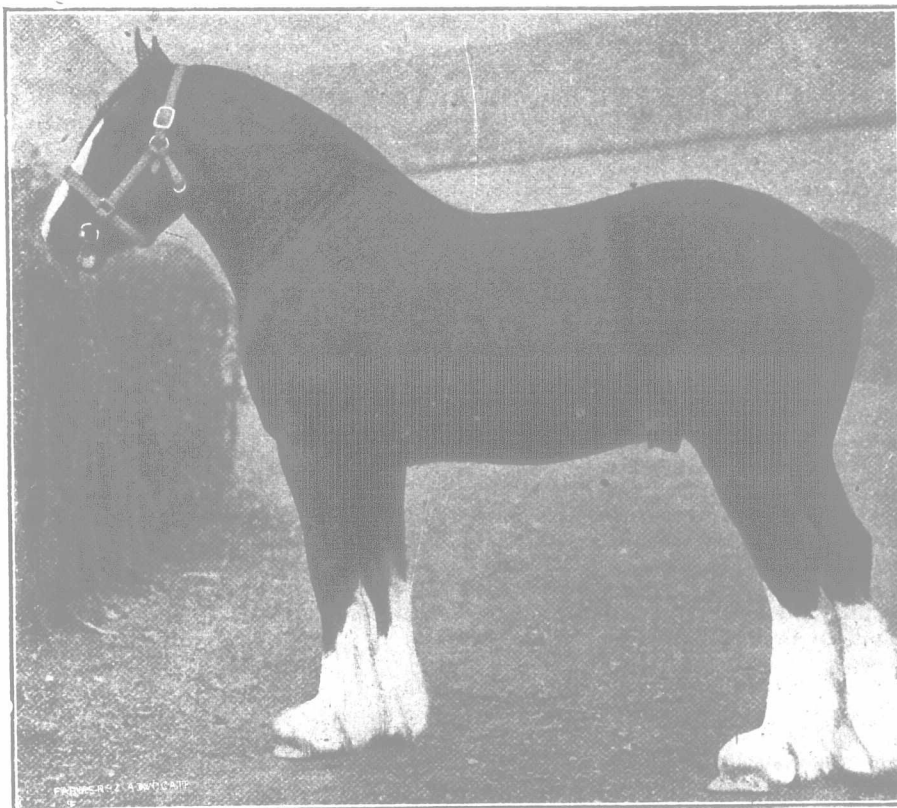
There has been an amazing shuffling of the political cards within the Cabinet, and agriculture, as usual, has come very badly out of the deal. Two men, not infallible or ideal, yet having considerable first-hand acquaintance with agriculture,

who know enough about agriculture to stagger the new Ministers. Mr. Runciman is essentially a city man, and his attitude to agricultural affairs is an unknown quantity.

Lord Carrington was closely identified with the movement for establishing Small Holdings in England, and great progress was being made under the scheme which the Legislature had sanctioned. Unhappily, the Government refused to give Scotland the same kind of legislation as was given to England, and, after prolonged fighting, the bill, which was several times rejected by the House of Lords, is still in the crucible. As it is shaped at present, the great majority of Scottish farmers are its strenuous opponents. The cause of this does not lie in its provisions for setting up small holdings, so much as in the proposal to set up a separate Board of Agriculture for Scotland. What farmers, and especially stockmen, fear is that, with a dual control of contagious disease in this island, the interests of breeders of stock will be seriously menaced. There is no agricultural division of the island parallel with geographical or political division. The agriculture on either side of the border is identical, and the movements of stock leave no room for dual authorities controlling interests so vital as those which affect the diseases of cattle and sheep. Somehow, such axiomatic commonplaces in the agricultural world are treated with contempt by the politician, and the prospects of the future are not too rosy for the Scottish flockmaster.

AGRICULTURAL EDUCATION.

Agricultural education is making rapid progress in this country. We have three agricultural colleges, one in Glasgow, one in Edinburgh, and one in Aberdeen. These have the land divided between them, and with the Glasgow College is allied the National Dairy School at Kilmarnock. All the colleges are face to face with a big problem. They are overcrowded, and extension is urgently called for. Aberdeen has purchased the farm of Crabstone, in close proximity to the town, and means to make it a Scottish Guelph. Indeed, it may safely be affirmed that the ideal aimed at by all three colleges is Guelph. The most successful of the three colleges has undoubtedly been that at Glasgow. The late head, now Sir Robt. Patrick Wright, was an ideal organizer. He never knew what it meant to hold back, and now that he is in the Government service, he is likely still further to make his mark. The work in the West of Scotland is carried on at three centers. The teaching work is done in the College at Blythswood Square, the dairy instruction is given in the National Dairy School at Kilmarnock, and



Oyama (13118).
Clydesdale stallion; bay; foaled 1904. Bred by D. & R. Scott, Girvan. Property of James Kilpatrick, CRAIGIE MAINS, KILMARNOCK. Sire Baronson, by Baron's Pride, dam by Prince Alexander.

have hitherto had charge of agricultural affairs in the present ministry. These were Lord Carrington, a genial, hail-fellow-well-met sort of man, with the bucolic instinct; and Sir Edward Strachey Bart., a West of England Squire, who really knew a deal about farming, especially in its bearing on dairying. Lord Carrington was very much given to making after-dinner speeches on serious occasions, yet, on the whole, he served agriculture well. Sir Edward Strachey was industrious, and thoroughly sound in his agricultural ideas. Both men have been shunted. Lord Carrington becomes Lord Privy Seal, an ornamental post, which, however, carries Cabinet rank. Sir Edward Strachey has been dropped altogether—an unworthy method of requiting useful service. In place of these, we get as President one of the outstanding failures of the Asquith Ministry, Mr. Runciman, whose friends say he does not know a cow from a cucumber; and a gilded youth named Lord Lucas, who has filled ornamental parts in the Upper House. Sometimes growls are heard regarding government by permanent officials, but when such appointments as these are made, it is a mercy we have permanent officials who know something about their work. Obviously, the responsible Ministers are mere figure-heads. How the changes will work out remains to be seen. There are a few men in the House of Commons

adjoining that is the Holmes Farm Experimental Station and Poultry Demonstration School. The governors want to combine all three at one center, and at present they are on the outlook for such a place. Money is wanted by all these colleges, and the difficulty is to know where it is to be obtained. The amount wanted is large, and those immediately interested in land are no longer wealthy. The urban and commercial instinct is not quite the same as that of the farmer, and at the moment all the schemes are at a standstill. So far, no wealthy magnate has arisen like your Macdonald, prepared to advance unlimited funds for the promotion of rural and agricultural education. We need him badly, but may have, in true Scots fashion, to work out our financial salvation.

THE WAR ON UNSANITARY CONDITIONS.

Sanitary reformers and veterinary surgeons have been holding their annual conferences and congresses. The former met at Oban, and the latter at Edinburgh. There is once more a dead-set being made against milk. I often wonder what those who talk so much about these things among us have to say to the "barns" you are building out in the West, and the homesteads seen in the Netherlands. These, so far as I can make out, are built in sheer defiance of every theory as to sanitation, so eloquently and incessantly urged

among us. The homesteads you are erecting in the more settled parts of the prairie and the homesteads which we saw in Friesland are as unlike what our farmers are compelled to build here as anything can well be. On the whole, the safe course is in the middle. The demands made upon us here are often unreasonable, but much that one has seen in Canada and the Netherlands on the same lines, is capable of improvement. The attacks of the Sanitariums and Veterinarians this year have been mainly directed against the unfortunate cow. If everything one heard was to be accepted as true, instead of the cow and her produce being one of the most wholesome factors for the preservation of life and health, she must be regarded as a deadly menace to the well-being of the community. The great object of attack was tuberculosis, and one point upon which there was little agreement merits serious consideration. It is now generally admitted that milk from a cow affected with tuberculosis of the udder is inimical to health. The question arises: Is milk from a cow, obviously affected with tuberculosis, but free of it in the udder, inimical to health? On this subject, opinion among the veterinarians was divided. On the face of it, the question is important. A cow may be far gone in tuberculosis, yet be sound in the udder. Anyone seeing such a cow, irrespective of what doctors might say, would not be anxious to drink her milk. The broad fact that scare-mongers have to face is the unquestioned healthfulness of those engaged in agriculture, who drink more milk than anybody else. The common-sense view of the situation is: Give the cow a chance, house her well, keep her clean, keep her surroundings clean, let all who work about her be clean, and handle all her produce, direct or indirect, in a thoroughly clean way, and there is no better friend of humanity on earth than the dairy cow. Reverse all these requirements, ill-treat the cow in any way, and fail to handle her products as they should be handled, and there is no greater menace to the health of the community.

SCOTLAND'S CHEESE IN DEMAND ON THE ENGLISH MARKET.

October, among other things, is the great month for dairy shows, exhibits of cheese and the general produce of the farm. There are three great Cheddar cheese fixtures in the British Isles: Frome, in Somerset; London; and Kilmarnock, in Ayrshire. This year there has been a great run on Scots cheese for the English market. The demand is for white Cheddars, and the price has gone up to 80s. per 112-lb. cwt. This is nearly double the figure at which second-class Cheddars were selling a year ago. The cause is largely a shortage in the make in Somerset and the West of England generally. There, on account of the dry summer and autumn, there has been nearly one-fourth less cheese made this year than the average. But the run upon Scots cheese for England is also due to the fact that the Scots maker has discovered how to make the Cheddar which the English market demands. It is a soft, meaty, white cheese. Curiously enough, it is not easy to sell a cheese of that type in Scotland. A white cheddar or deep cheese can hardly be sold; a white Dunlop or flat cheese can be sold in any quantity. Briefly, the English market demands a Cheddar made like a Dunlop, and free of coloring. It is for this class of cheese that English buyers have this year overrun the Scots market. A notable fact connected with cheesemaking is the hereditary ability to make high-class cheese. In one class at London this year, nearly all the prizes went to one family, named Portch, from Somerset or Dorset. They have been cheesemakers generation after generation. They make Cheddars according to a system of their own, and it is a system which invariably commands a large share of the prizes and the highest price in the market. We have a family in the Stewarty of the same kind or type, the Smiths, and another, the MacAdams, who are also distinguished, not as individuals only, but as a race. Cheesemaking can certainly be taught, but some there are who have an intuitive gift for making first-class cheese, even although they attended no dairying school. The champion cheese at the Kilmarnock show this year was made by Wm. McCulloch, Almont, Pinwherry, Ayrshire. It is some years since the championship went to the home county.

CLYDESDALES AND SHORTHORNS IN GOOD DEMAND.

Clydesdale business is still "booming." The Society, at the last meeting of council, had an addition of 108 members. The shipments to other lands have been very numerous, and will not be less than for 1910. The record of several days an alteration. For the first time in many years the first place is not held by Baron's Pride 9127. He is second, and the premier place is filled by his noted son, Baron of Buchlyvie 11263. Another horse which is making a name for himself is Scotland Yet 14839. He is a comparatively young horse, but is coming to the front as a sire. A foal by him was sold at Lanark the other day for

£180. Shorthorns have also been doing well, even although all ports are at present closed against British cattle. We had a week of sales in the north, and on the six days the following averages were made. On the first day, at a joint sale at Perth, 63 head made £28 7s. 10d.; on the second, 70 head at Tillygreig, Udry, Aberdeenshire, made £37 2s. 9d.; on the third, at Tillycairn and Uppermill, Tarves, the Duthie-Marr combination sale of calves gave a return of £115, 12s. 9d. for 61 calves of both sexes. On the following day, at the Inch sales, the Loanhead-Gordon sale gave an average of £48 12s. 4d. for 53 head, and the Burgie Lodge dispersion sale gave £31 7s. 0d. for 46 head. On the fifth day, a joint sale at Aberdeen yielded an average of £35 for 170 head, and the best sale of all was held at Pirriessmill, Huntly, when the fine herd of the late John Wilson was dispersed, and 92 head made an average of £65 4s. 9d. At this sale a cow made 700 gs. She was the dam of the bull calf which last year made 1,000 gs. Two bull calves at the Duthie sale made 500 gs. apiece, and another made 430 gs. The averages in some cases were down, as compared with those of 1910, but, altogether the Northern Shorthorn sales of 1911 have been highly successful. "SCOTLAND YET."

Piggy.

By Mrs. W. Buchanan.

[Note.—Submitting manuscript of the following verses, the author refers to a recent article by Peter McArthur, in which he had complained that there were no poems written on that same useful animal. She forthwith undertook to fill the bill. The verses are amusing, though many will consider them much too scantily appreciative.—Editor.]

Oh, I'll sing of the pig, be he little or big,
For we can't very well do without him;
Tho' he cares not a fig to be neat or be trig,
And hasn't much beauty about him.

But there's meat—juicy meat—and spare-ribs so sweet,
That many times grace our table;
There's the head and the feet, and the carcass complete,
And we oft eat as much as we're able.

And there's lard—snowy lard—(sometimes soft,
Sometimes hard),
And we use it when doing our baking.
Oh, the pig is a pard that we cannot discard,
Tho' sometimes new friends we be making.

But the pig is a friend that will last to the end,
Altho', as I've said, he's no beauty;
And to you I can send this good recommend,
That he always keeps doing his duty.

He may dig, he may root, and our gardens oft loot,
But that, you must know, is his natur';
We may after him scoot, and threaten the Brute,
And breathe out bad cess to the cratur'.

But then with a will, he will come to us still
And thrive if we give him attention;
If his trough we but fill with plenty of swill,
And other good food I might mention.

And if we have cares in our money affairs,
If at any time there is a shortage;
Then the pig nobly shares, and our burden oft bears,
And he's great at reducing a mortgage.

Oh, the pig is a gent, on mischief oft bent,
To take him all through, he's a corker;
But we will repent, and lose many a cent,
If we ever go back on the Porker.

The Importance of Palatability.

The results of investigations made by the Missouri Experiment Station in fattening cattle on blue grass pasture, and recorded in Bulletin No. 90 of that Station, tend to emphasize the importance of palatability in the ration. From these results, it is apparent that the greater the palatability, the greater the consumption of food. The greater the consumption of food, the more rapid the rate of gain and the shorter the period required for fattening the animals. The importance of palatability has been demonstrated by careful experiments, and the results have shown conclusively that a very palatable ration causes a greater secretion of digestive fluids, and, consequently, better digestion and absorption in the body of the animal. It requires a certain amount of feed for maintenance, and, theoretically, all the feed consumed above the fixed maintenance requirements will be used for increase in live weight. In the mixing of rations, therefore, for fattening animals, their palatability is a factor of prime importance. The more palatable the ration, the greater will be the consumption of food, and the greater will be the increase in live weight.

Tuberculosis — An American Bulletin.

Farmers' Bulletin 473, soon to be issued by United States Secretary of Agriculture, Wilson, contains an important and most comprehensive statement of facts on bovine tuberculosis. The bulletin deals with the history, nature, symptoms of the disease, how it spreads, how a herd is infected, the tuberculin test, and its prevention and suppression.

"Tuberculosis," the bulletin states, "is a widespread disease affecting animals, and also man. Human beings and cattle are its chief victims, but there is no kind of animal that will not take it. Hogs and chickens are quite often affected, horses, sheep and goats being affected but seldom, however.

The disease is contagious. It spreads from cow to cow in a herd, until most of them are affected. It is slow in developing, and may not become noticeable for months, or even years. The tuberculin test, which cannot do harm to the healthy cow, reveals the germ in a few hours, and always proves successful when in the hands of an experienced veterinarian.

"The disease is common among hogs," the bulletin goes on. "The public abattoirs report that a serious percentage of hogs inspected is found to be tuberculous. The losses among cattle and hogs are enormous, amounting to millions of dollars annually."

Turning to the infection of human beings with the tuberculosis germ through cattle, the bulletin says: "Milk is the staple food of infants and young children, and is usually taken in the raw state. If this milk is taken from a tuberculous cow, it may contain millions of living tubercle germs. Young children fed on such milk often contract the disease, and it is a frequent cause of death among them.

"Meat from tuberculous cattle is not so likely to convey the infection, for several reasons. It does not so frequently contain the germs, cooking destroys those that may be present, and, lastly, meat is not consumed by very young children."

As to the spread of the disease, the bulletin says: "Sooner or later the tuberculous cow begins to give off the germs of the disease. The germs may escape by the mouth and nose, the bowels, in the milk, and in discharges from the genital organs. When the germs are being given off in any of these ways, the disease is known as open tuberculosis."

The bulletin concludes with: "Dark, dirty, crowded stables are favorable to tuberculosis. Under these conditions the disease spreads rapidly, and it is only kept out with difficulty.

"Clean, airy, well-lighted stables, on the other hand, are unfavorable to the development of the disease. If brought into such a stable, it does not spread so rapidly, and is not so difficult to get rid of as in the first case.

"A well-built, sanitary stable need not be made of expensive material or of elaborate design, but should have plenty of air, light and drainage.

"Light is very important. Direct sunlight is a great destroyer of germ life. Tubercle bacilli soon die if exposed to sunlight. It is a disinfectant, always ready to work without cost."

THE FARM.

Corn Regardless of Expense.

T. P. White, of Fairfield County, Ohio, an agricultural college graduate, raised 111 bushels and 56 pounds of corn on an acre of ground this past season, in competition for a prize for the largest yield produced, regardless of expense. The land was well drained and fertilized. A home-mixed fertilizer was used, composed of 400 pounds of acid phosphate, 150 pounds muriate of potash, and 150 pounds nitrate of soda. This was applied with a manure spreader set for 22 loads to the acre. The corn, Imp. Learning, a 100-day variety, was planted May 16th, with a check-row planter, in hills 3 feet and 4 inches each way. This field was cultivated five times with a two-horse cultivator, and a last time with a two-shovel plow and a single horse. The only extra expense for labor was one day's work pulling weeds. While the fertilization was much heavier than ordinarily recommended, it shows the possibilities.

Best in the World.

We have been taking "The Farmer's Advocate" for five or six years, and I don't think there is a better farm journal in Canada, or perhaps the world.
DUNCAN B. FRASER.
Pictou Co., N. S.

Sanitary Water Supply on the Farm.

Editor "The Farmer's Advocate":

It may be a little strange to question the sanitary conditions on the farm, but this is what I am about to do, although the healthful conditions of farm life have been extolled for ages. No doubt the occupation is healthy, where even moderate care is taken, but in many cases the farm steading is a prolific source of disease.

Let us look into the condition of the water supply. We often see it really obnoxious: An old well covered with rotting planks, where any animal, from a pig to a mouse or a toad, can topple in, and go through the process of decay, till perhaps disease attacks the family, and the well, for the first time, is pronounced unhealthy, often furnishes a surprise upon examination, when mice, cats, skunks or rats are found to be the cause of the trouble. The defective covering referred to is not the only trap for disease germs. We often see a fairly good well platform, where ducks, hens, geese and turkeys are continually about, sipping up the drips of water, when the boys run hastily when thirsty and pump an overflowing cup, the overflow taking the droppings down to leach back into the well, after having supplied the old sow with enough water to work up into a first-class mud hole, in which she seems to enjoy the most exquisite pleasure. This is not an exaggerated description of some country wells.

There are others to be found much better in appearance, but nearly as dangerous. I refer to where the well is near the back kitchen door, where the slops are thrown thoughtlessly to percolate into it and contaminate the drinking water. This drinking water is often filled with the bacteria of typhoid fever, ptomaine poisons, and other disease germs. More than that, the throwing of slops at the door makes a breeding place for the house fly, which, in turn, puts its germ-laden feet into all the foods we eat, tickles the nose or blinds the eyes, and is an indescribable torment on the bald heads of so many of our old and young men.

How can this be remedied? By attending to some simple plans that anyone may understand.

Knowing that much, if not all, typhoid fever is due to the drinking of bad water, our first object should be to have that water pure. Soils, and the natural drainage, should be studied. In digging the well, gauge it so that a three-foot concrete tile, such as is used in culverts, will slip down readily. This, for a house well, is large enough, as it is not advisable to have a great quantity of water lying stagnant, as is found in many holes that go by the name of wells. If a good spring is struck, well and good. We then proceed to make it proof against rats, mice, toads and worms.

Having packed some nice clean gravel round the first length of tile, each succeeding tile should have concrete poured around it, and the same done to each length to the top. If about two inches is allowed over the diameter of the tile, the concrete may, if very fine and watery, be poured in from the top. This will render the well proof against every visible animal.

To guard against surface soakage, clean the surface of all impure earth, and place a layer of concrete, sloping away from the well, around it, and drain thoroughly away from this.

The covering should also be of concrete, forming a lid, which is in two pieces. It need not be very heavy, but may be augmented by heavy wire, angle iron, or some of the iron usually sold to the old-iron merchant. Make a wooden lid to cover the well, sufficiently close to prevent concrete from going through, then place a strip of stiff pasteboard round outside of the lid edgewise, which will be the limit of the cement or concrete lid. This should be kept in place by damp sand placed against outside. A round block should be placed on the wooden lid, which may be kept in place by nails. On this block, on each side, place a saw cut, to receive a piece of fairly stiff sheet-iron, extending to the circumference, one on each side. This will form the division in the lid, and the block will form the hole for the pump. To form holes for bolts, if an iron pump is used, half-inch pins may be placed in the lid, according to marks taken from the holes in the base of the head of pump, and another pin for brace to pump. I place the pump on one side of well, so that, if at any time it should be found necessary to go to the bottom, the piping will not interfere. All is now ready to put cement in for lid, excepting greasing well all parts where cement touches, inside of rim, plug, pins and cross-pieces, so that cement will not stick. Have the concrete ready, and shovel or pour carefully, so that neither rim, plug, pins nor strips of sheet-iron will be misplaced. Do not tamp hard, nor forget to put in the irons to strengthen.

This well, if properly made, should rarely get dirty. If a good iron pump is put in, it should need no fixing for practically a lifetime.

Where the soil is likely to cave in, the tile should be allowed to slip down as the well is being dug.

There is no reason why a farmer should not have wholesome water, and everyone should know that healthy surroundings are cheaper than doctor's bills.

Bruce Co., Ont.

WM. WELSH.

THE DAIRY.

The Care and Management of the Dairy Cow at Time of Parturition

THIRD-PRIZE ESSAY.

While the dairyman with the grade Shorthorn may be unconcerned at the time of parturition, the owner of the pure-bred dairy cow, for which he has paid a "long price," will feel easier when she has passed the fourth or fifth day, and he finds that all is well.

It is the care of the latter which I will attempt to outline.

I always take the pregnant cow from the herd when she becomes heavy with calf, as she otherwise might receive some injury, and keep her in a small field by herself.

It is impossible to quote a measured ration of feed, but in my experience I have found cows to do well during their dry spell on half their usual rations of meal, roots and silage, with hay; or good pasture alone is enough.

I prefer a mixture of ground oats and bran as a grain ration. About two-thirds oats and one-third bran, and a pound of linseed meal to each cow, twice daily. I like to see them freshen in good condition. Their dry spell is their period for recuperation, and they should not be starved.

During the last ten days of her pregnancy, the cow should be carefully fed, or diarrhea in the calf may be caused. Proper treatment at this time will also ward off trouble later. I cut off the silage, roots and grain, and substitute about four pounds bran and one pound linseed meal, scalded, and given as a mash twice daily, with good clover hay.

As a laxative, I give from three-fourths of a pound to one pound of Epsom salts, or just enough to produce a mild action, but not enough to weaken or pull down the cow, commencing a week or ten days before calving and giving each alternate night.

By watching the cow, I notice certain changes. The tendons become relaxed and the udder enlarged. This is my time to take all feed from her, and give 1½ pounds Epsom salts, presuming that the bowels have become normal since her last dose.

A well-bedded box stall should now be given her. If she has had pains for some time, I disinfect my hand and arm and make an examination, to be sure that the calf is in its proper position. After the birth of the calf, I cover the cow with a warm, dry blanket, or, if it be hot weather, a light sheet, and let her take nature's own way of caring for her calf for an hour. In the meantime the stall is cleaned, and plenty of dry bedding given her. It is best to tie her up now and remove the calf where she cannot see it, and give her a pail of water, warm enough that there is no danger of it chilling her, and in a short time another pail, if she will take it. Plenty of water helps the bowels to move. The cow will generally lie down now, and she should be closely watched until the afterbirth comes away, which will not be more than a few hours. When the afterbirth has been removed from the stall, the cow may be let loose and the udder rubbed with a little goose-oil or camphorated liniment twice daily. If the udder and teats are well distended with milk, the calf may be brought back and given a little from all four teats, taking care that it does not take too much from the cow. If the cow does not become excited over the calf, I continue this method for three or four days; but if she becomes restless and is bawling, I do not let her see or hear her calf, and commence feeding it by hand.

In suckling the calf or milking the cow, which I do three or four times a day at first, I take just enough to keep the udder soft, and still leave it fairly well distended with milk, taking a little more as time goes by, until the fourth day is past, and even then I do not strip dry for another day.

Although I believe there is little danger of milk fever if the cow has been properly treated, she should be closely watched for the first four days. If her appearance is dull, ears drooping, she does not chew the cud, and later has difficulty in rising, milk fever is pending. Another early symptom of milk fever is to be detected in the bawling of the cow to her calf. If the sound is unnatural, coarse and guttural, it is caused by paralysis affecting the glands of the throat; and if this symptom is marked, it is time for the inexperienced attendant to send for his veterina-

rian, but the experienced herdsman should always have a good milk-fever outfit on hand.

A few hours after calving, all being well, I give the cow a little clover hay, and later on a little scalded bran and linseed meal, and let this be her rations, with plenty of lukewarm water, until after the fourth or fifth day, after which she may be gradually brought back to her rations. For the sake of the young calf, I feed no sour silage for some time.

In feeding the calf, I try to have the milk at as nearly the same temperature as if taken from the teats. A pint three times a day is enough for a small calf at first, gradually increasing the quantity. I feed with the finger for some time, teaching the calf to take its milk slowly. I find that the calf which gulps down its milk in a few long swallows is a good subject for indigestion.

In concluding, I might say that, in my experience, cows treated ten days before calving, as indicated above, experience no sickness whatever, and chew the cud before and shortly after calving.

JAMES YOUNG.

Victoria Co., Ont.

The Ohio College of Agriculture is now giving practical instruction in the condensing of milk.

POULTRY.

Fall Management of Laying Stock.

Now is the time when a little extra care on the part of the poultry farmer will make or mar his flock for coming usefulness. The frosts have destroyed or sent to winter quarters, to a great extent, all insect life, which is one of the most important articles of diet for the growing pullet. To prevent any setback in their development, animal feed of some sort must be supplied. A few poultry-raisers have green-bone cutters and are using them to advantage, but the greatest care must be exercised in the feeding of cut bone or meat scrap, as a very little too much is apt to do more harm than good, by causing some form of intestinal trouble that will be hard to overcome.

One form of animal feed that may be fed in unlimited quantities, and be of the greatest benefit to build up and bring into laying condition the young pullet is milk. Give it to them sweet to drink, sour it and use it to mix up their mash with. Some claim that buttermilk is of greater value as a feed than sweet milk, but my experience has shown that it is very liable to cause bowel complaint, unless used when freshly made. With sweet milk or soured skim milk I have never had any trouble.

Besides animal feed, green feed must now be supplied in generous quantities. Turnip tops are good, and are greatly relished. When they cannot be had, use turnips or mangels cut in halves and suspended along the henhouse walls on nails, and placed high enough that the hens have to jump to reach them; this compels exercise.

Use every precaution to have your poultry houses clean before putting in the pullets. If not already done, get to work. A few lurking germs of disease and myriads of mites are liable to be in any neglected henhouse, and will work havoc with the best of pullets. Take two ounces corrosive sublimate and two ounces common salt, mix thoroughly with six quarts of water, and spray it into every nook and cranny of the henhouse. Before doing this, have everything ready, so that every corner may be reached easily. I take an old broom and sweep the walls and floor thoroughly before I start spraying. If a sprayer is not available, use an old broom, in which event a larger quantity of solution will be required. Follow this with a good whitewash. Wash the windows, and allow all the light possible into the building. Take off the old canvas, if you have canvas, as I have, on part of the window frame for ventilation; replace it with new, as the old will be too filled up with dust to be of much use. Just here, in regard to ventilation, when I first started I had a large window in the south end of the henhouse, which, though old, and not the modern style of building, still was well lighted, and apparently warm and comfortable. During the first winter, which was not at all severe, nearly every hen had her comb frozen, which retarded egg production considerably. For the next winter I removed three panes of glass in the top of the window sash, and three in the bottom, and covered the openings with canvas, instead. Since that, although we have had colder weather, not one comb has been frozen.

Be sure that your fowl are free from lice before putting into the cleaned house. To accomplish this, about four days before I clean, I dust all the fowl thoroughly with a powder made by taking one part of crude carbolic acid and three of gasoline, mixed up to a dry, pinkish powder with plaster of Paris. Then, the evening I put the fowl in, I go over them all again. This is

one of the most effective lice powders to be had, and its cost is only about one-quarter that of prepared powders.

Some may say that all this cleaning is a lot of work for nothing, but it is merely the premium which the poultryman must pay for large numbers of eggs later on.

Now, as to feed. Do not fail to lay in a supply of good grit, lime and charcoal for winter. Crushed stone and crushed oyster-shells are the best for the first two, and for charcoal nothing is better than vegetable charcoal, obtained by charring ears of corn. Feed it in the mash or with the oyster-shells.

Keep a deep litter on the floor, and make the hens work to find their grain feed. Exercise is half the battle in making hens lay. Feed a variety of grains, if you can, but oats should form the bulk of their feed, as they form about as near a balanced ration for hens as can be had. I have had excellent results from feeding a small handful of wheat or buckwheat to each fowl in the morning, scattered in the litter. At noon I give about 1½ ounces to each fowl (Barred Rock) of a mash consisting of ground oats, corn meal, wheat bran and animal meal, mixed to a crumbly condition with skim milk. At night a large handful of oats is given to each. Feed good oats, if possible, as the lighter the oats, the greater the percentage of hulls to be consumed in providing the necessary amount of nourishment. Be sparing in the use of condition powders and tonics. They are apt to cause the fowl to fatten if used in excess, and a fat hen is rarely a laying hen.

Occasionally, hens get in the habit of egg-eating. It is generally started by having too few nests; boxes too small, so that the hens crowd and break the eggs, or not sufficient material in the bottom to prevent a thin-shelled egg from breaking when it strikes the bottom of the box. Have plenty of good-sized nests, with plenty of material in them and china nest eggs; feed rationally and intelligently, and you will have no trouble with egg-eating.

In conclusion, I may say that anyone who is willing to give their fowl a reasonable amount of care, and who looks carefully after the three essentials of successful poultry-keeping—breeding, feeding and cleanliness—cannot fail to make a success of it.

POULTRY FANCIER.

Egg Eating.

Egg-eating is a bad vice which, if once acquired by the flock, is somewhat hard to overcome. It is often caused by soft and thin-shelled eggs being broken in the nest. A few broken eggs eaten from the nest has a tendency to teach the hens to break eggs themselves. If the vice would remain confined to a few individuals, it would not be so troublesome, but such is not the case. A few egg-eating hens soon communicate the vice to the entire flock. Where one or two hens are affected, it is often advisable to kill them, but if it has spread to many members of the flock, this is impracticable. If the hens can be prevented from eating the eggs for a couple of weeks, further trouble is not likely to occur. Prevention consists in keeping the nests dark. Two or three weeks of such treatment will usually effect a cure. Feed the hens plenty of grit and lime material to produce thicker shells on the eggs.

F. S. Jacoby, a graduate of Cornell University, has just been secured by the College of Agriculture, Ohio State University, to take charge of its new Poultry Department, provided for by the last Legislature.

GARDEN & ORCHARD

Protecting and Pruning Grape Vines.

Owners of vineyards are agreed that summer pruning should not be followed to any extent in grape-growing. Pruning may be done with safety after the crop has been harvested, and especially in the colder sections, growers will be wise to provide some winter protection for the vines. Where winter protection is necessary, fall pruning can be practiced to good advantage, and, after pruning, the vines can be removed from the trellis and covered with a few inches of earth before winter sets in. This can be accomplished after the land has been frozen, for in most seasons warm days, on which the top soil thaws, follow the first cold snaps. Do not neglect it too long. However, if the land becomes permanently frozen, a few clods of the frozen earth can be placed on the vines to hold them down and also to hold the snow over them, thus forming a very good protection. If the vines are so situated that a winter thaw is likely to bare them of their snowy covering, it is much better to cover them well with earth, because these vines, being accu-

stomed to the protection which the snow affords them, and being suddenly exposed to the severe weather which may follow, are somewhat tender, and easily injured by the frost.

Grape-growing demands that some system be followed in shaping and training the vines.

For cold districts, the Fuller system is undoubtedly the best suited to meet all conditions of the severe winters. To follow this system, as with all systems of grape pruning, it is necessary to begin with the setting of the vine. Cut the vine back to one or two buds, and allow only the strongest one to grow. Let this grow until the end of the first year, when it should be cut back to within about one foot of the ground. The following year it is generally well to allow two of the upper buds to grow. These buds should produce two strong branches which can be trained each way along the trellis. At the end of the second year these branches should be cut back to within four or five feet of the main vine, and they form the two main permanent basic branches of the vine. From these branches new canes are produced annually. They can be spaced at about a foot apart, and should be tied up to the trellis wires as they grow. Each year these should be cut back, so as to leave two or three buds on them, which means that the entire vine, after it is pruned, is not allowed to produce more than thirty-five to forty buds. At the approach of winter the necessary pruning can be done, and the vine taken from the trellis and covered, as previously indicated.

In more moderate climates, the "Kniffen System" works well. This system is such that the vines must be left exposed on the trellis throughout the winter. The vine is cut back to two buds at planting, and again at the end of the first year's growth. The beginning of the second year, the stronger of these two buds is allowed to grow into a long, straight cane which, at the end of this year, is cut back to about four or five feet in length, or just long enough to reach the top of the trellis which should be made for it at this time. This upright cane forms the permanent portion of the vine. The next year, four arms should be allowed to grow from the main cane, and they should be trained on the upper and lower wires. At the end of the first season these arms should be cut back to the sixth or seventh bud. The vine should be pruned back to this size each year. From each bud on the arms laterals are sent out in the spring. These laterals bear the fruit. The annual pruning consists in cutting out the four laterals as close to the main upright as possible, and allowing to grow in their places the strongest laterals nearest to the main vine.

Nearly every farm, whether a fruit farm or not, has its grapevine, and, with a little care, it can be made much more sightly, as well as a great deal more profitable, than if it is allowed to ramble over old fences and up into trees. Grapes are a luxury which can be had on most farms if they are cared for. Devote a little time to the grapevine this fall.

Some Work of the Federal Government Against Insect Pests.

(Abstract of an address by Dr. C. Gordon Hewitt, Dominion Entomologist, Ottawa, before the Annual Convention of the Fruit-growers' Association of Ontario, November 15th, 1911.)

The three methods, in which the Department of Agriculture of the Federal Government is dealing with the serious problem of insect pests are by legislation, by investigation, and by education, and it is proposed to deal particularly with the first of these methods on the present occasion, as there are still many fruit-growers and others who are very materially concerned in the prevention of the introduction, eradication and treatment of insect pests, who are not as yet fully acquainted with the work of the Federal Government in this respect.

When it is realized that about 50 per cent. of our most injurious insects have been introduced into Canada from other countries, the necessity of taking steps to prevent the introduction of further pests, and the spread of serious pests already within our borders into regions of Canada in which they do not occur, will be readily understood.

The discovery of winter nests of the Brown-tail moth on nursery stock imported from France in 1909 was chiefly responsible for the passage of the Destructive Insect & Pest Act of 1910. A previous Act, the San Jose Scale Act, was in existence, but this only empowered the Federal Department of Agriculture to fumigate vegetation liable to be infested with the San Jose Scale. The value of the San Jose Scale Act is obvious from the fact that, so far as we know, the San Jose Scale has not been introduced since the passage of the Act into regions other than those in which the Scale was already present when the Act came into force, from which it naturally spread. It was seen, however, that, for the work

to be effective, the Department should have wider powers, and should not only be empowered to fumigate stock entering, but should have the powers to inspect such stock as was deemed necessary, and also to inspect nurseries, orchards, etc. This power was obtained under the Destructive Insect & Pest Act, which provided for the fumigation of nursery stock and other vegetation, or for its inspection, and also gave the right to enter into nurseries, orchards, etc., and the prescription of treatment which was to be carried out. All vegetation and nursery stock, except certain classes of florists' stock, such as greenhouse-grown plants, herbaceous perennials, bedding plants, etc., is allowed to enter Canada through certain ports only, at six of which, namely, St. John, N. B.; St. John's, P. Q.; Niagara Falls, Ont.; Windsor, Ont.; Vancouver, B. C.; and Winnipeg, Man., fumigation stations are established, where stock requiring fumigation is fumigated before being released from customs, and a certificate of fumigation is given. For stock requiring inspection, a different procedure is necessary. All vegetation and nursery stock, except already mentioned, coming from Europe, Japan, or the States of Vermont, Maine, Massachusetts, New Hampshire, Connecticut and Rhode Island, is inspected, and the method of procedure is as follows:

Any person importing such stock is required to send to the Dominion Entomologist, within five days of ordering this stock, a notice of his order, which must give the name of the consignee, place of origin, quantity and nature of the stock. When the shipment arrives, a notice of its arrival is sent by the Customs officers to the Dominion Entomologist, and the importer and Customs House brokers, also, are required, under the regulations, to send a notice of its arrival. Two methods may then be followed:

Nursery stock entering through certain ports, such as Vancouver or Winnipeg, is inspected at the port of entry, and when it bears a certificate of inspection it is allowed to proceed. Nursery stock entering Ontario through certain ports, however, is allowed to proceed to its destination, and, on notice of its arrival from the Customs officers and the importer, an inspector is immediately instructed to visit the consignee for the purpose of inspecting the stock. Under the regulations, the consignee may not unpack the stock, except in the presence of an inspector, who, after inspecting the same, issues a certificate of inspection.

During the first year of our work under the Act, over two and one-half million plants and trees in Eastern Canada alone were examined, and over three hundred and ten winter webs of the Brown-tail moth were found. When you realize that each of these winter nests or webs may contain two or three hundred young caterpillars of the Brown-tail moth, the importance of this work is obvious. Last season, nearly four million plants were inspected in Canada.

In addition to the fumigation and inspection of imported trees and vegetation classed as nursery stock, a campaign against the Brown-tail moth, which was first discovered in Nova Scotia in 1907, is being carried on by the Federal Department of Agriculture, in co-operation with the Provincial Departments of Agriculture of Nova Scotia and New Brunswick. To those acquainted with the ravages of the Brown-tail moth and Gipsy moth in the New England States, where these moths were allowed to spread, the necessity of taking all possible means to obtain the control of this insect in Canada needs emphasizing. In the State of Massachusetts alone over a million dollars a year are being spent in the attempts to control these two pests. The control will never be obtained by artificial means, and resource has now been made to the importation of the parasites of these insects from the countries in which they are native, in the hope that ultimately, with the aid of man's assistance, nature will be able to obtain the control. In Nova Scotia, the insect is distributed through the four Counties of Yarmouth, Digby, Annapolis and King's, and the suitability of the country to the propagation of the insect is indicated by the fact that in one case a winter nest or web was found to contain over eighteen hundred caterpillars. The insect infests not only the apple, but also wild thorn, rose, oak and other trees. Last spring, for the first time, the insect was found to have spread into New Brunswick from Maine, along the coast of which it is prevalent. We are now making attempts to anticipate its arrival in large numbers by introducing its parasites and establishing these on the native insects before it arrives in force. Its abundance in Nova Scotia and New Brunswick is such that, unless it spreads seriously into the wild bush and forest, we shall be able, I venture to hope, if we leave no stone unturned, to keep it under control, and to prevent it from attaining such dangerous proportions as it has obtained in the New England States.

In the carrying out of this legislation and work against the introduction and spread of introduced pests, the co-operation of all whom the successful carrying out of the work affects is ab-

solutely necessary. If importers of nursery stock and other vegetation will comply with the regulations governing such importations, the work of inspection will proceed as smoothly as if no regulations existed. Inconveniences are only introduced when the regulations are not complied with. Although fruit-growers and others suffer very severely on account of the losses entailed by the work of such insects as have been introduced into Canada, such as the San Jose Scale, the Codling moth, and in many cases the apple maggot, they would suffer far more if other pests, such as the Brown-tail moth and the Gipsy moth, and other insects from foreign countries, were introduced, and they cannot but realize that it is to their advantage to assist in every way possible in carrying out the work which we are empowered to do by Statute against the further introduction and spread of serious and injurious insects.

APIARY.

Ontario Beekeepers' in Convention

The annual meeting of the Ontario Beekeepers' Association, held at the York County Council Chambers, Toronto, on Nov. 15th, 16th and 17th, was verily "a gathering of the clans." Nearly every county of Ontario was represented. The ladies took advantage of the cordial invitation, "to all the sessions," accorded to them by the programme committee. A goodly number of American beekeepers were present, and gave evidence of their interest in the subjects under discussion, and of their pleasure in meeting so many Canadians of the same persuasion as themselves, as well as contributing to the programme in discussions, papers, addresses, and on two occasions by exhibiting limelight views to illustrate the addresses.

Foul brood was again, as it was last year, the chief subject before the convention, although a high note has been struck on the subject of co-operation, and it is possible that, when the fears of the Association have been allayed in regard to the two forms of foul brood, co-operative buying and selling, and the organization of beekeepers, will be the most engrossing subjects upon which they will be spending their energies. A better plan for exhibiting was discussed, and a resolution passed to ask for material to be available for exhibition purposes, each county to contribute its share towards a "larger exhibit of honey than has been."

The president, W. J. Craig, said that the light crop of honey last season had not quenched the zeal of the beekeepers, as the attendance of beekeepers was the largest ever seen in the hall. The absence of many of the old-time topics gave more time to the consideration of new subjects. He congratulated the Association on the good prices obtained.

The vice-president, D. Nolan, pointed out that while this season's early-honey crop was very disappointing in many localities, beekeepers realized a great harvest of buckwheat in many districts, thereby saving the expense of feeding sugar for winter stores, when such high prices for sugar prevailed as was the case this season.

In his address on "County Associations and Their Work," Morley Pettit, Provincial Apiarist, gave a history of Canadian Beekeeping Associations from their inception, in 1880, to the present time. The first evidence of any interest being taken in foul brood was in 1886, when a resolution was passed, suggesting that the O. B. A. appoint inspectors to go through the country and report the condition of any and all apiaries and of those selling bees, and also to ask the Ontario Legislature for legislation to prevent the spread of disease. In 1903 county inspectors were asked for, and there soon followed the appointment of a man who was to give most of his time to the work.

Robert Thompson, of St. Catherines, Ont., dealing with the subject of "The Co-operative Purchase of Supplies," said that the question appeals to the man who wants a dollar for fifty cents. If we purchase our supplies in large quantities, we naturally lessen the outlay. If we place our goods in the hands of the consumer, without passing through the hands of the middleman, we as naturally sell for a higher price, and he naturally buys for less, than if neither had he learned the art of co-operation. His plan for starting a co-operative buying and selling scheme was to ask a member of the association to give his note for the amount required to purchase a given amount of goods, said note to fall due at a date a little beyond the time the goods would be sold.

"Diseases of Bees and Their Treatment," illustrated with lantern views, by E. F. Phillips, Ph. D., Washington, D. C., was one of the most interesting features of the convention. The same gentleman gave his popular lecture, "The Behavior of the Bee," also illustrated, and "A Discussion of Bee Problems." In this paper he

gives half a dozen rules to be used in case disease was present in a hive: (1) Close the entrance to prevent robbing; (2) never feed honey purchased on the open market; (3), if possible, see that no honey from diseased apiaries is sold in the neighborhood; (4), in introducing purchased queens, transfer them to clean cages, using candy free from contamination; (5) never purchase colonies unless certain they are free from disease; (6) purchase no old combs or second-hand supplies, unless certain they are from healthy apiaries. The thing most essential in treating foul brood was to be able to handle the beekeeper effectively.

Mr. Pettit, in his report on inspection of apiaries, said there was nothing new in apiarian inspection. We have the doctors on the job, he remarked, but it will be some time, and require considerable money, before we are able to provide the nurses and hospitals necessary to cope with these virulent diseases, American and European foul brood. He was also of the opinion that a series of bee institutes was the best "red flag" to wave in front of the express train that was carrying European Foul Brood through the country.

The only change in the officers of the Association was the election of Denis Nolan, of Newton Robinson, Simcoe Co., Ont., to the position of president.

E. B. Tyrrell, Detroit, Mich., Secretary National Beekeepers' Association, in treating on "Methods of Organizing," said the farmer who does not organize takes his load of produce to market and asks, "How much will you give?" But when the farmers organize, it will be theirs to say how much they will take. A successful organization must have an object, a plan, and unity of purpose. He congratulated the Ontario Beekeepers' Association on having an organization which had done so much to standardize the price of honey, although he did not think the possible price of honey had yet been touched. By organizing, the beekeeper would also be able to buy his supplies at much lower prices, and save at both ends of the game in outlay and income. Organization also led to enthusiasm, and enthusiasm to success.

C. C. James, Toronto, Deputy Minister of Agriculture for Ontario, discussed "Educational Methods in Agriculture." He showed the fallacy of beekeepers thinking that they were the only ones up against the hard problems of life, for between the producer and the consumer there was a middleman who makes the consumer wonder how his bread and honey are to be paid for. What the producer and consumer should do is to organize, and share the profits of the middlemen between them. He doubted if there was an industry in the this country that was capable of such development as the honey industry, and this development rested with the beekeeper himself, dependent upon individual and organized effort.

Inspector Chas. Stewart, of New York State, in giving his experience with the treatment of European foul brood, claimed that Italianizing is one of the most effective cures for this disease. They are the best housecleaners of all the races of bees. It would be as wise to let a building go without insurance as to refuse to Italianize in the cure of European foul brood. Italianizing has been the salvation of the bee industry in New York State.

The Association decided to make a large exhibit of honey and apiary supplies at the 1912 Flower, Fruit and Honey Show, as this year's honey exhibit, while high-class, was rather small.

Programme of Lectures.

ONTARIO PROVINCIAL WINTER FAIR, GUELPH, DEC. 15th to 18th, 1911.

Tuesday, Dec. 12, 8 p. m.—Address—"Housing Poultry" (illustrated), by W. R. Graham, Professor Poultry Department, Ontario Agricultural College, Guelph. "Marketing Poultry," F. C. Elford, Professor Poultry Department, Macdonald College, Quebec. W. A. Brown, Live-stock Branch, Department of Agriculture, Ottawa.

Wednesday, Dec. 13, 10 a. m.—Address—"Judging Draft Horses," Robert B. Smith, Columbus, Ont. "Care of the Pregnant Mare," John Gardhouse, Highfield. "Care of the Colt to Three Years of Age," John Bright, Myrtle Station.

2.30 p. m.—Address—"Economic Feeding of Beef Cattle," J. H. Grisdale, Director Dominion Experimental Farms, Ottawa. Discussion—By Thos. McMillan, Seaford. "Sanitary Stabling of Cattle," George E. Day, Professor of Agriculture, Ontario Agricultural College, Guelph.

7.30 p. m.—Public meeting, at which will be given addresses by prominent public men.

Thursday, Dec. 14, 10 a. m.—Address—"Buildings for Swine," J. H. Grisdale, Director Dominion Experimental Farms, Ottawa. Discussion by Geo. E. Day. "Care, Grading and Marketing of Wool," W. T. Ritch, Department of Agriculture, Ottawa.

2 p. m.—Address—"Hardy Strains of Alfalfa for

Ontario," C. A. Zavitz, Professor of Field Husbandry, Ontario Agricultural College, Guelph. "Conservation of Soil Moisture," Alfred Atkinson, Professor of Agronomy, Bozeman, Montana. Address—"Feeding Alfalfa," by James Douglas, Caledonia. Discussion—R. S. Stevenson, Ancaster.

8 p. m., Canadian Seed-growers' Association: Address—"How I Operate My Seed-corn Plot," by T. J. Shepley, Ouvry, Ont. Address—"Some Observations as a Judge in Competitions of Standing Fields of Seed Corn," J. H. Coatsworth, Ruthven, Ont. Address—"The Commercial Handling and Storing of Seed Potatoes," by Wm. Naim-Smith, Falkenburg, Ont. Discussion—Alfred Hutchinson, Mt. Forest, Ont. Address—"The Outlook for Red Clover and Alsike Seed Production in Ontario," by Dr. O. Malte, Seed Branch, Ottawa. Discussion. Address—"The Commercial Handling of Registered Seed, and the Measures Taken to Maintain and Safeguard the High Standards set by This Association," by L. H. Newman, Sec'y C. S.-G. A., Ottawa. Discussion. Address—"Some Observations in Plot Inspection Work," by T. G. Raynor, Seed Branch, Ottawa. General Discussion.

The Season in Middlesex Co., Ont.

Thanks to October weather, rather than to other things, the farm outlook in the district that sustains London has materially improved. As a slight offset to the summer period of drouth, the heavy weekly rains during the past six weeks benefited the pasturage, made plowing easy, and bodes well for crops of old-fashioned luxuriance next season. The silos were all fairly well filled by a good corn crop, and what roots were grown are securely housed. Last season, a good many of them, including potatoes, spent the winter out of doors. That experience was not lost, if the roots were. This fall everybody hustled, and nearly all farm work is well advanced. Stock goes into winter quarters in fairly good order, but for milk and its products this winter, and beef in the spring, prices must rule high if there is to be anything "in it" for the man before the manger. Dairy cows and good feeders still command upward prices, but a lot of inferior animals have gone to the canners. Hay and all fodders were a short crop, and are high-priced. American corn is also up, and labor scarce, often insufficient, and nearly always costly. Fodders and coarse grains will have to be carefully husbanded. New and old meadows have been pastured altogether too severely for their good next season, and the cloverseed crop must have been very light. The outlook for the town householder is a continued dear breakfast table. The slump in the price of hogs has been knocking the heart out of that business, and if the packers continue to quote depressed figures, there will probably, as usual, before long, be a falling off in supplies. As one Middlesex man says: "Let 'em merger away. We'll just quit." A good acreage of fall wheat was sown, and probably never in the history of this portion of Western Ontario did it look so well. The heavy top grown should carry it well through the winter.

Hay Crop Short.

The report of the Dominion Census and Statistics Office for the month ending October 31st, shows that the total area in potatoes, roots, fodder crops, hay and clover this year was 9,007,492 acres, with a total products value of \$219,055,000. This is \$1,600,000 more than last year, and there is a decrease of \$3,120,000 in hay and clover. The largest increase is shown in potatoes, which is nearly \$6,000,000 more than last year, although the product is less by 8,000,000 bushels, the average selling price being 60 cents per bushel, as compared with 45 cents a year ago. The value of this year's product of hay and clover and fodder corn is \$159,065,000, which is less than last year's value by \$2,608,000. Potatoes, turnips and other roots and sugar beets have a value of \$59,990,000, being more than last year's value by \$4,213,000. The quality of all the crops this year is 90 per cent. and over, excepting sugar beet, which is 88 per cent., and last year all crops, excepting potatoes, turnips and other roots, were over 90. The values of all root and fodder crops this year, by Provinces, were \$5,754,000 in Prince Edward Island, \$12,228,000 in Nova Scotia, \$12,596,000 in New Brunswick, \$73,315,000 in Quebec, \$94,468,000 in Ontario, \$5,583,000 in Manitoba, \$3,790,000 in Saskatchewan, and \$6,321,000 in Alberta.

The area sown to fall wheat this season is 1,097,900 acres, being 797,200 acres in Ontario, and 300,700 in Alberta. This is 2.93 per cent. less than a year ago.

The per cent. of fall plowing completed ranged from 73.57 in Ontario, to 90.40 in Prince Edward Island, for the Eastern Provinces, and from 18.75 in Alberta, to 34.12 in Manitoba, for the Western Provinces, which is less than the averages of last year at the same date. For summer-fallowing

the average in all the Provinces is well over 90 per cent. for each of the three years, 1909-11.
ARCHIBALD BLUE.

A Fellow Feeling.

By Peter McArthur.

Sometimes we are forced to do some clever reasoning to square matters with our consciences. Now, I would not for the world rejoice at another man's misfortune, and yet, when I was in town the other day I felt an unmistakable glow of satisfaction when one of the best farmers in the vicinity confessed that the cold snap had damaged the apples in one of his pits. When it occurred to me what I was doing, I felt badly about it, and began to hunt for an excuse. I was really sorry that he had lost his apples, and yet there was that glow of satisfaction. It was very puzzling, but now that I have thought it out, I have decided that I was not so very guilty, after all. What I really felt was a fellow feeling for him. I had been caught with a lot of work undone, and it somehow cheered me to find that I was not the only victim. To make things better for me, the farmer who had been caught is one who has been held up to me as a good example. After this, I shall pay more attention to the things he does and try to learn from him, for I have found that he is human like myself. When you have been feeling for a few years that you are a poor, blundering mortal in a land of people who never make mistakes, and who are always up with their work, and who sniff superior at your way of doing things, it is enough to give you a happy feeling to find that there is a man in the neighborhood who is capable of being neglectful at times. And to find that one of the best farmers got caught, and was willing to confess it, made my heart open to him. As the poet says: "A fellow feeling makes us wondrous kind."

This incident, and the solution I arrived at made me feel that perhaps I have found an explanation of the difficulty experienced by those who are trying to promote better methods of agriculture. The speeches they make and the papers they write describe such perfect methods and such invariable success that they go over our heads. They lack human sympathy, though just how to give them this quality is something of a problem. Each man has his own way of being sympathetic. But one thing is certain, most people are afraid to attempt to do things perfectly. They would rather go along in the old way than try some new way with which they may score a failure. We all admire perfection, but few of us hope to attain it. If the feeling could be got abroad in the land that it is no disgrace to fail in trying better methods, and that the man who fails has not lowered his standing, but should really be praised for having tried, more men would try, and much good would be accomplished. If the men who fail would only recount their experiences with good humor, and not be ashamed, we might learn as much from them as from the men who do things perfectly. I really think that if some of the lecturers at the Farmers' Institutes devoted whole evenings to telling of their failures, it would be a great help. The rest of us might be induced, like Topsy, to "fess up," and they say that confession is good for the soul. It is the failures that we hide that discourage us and do us harm. If we discussed our failures with those who have succeeded, they might be able to help us much more than they do now. I suspect that some of our best farmers have had the necessary experience to deliver excellent lectures on their failures.

Speaking of confessions, I want to confess a little matter, that I suspect is not peculiar to me, and that is the way that I read bulletins of the Department of Agriculture, and even "The Farmer's Advocate." Like other people, I have always been fond of travellers' tales and accounts of explorations in strange countries; but now that Peary has discovered the North Pole, about the last spot on the map has been written about. This has forced us to look for new worlds to conquer, and the bulletins and farm papers supply us with just the information we want. We read about these fine cattle and horses, and perfectly quipped farms and bumper crops, in much the same way as we used to read about

"The anthropophagi
And men whose heads do grow beneath their
shoulders."

The stories and articles are no doubt true, but that does not make them any the less fascinating. We read them as if they were accounts of happenings in another world, and are neither made envious nor roused to action. I read accounts of wonderful cows, and am enthralled by descriptions of their amiable habits, but cannot say that I have any hope of ever owning one. I have a sneaking feeling that cows like that need a lot of care that I could not hope to give. What I need

is a cow that can do a lot of hustling for her own living. Then there is the discussion that is going on about hired men. We read that, with mild wonder and perhaps a little disbelief. We know that there were hired men in the country once, and there may be a few specimens surviving in remote districts, but we never hope to see one again. The last one seen in this section passed through in 1907. He stopped a few weeks, merely to earn enough money to take him West. Since then we have heard of hired men only from letters in "The Farmer's Advocate."

The cold snap was certainly sudden in its movements. One day the thermometer was standing at sixty, and next morning it was down to twelve above zero. The worst thing about it was that it caught many farmers who attend to their roots, potatoes and apples in the traditional way. As far back as I can remember I have heard wise people say that pits should not be too warm in the fall, just lightly covered, and that Northern Spy apples are better of a light touch of frost. Because of this, many of the pits were in no condition to stand the midwinter frost of the past few days. Even worse than the state of the pits was the plight of many herds of fat steers. Their owners had them pasturing, in many cases, on farms at a distance from their homes (on those all-too-plentiful farms that should have signs bearing the inscription, "Owner moved West"). The result was that the cattle were caught without food or shelter, and in many cases had to stand for a couple of days shivering in the fields. But more than farmers and their stock were taken by surprise. Even the wild birds, with their wonderful instincts, were caught napping. Wild geese have been going over steadily since the cold snap came, and on the coldest day I saw a flock of blackbirds. When even these were overtaken unawares, ordinary people who depend on the weather reports in the newspapers and their own knowledge of the seasons, are not to be blamed too much. Personally, if I could live as wisely as the birds, I would be content to make the same mistakes as they do.

Now that winter is with us, and sleighing a possibility of the near future, I am beginning to long for some of the good old winter pleasures that have been improved out of existence. It is years since I have heard of an "Olio" or a "Singing School." We now have high-toned entertainments, with professional elocutionists who can command either laughter or tears. But I would give something to hear some of the old stand-by recitations again. Make no mistake about it, these old "olios" furnished a training that was worth while. A short time ago, an orator of international reputation assured me that much of his ease on the platform was due to the practice he had had in the country schoolhouses thirty years ago. To prove it, he stood up and recited for me, with the old familiar swinging rhythm and sing-song intonation:

"Come hither, Evan Cameron, come stand beside
my knee!
I hear the river roaring, down towards the wintry
sea!
There's shouting on the mountain side, there's war
within the blast,
Old faces crowd around me, old forms go trooping
past!"

Oh, yes, I know it, too, and as I repeat it the old forms and old faces come back again, and memories of long drives when we were all huddled in a sleigh-box that was well filled with pea-straw. I may remark, in passing, that it is a long time since I have seen any pea-straw. Then, there were the singing schools, where we each paid a dollar to be allowed to yell at the tops of our voices once a week for three months each winter. When the teacher succeeded in getting a class in every schoolhouse, some of us would follow him on his rounds night after night. Of course, we didn't learn how to sing, and I have never even tried since those happy nights. As a matter of fact, I never ventured to sing, except when there was such a noise going on that no one but myself could hear my voice. Nowadays, however, when a girl or boy suspects that they have real voices they go away to some city conservatory and learn to "holler" scientifically. Some of them become so skilled that they can sing "Coming thro' the Rye" so that you think they are giving you something in Italian or some foreign language that you cannot pretend to understand. But I feel sorry when I think of the fun they are missing.

It used to be quite a trick to get safely into the bank without having our heads knocked off by the bulls that had been soaked at the trough. The young people throw their peanut shells, and in good times we have become used to the sight of a bull whose chief

merit was that they could bellow like the bulls of Bashan. They seem to have disappeared with the old-time preceptors who used to lead the singing in the churches, and get the right note by tapping a tuning fork. Sometime I am going to make an investigation and find out if our young people have any pleasures that make up for the ones that have passed away.

P. E. Island Letter.

"Chill November's surly blasts" are with us again. The crops are all safely housed and cattle are snugly in winter quarters, with lots of feed in sight to carry them through the winter. Crops on the Island have been up to a good average. The rainfall was a little below that of the previous year. The eastern County of King's had not enough rain, but Queen's and Prince Counties got a larger share, and had good crops. Hay was a little short all over, clover having been winter-killed, but there is a large amount of hay left over from the 1910 crop, which will more than supply the deficiency. Stock is not in quite as good condition, on account of the hot summer, with its terrible plague of flies. Grass beef of good quality is scarce and dear, but the excellent root crop just stored up will be a great help in preparing the thinner animals for the block.

Oats are threshing out well, but will not weigh out as well as last year. Wheat has yielded well. Potatoes are nearly up to the average. Turnips are a bumper crop. Fodder corn did finely, and helped the dairymen to tide over the shortage of grass and come out with a good milk account at the close of the season. This has been one of the most satisfactory dairy seasons in our dairy business. The milk supply at the co-operative dairy stations has lacked a little in quantity, but the returns to the patron will be the largest he ever received. Milk will realize the patron considerably over \$1.00 per 100 pounds. Cheese has sold at about 2 cents a pound more than last year. This will give the dairy business here quite a "boost," as is already in evidence in the increased price of the milk cows. Our winter butter business is now in full swing, and the very high price for butter will tend towards keeping the cows milking well on into the winter.

Prices for some lines of farm produce are very good. Oats sell at 45c., potatoes at 35c., hay \$13 a ton, but pork and lambs are away down, the former selling at 7½, dead weight, and the latter at \$3.50 per hundred alive. At a closing-out sale of farm stock that we attended recently, ordinary farm horses sold for from \$150 to \$200, and milch cows and young cattle at extra prices.

The Farmers' Institutes are holding their annual meetings this month, and arranging programmes for the winter meetings. These Institutes have been a great help to our agriculture in educating the farmers up to the necessity of sowing only the best seeds and improving their farm stock; and, by working co-operatively along these lines, the farmers have succeeded in introducing many pure-bred sires, and so have graded up herds to a more profitable standard.

Another forward move is now being taken in this matter in the organization of a "Central Institute" for the whole Province. This Central Institute, composed, as it is, of delegates from all the Farmers' Institutes on the Island, will afford the agricultural interests an opportunity to speak unitedly in demanding their share of our revenues for the advancement of all matters connected with the farmers' calling. There is a strong demand here for the getting of more agricultural teaching into our educational system, both in our common schools, as well as the Prince of Wales College. It is claimed that our present system, especially as regards the trend of teaching of the Prince of Wales College, takes our young people, not only away from the farm, but also away from the Province, to engage in teaching or other professions. Then, there is the question of better transportation, which will not down. On account of our isolation, we have to pay freight on three short hauls to get our farm produce to the markets in the other Maritime Provinces. What our farmers demand is a Government ferry across the Straits of Northumberland, connecting the Government railway here with the Intercolonial railway on the other side, and by doing away with the privately-owned steamship line, give us a chance to reach our market by paying one through rate, instead of three, as we do now. These and other matters of importance will receive attention from the Central Institute as soon as the organization of it is completed, which will be at a meeting called for the 28th of November.

The annual convention of the Fruit-growers, and the Winter Fruit Show, will be held here on November 29th. Apples have been a heavy crop here this year, and the quality A-1. Shipments have been made to England direct by steamer from Charlottetown.

W. S.

POOR COPY

Stock Judging Competition at Fall Fairs. "Easy to Labor for Those You Love."

There is no better means of gaining knowledge of type and conformation, and at the same time acquiring confidence in ability to judge live stock than the actual placing of a few classes of animals in competition. At several of the county fairs in counties where a Representative of the Ontario Department of Agriculture is located, stock-judging competitions for young men have been inaugurated during the past autumn. These have proven of great interest to all stockmen, young or old, who have attended these fairs. At the North York Fair, recently held at Newmarket, such a competition was put on for the first time, and thirty young men, between the ages of fifteen and twenty-five, placed the different classes, which included draft horses, dairy cattle and beef cattle. The competition was in charge of W. E. J. Edwards, the Agricultural Representative, and its success speaks well for him, and goes to show what can be done to work up interest in this important phase of agriculture. Such competitions are very commendable, and there is no reason why every fall fair, whether a large exhibition or only a small country show, should not offer prizes for the best work done by young men in stock-judging. Where there is no Local Representative of the Department of Agriculture to manage the work, some of the stockmen on the Fair Board could handle it very well, and such a move on the part of the management of all our fall fairs would do much to maintain and further the interest in live stock among the young farmers and farmer's sons of the country.

Britain's New Minister of Agriculture.

The Right Honorable Walter Runciman, a photograph of whom appears on this page, who has recently been appointed Minister of Agriculture, or President of the Board of Agriculture, by which name the office in the British Cabinet is designated, is a son of Sir Walter Runciman, Newcastle-on-Tyne, and has represented the District of Dewsbury in Parliament since 1902. In the recent reconstruction of the Cabinet he was transferred from the office of Minister of Education, which he had filled for some years. He was educated at Trinity College, Cambridge, and became Parliamentary Secretary to the Local Government Board from 1905 to 1907, and was Financial Secretary of the Treasury in 1907-8. "The new President," says the Live-stock Journal, "is not known as an agriculturist, but is a brilliant member of his party, and it is quite probable that his work at the Board of Education may stand him in good stead in the new office, as one of the aims of the future is evidently to be to systematize agricultural education." Mr. Runciman's salary is £2,000 a year.

The second annual meeting of the Northern Nut-growers' Association will be held, on the invitation of Director L. H. Bailey, at the New York College of Agriculture, Cornell University, Ithaca, N. Y., December 14th and 15th, 1911. Membership in this Association is open to all persons who desire to further nut culture. The cause is worthy, the subject not unimportant, and the meeting should be profitable.

To the Marquis variety of spring wheat, originated by Dr. Chas. E. Saunders, Cerealist at the Central Experimental Farm, Ottawa, and grown by Seager Wheeler, Rosthern, Saskatchewan, belongs the credit of securing the \$1,000 gold prize for the best exhibit of wheat at the Madison Square Garden Land Show, New York, as reported in "The Farmer's Advocate" for November 9th.

Two important dairy meetings will be held again this year at the O. A. C. Dairy School during the week of the Winter Fair. The cheese meeting will be held Wednesday, December 13th, at 1.30 p.m., and the creamery meeting on Thursday, 14th, at same hour. Everyone interested in dairying will be welcome.

In the obituary of the late Sir John Carling, in our last week's issue, the date of his decease was inadvertently given as October 6th, whereas it should have read November 6th.

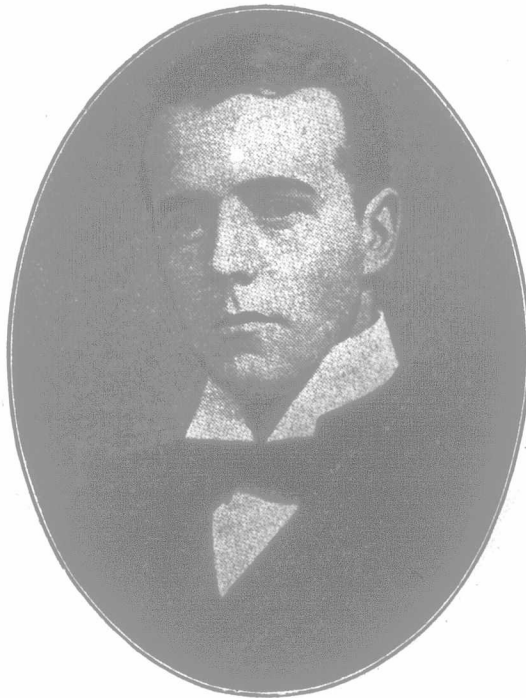
Governor Harmon has offered a gold medal for the best five ears of corn in Ohio exhibited by a young man studying agriculture, to be awarded at the "Battle of the Kernels," the corn and grain show to be held at the College of Agriculture, in Columbus, next January.

Editor "The Farmer's Advocate":

I have been very interested in reading some of the articles touching on the farm-labor question which have appeared from time to time in "The Farmer's Advocate," and have been pleased to notice the kindly sentiment displayed in some of them, but I have felt a fear lest the original end in thus commenting on this subject (which I understand is the solving of the labor question) might be lost, and instead thereof, a controversy arise between farmers and the laborers on a basis which would prove more harmful than good.

I believe it is difficult to write on a subject of the kind now under consideration without the possibility of hurting some person's feelings, but I am sure that such a design is far from the writer's mind. In my opinion, it is a good plan, in a case of the present kind, to keep more to the general condition, rather than instance some rare circumstance. Perhaps, again, the question might be asked what is the "general condition," that it might be known from the "more rare." I do not feel that I am capable to satisfy all minds as touching this, but it does seem to me that the instance cited lately, concerning the Englishman of the "elaborate toilet" is "more rare."

It is, I believe, an undeniable fact that in some districts the labor question is not only getting serious, but is serious. The thought that is before me is not so much about the scarcity of farm labor as the retaining of what there is. Why is it that the farmer cannot (or does not) keep his hired man, and why is it that the hired man does not stay with the farmer? This, I believe, comes very close to our question. Then, what is the answer to it? Perhaps few would care to openly endorse my sentiments, and some may



The Right Hon. Walter Runciman.
Appointed Minister for Agriculture in the British Government.

think that they have no bearing on the subject, but I believe there are more convinced of the truth in them than would care to admit. I believe there is too little love existing between men and masters (and masters and men), and too much bestowed upon the money part of the question. Has it not been truly said that "the love of money is the root of all evil," and can we not trace it out in this matter? The hired man's complaint is (and perhaps it will be admitted as general) that the hours for working are too many; that they do not like the choring at night. Why is it that the farmer has his man choring so late at night? I do not refer to the attention to his team, but the feeding of pigs and the milking of cows after night. Is it not because it brings him in money? Then, again, the fault with the laborer is that he wants too much money, according to the farmer's views. Both would set about to justify themselves on their different points, the one says that, if he has to pay big wages, he has got to get the work out of the man; the other that, if he has got to work long hours, he is going to make the farmer put up the wages. What, then, would the writer say—that the laborer should work for the farmer because he loves him, and not get any wages, and that the farmer should pay the laborer money, and not expect any work from him? No, but is it not evident that, when the two meet on this ground,

they are the better prepared to satisfy one another, for then the laborer will not work "with eye-service as men-pleasers," thinking to do enough to earn his wages, and that's all, but will have that interest in his employer's business which love for him would warrant. And so with the farmer, he would not keep his man to get as much out of him as possible, but the mutual love would create in each a desire to do unto others as they would be done unto. Perhaps the question would be asked, "Suppose that one of the parties was disposed to look at things in this light, what is he to do in his dealings with the other man? Surely he will find the answer if he considers the subject of doing to others as he would be done by."

The writer is a native of London, England, who came to Canada at the age of fifteen years, practically alone, which was about seven years ago, and has worked on the farm for the most of that time, and is now putting in his second term with his present employer, but, although a laborer, he has endeavored to write without any prejudice. F. C. B.

Unusual Interest Shown in the Horticultural Conventions.

ONTARIO FRUIT-GROWERS' ANNUAL CONVENTION.

It would be difficult to find a more alert, keen, businesslike body of men than those which met at the Canadian Forester's Hall, Toronto, November 15th and 16th, for the annual convention of the Ontario Fruit-growers' Association. There was a marked air of prosperity and firm belief in their business shown by all the large number present. The attendance was perhaps the greatest in the Association's history, and the meetings were an unqualified success throughout. President Donald Johnson, of Forest, reviewed briefly the fruit industry situation of 1911, and prophesied greater strides than ever in the next few years. Much of the progress being made, he thought, was due to the work of the Association in opening up new markets and improving transportation facilities. He dispelled all fear of overproduction injuring the business, and stated that Ontario fruit had now found its place in the markets of the world. Orchard planting is increasing rapidly, and the next few years will see larger numbers of trees set out than ever before. The awakening he traced to demonstration orchards and individual enterprise. "Fruit-growers of to-day are at the threshold of their possibilities," said Mr. Johnson. The Westerners need fruit which they cannot produce, and there is a large market in the home land. The revival has been general from Georgian Bay to the counties bordering on Lakes Erie and Ontario, and to the Eastern counties, as well, where hundreds of thousands of trees are being planted annually.

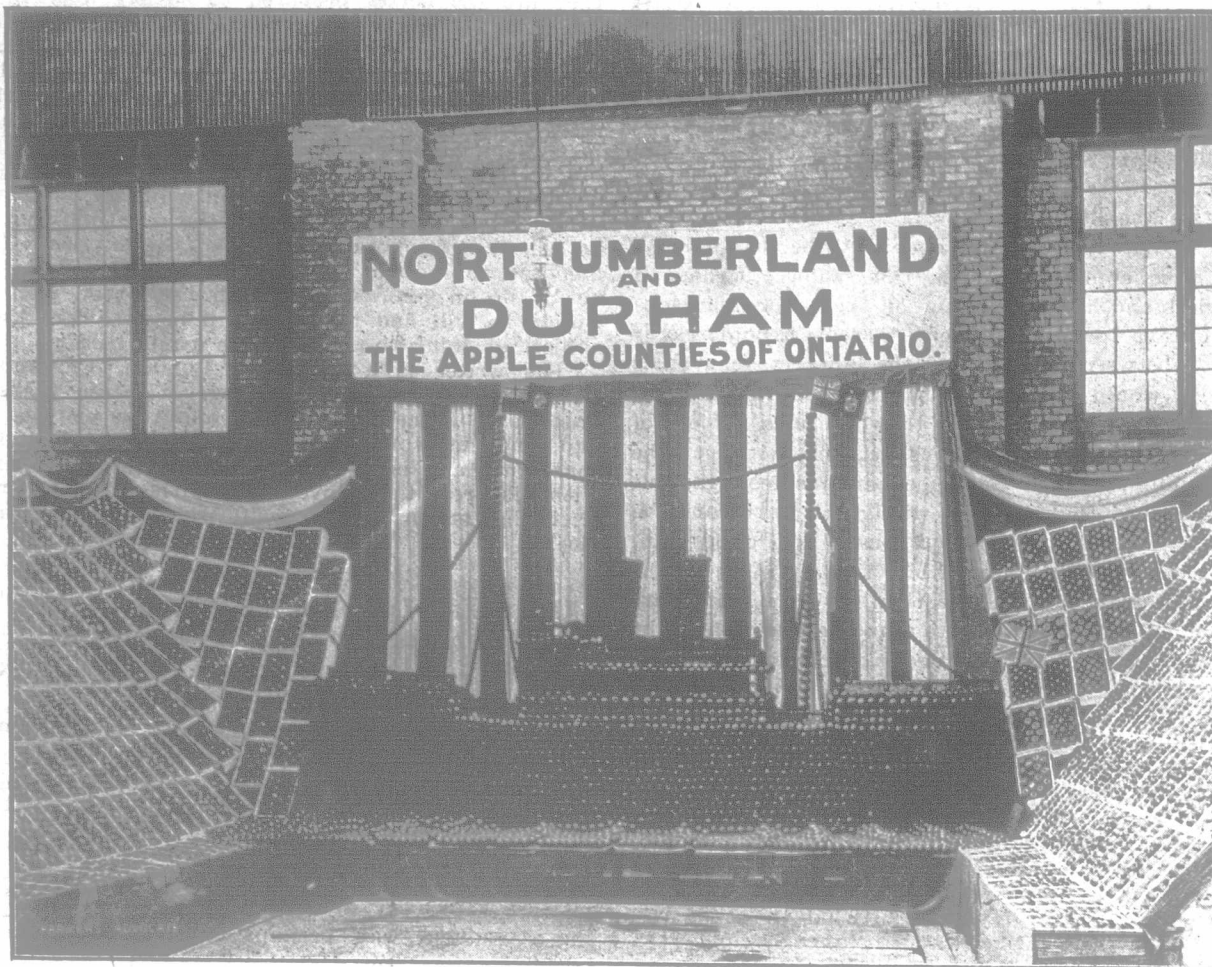
Spraying and good orchard care, he thought, had been practiced this year more than ever, and yet there was much room for improvement. Mr. Johnson urged the appointment of a committee of thoroughly qualified men to inspect the apples at point of shipment. He did not believe in political appointment of inspectors, and asked the Association to appoint a committee to look into the matter. A very sharp discussion followed, in which the need of standard sizes for the different grades of different varieties was brought out.

LIMIT THE NUMBER OF VARIETIES.

Prof. W. T. Macoun, Horticulturist, Experimental Farm, Ottawa, advised growers not to plant too many varieties. A large number of new varieties are originated each year, but very few are especially valuable. Before planting a new variety, the grower should be sure that it is recommended by the experiment stations. New apples are propagated from seedlings, and the only one of promise during the past year has been the Norfolk Beauty, a dark, orange-red apple, originated in Norfolk County. A number of promising McIntosh Red and Wealthy seedlings have been propagated. A new hardy variety of plums has been found in the Omaha. Few really valuable varieties have been propagated this year, although thousands of seedlings have been grown.

THE RAILROAD WORM.

The Railroad Worm or Apple Maggot is not, as many suppose, a new pest in Ontario, said W. A. Ross, B. S. A., who has been in charge of special investigation into the ravages of this insect during the past summer. It is found in the following counties: Prince Edward, Lennox, Hastings, Frontenac, Northumberland, Durham, Ontario, Wentworth, Lincoln, Welland and Norfolk. The injury is done by the larvae of a small fly,



An Ocean Liner of Apples.

The unique exhibit of Northumberland and Durham Counties at the Fruit Show.

which make winding, brownish streaks or burrows through the fruit. The insect passes the winter in the pupal stage in the soil, and the adult emerges in July. The egg is laid under the skin of the apple, and the insect hatches and begins work. Infected apples become woody and unfit for use. The most reliable remedy is the gathering and destruction of all fallen fruit twice per week. Hogs or sheep will usually keep this fallen fruit cleaned up, and much of it can be profitably disposed of to the evaporators. Harvest apples, sweet apples, Snows and Spies seem to be the worst-affected varieties in Ontario. No variety appears to be exempt from attack. Very acid varieties are much less subject to attack than sub-acid and sweet apples. Good orchard practice seems to keep the railroad worm away, concluded Mr. Ross.

THE NEEDS AND POSSIBILITIES OF ORCHARDING.

Four needs of the orchard were pointed out by W. F. Kydd, of Simcoe, who has been in charge of demonstration orchards in the Georgian Bay District, chief of which he thought was manure. He did not think it possible to grow large crops of good fruit without manure. Following this comes pruning. More trees are left too thick than are too severely thinned. Speed is necessary, and for this he recommended long-handled shears. Careful spraying he deemed the third essential, as clean fruit cannot be had without it. Cultivation he placed as the last essential. This, he believed, depends largely upon locality. Mr. Kydd thought no other branch of agriculture was progressing so fast as fruit-growing. More spray pumps were bought by growers the past season than ever before, but still there is a great deal to be accomplished. He cited conditions in the Georgian Bay District. Orchards, he said, in Simcoe County will not average \$25.00 per acre, whereas, if all were properly cared for, \$100.00 per acre would be a low estimate. Possibilities, he thought, were unlimited, and that from \$100.00 to \$500.00 per acre could be realized. He knew an orchard which in 1910 yielded \$50.00 worth of fruit, and in 1911, the first year of care, it yielded \$225.00. Another case was mentioned of an orchard which in 1909 gave \$200.00; in 1910, under care, \$510.00, and in 1911, the second year of proper treatment, boosted the returns to \$1,200. Greater care is still necessary in picking and packing, said Mr. Kydd, in closing.

CULTIVATION A PRIME FACTOR.

The greatest factor in successful orcharding is cultivation, according to Prof. J. W. Crow, of Guelph. He believed that it was more important than fertilizers. In experiments carried on for fifteen years at Woburn Experiment Station, in England, the trees were better where no fertilizer was used and good cultivation adopted than where the heaviest amount of fertilizer was used. The trees, however, by actual experiment has failed to produce fruit buds, and so no more fruit can result than from clean cultivation, which

he believes to be the greatest factor in rendering plant food already in the soil into an available condition. Nitrogen and humus can be added by the use of leguminous cover crops, and thorough cultivation will accomplish wonders; so that, before buying chemical fertilizers, the soil should be carefully studied, to show what is needed.

Underdrainage, said Prof. Crow, can safely be recommended for all clay or clay loam orchard soils, unless on a heavy slope or a sandy or gravelly subsoil. It adds more root area per tree, and thus more food material is reached.

The subject of fall plowing raised an interesting discussion. In view of the fact that it makes earlier spring cultivation possible, and because early spring cultivation is important, Prof. Crow rather favored the idea. Fall-plowed land does not freeze to so great a depth as unplowed soil. It opens the soil and puts it in a first-class mechanical condition through the action of the frost, and, while it will not hold the snow as well as

unplowed land on which a cover crop is growing. Prof. Crow thought it would be all right in Southern Ontario, and could see no reason why it should not prove generally satisfactory, provided it was done very shallow. Much discussion followed, in which Dr. C. H. Riggs, of the Carefree Orchard Company, Toronto, cited a case of an orchard which gave a good crop on the spring-plowed section, and a very poor crop on the portion fall-plowed. Other conditions may have operated against the fall-plowed portion.

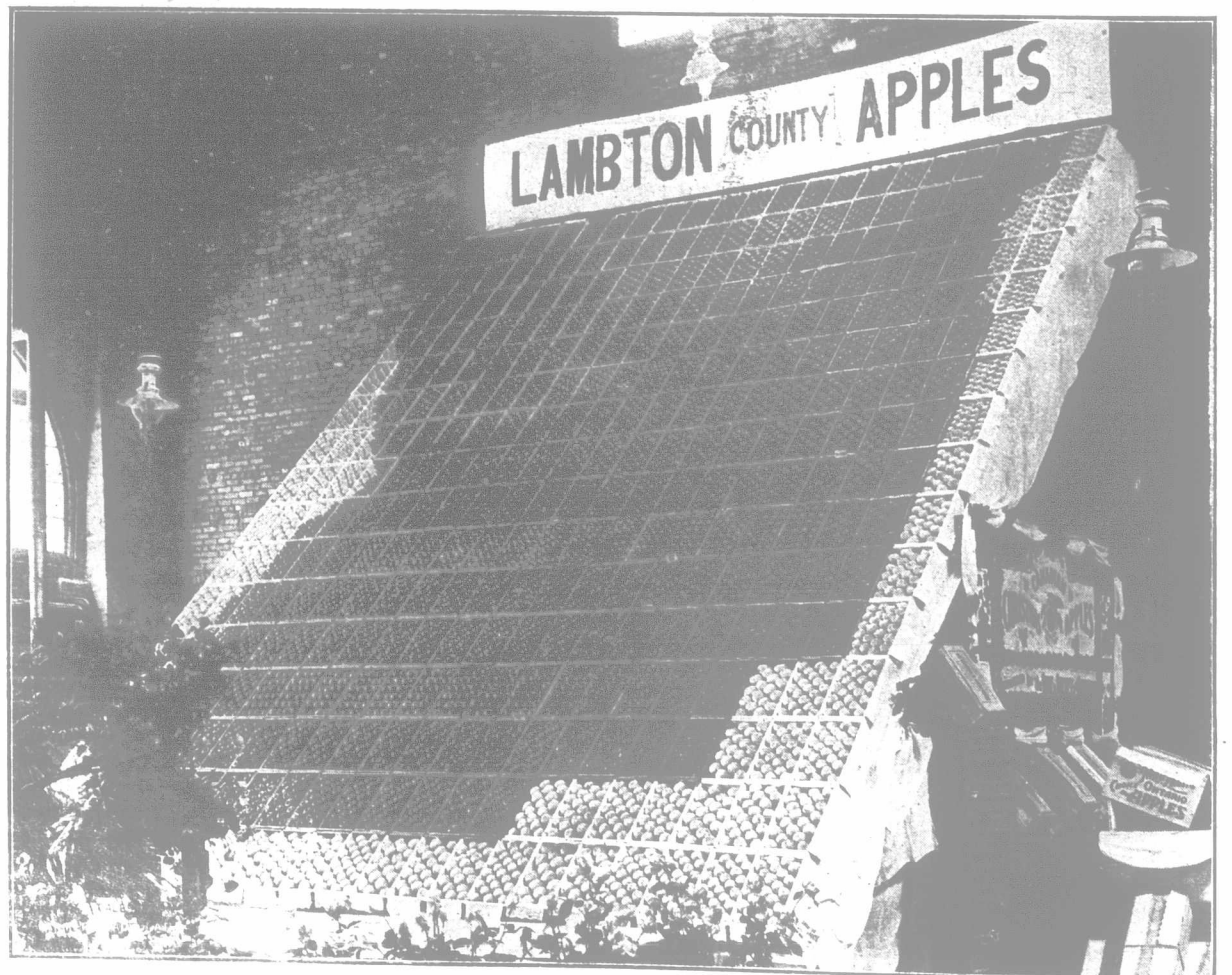
Windbreaks were discussed at length, and it was pointed out that it is quite possible to get them too thick, so as to obstruct the free circulation of air, so essential to clean, bright fruit.

A BRITISH MARKET FOR OUR PEACHES.

C. A. Dobson, Jordan Harbor, and A. C. Biggs, of Burlington, addressed the convention on the possibilities of shipping peaches to the British market. Mr. Dobson's shipments the past season comprised some 3,500 boxes of Elbertas, and the results convinced him that it is quite possible to market our peaches in Covent Garden, London, in good condition, and at a profitable price to the grower. High-class trade is all that we can hope to cater to, and in picking and packing it must be remembered that fifteen days will elapse between picking and marketing. If peaches are selling here at one dollar a basket, to make a profit they must bring two dollars on the English market. Growers were urged to keep in close touch with the Cold-storage Branch. No complaints were received by either Mr. Biggs or Mr. Dobson, a fact which testifies to the quality of the fruit sent, and to its good condition upon arrival. Careful handling is imperative, and double wrapping advisable. Thoroughness, Mr. Biggs believed to be the keynote of success in the venture. He thought that some kind of tight box might be used to good advantage to hold the cold air in the boxes upon leaving the cold storage, and thus enhance the keeping qualities of the fruit.

CARING FOR THE PEACH ORCHARD.

"The Care of the Peach Orchard" was the subject of an address by F. M. Clement, B. S. A., of Elgin County. Good varieties he considered the first essential to success. Different localities require different varieties, so it is necessary to study the district in which the orchard is to be located. Proper pruning and cultivation must be attended to if good results are to follow. Much diversity of opinion is shown in peach-orchard practice; some cut back and thin severely, while others do not practice cutting back at all, and each seems to get good results. Strong, thrifty trees, well fertilized and well cultivated, can be expected to do well if the climate is suitable. Late cultivation must be avoided, or the trees will suffer. Cultivation should cease about the first or middle of July, and a cover crop be sown. Mr. Clement believed that thinning the fruit would pay large returns, but most of the growers, he said, lacked the courage to do it.



A Great Commercial Exhibit.

Over 350 boxes of fancy apples exhibited by Lambton County at the Fruit Show in Toronto last week. The illustration does not do justice to the exhibit, owing to the difficulty in bringing out colors.

WHAT OTHER PROVINCES ARE DOING.

The first evening session was devoted to addresses by A. G. Turney, Provincial Horticulturist, Fredericton, N. B.; W. T. Macoun, Dominion Horticulturist, Ottawa; Norman Jack, Chateauguay Basin, Que.; and Harold Jones, Maitland, Ont., on fruit-growing in New Brunswick, Nova Scotia, Quebec, and British Columbia, respectively.

Mr. Turney outlined the possibilities of New Brunswick, showing that as yet the industry was in its infancy, and few men depended upon it for a living, yet he believed that Fameuse, McIntosh, Bethel, Dudley, Duchess, Wealthy, King, Spy and Ribston apples could be grown successfully, and, as land could be obtained for a very low price, he thought it a good place for investment in fruit lands. It has an immense geographical advantage, being close to the Old Country market, which is a great consideration.

The Province of Nova Scotia has the longest horticultural history of any part of Canada, dating back to 1668. The fruit-growing districts of the Cornwallis and Annapolis Valleys are well known. Apples, pears, plums, cherries and small fruits, and, to a limited extent, peaches and grapes are grown in these valleys. Gravenstein, Tompkins, King, Ribston, Blenheim, Baldwin, Northern Spy, Rhode Island Greening, Golden Russet, Nonpareil and Wagener apples do well in Nova Scotia. Nova Scotia, in climate, price of land, and access to market, compares very favorably with the other Provinces, and is making rapid strides in fruit-growing, according to Mr. Macoun.

Many of those present evinced surprise when Norman Jack stated that apples could be successfully grown in nearly every county of the Province of Quebec. Fifty years ago, said Mr. Jack, it was considered lack of wisdom to plant a commercial orchard in Quebec. Fameuse, St. Lawrence, McIntosh Red and Alexander, are varieties now recommended by Mr. Jack for planting in Quebec on a commercial scale. Wealthy also does well. Other fruits, as pears, plums and small fruits, succeed well in Quebec.

Mr. Jones, in speaking of British Columbia's fruit industry, praised their well-organized methods of packing and handling their fruit. Apples, cherries and plums are doing very well in the Province, as are also small fruits. Insect pests and fungous diseases, he said, were not very troublesome, aphids or cherry slugs being the most numerous. Orchards in British Columbia pay expenses, and show a profit at eight years of age. In some parts the temperature falls too low for tender varieties of apples, and trees were noticed by him showing the effects of frosts. He was quite satisfied to return to Ontario, where he thinks we have ideal fruit-growing conditions, although British Columbia, like every other district, has its own peculiar advantages.

PEACH DISEASE IN ONTARIO.

L. Caesar, B. S. A., of the O. A. C., Guelph, gave one of the best addresses of the convention, on the various diseases of the peach in Ontario. He discussed Leaf-curl, Brown Rot, Scab or Black Spot, Gum Disease and Cankers, Powdery Mildew, Crown Gall, Yellows and Little Peach. The last two named diseases are the worst enemies of the peach, as they cannot be controlled by spraying, but by a system of careful inspection by thoroughly competent men, and the prompt destruction of all trees showing symptoms of the disease, these two can be controlled quite successfully. The large number of diseases listed would indicate that peach-growing is a difficult proposition, but nearly all of them can be overcome by careful cultivation and thorough spraying. Most of those present showed more interest in the discussion of Little Peach and Yellows, and for this reason special mention is made of these diseases. Yellows causes the premature ripening of fruit, which is highly colored and blotched with red on the outside, and the inside is also more or less streaked with red from the skin to the pit. The diseased fruit the first year is usually larger than normal, but the following years it gradually becomes smaller. Well-advanced diseased trees show dormant or concealed buds on the main branches, which often burst into little slender shoots. Leaves often turn yellow and become curled and clustered. During the early stages, however, the foliage is usually green, but the following year the yellow tinge will show, and more fruit will be affected. The disease will sometimes kill a tree in two or three years, but they usually linger four or five years.

Unlike the Yellows, the fruit of trees affected by Little Peach ripens later than normal, and is usually somewhat smaller. This must not, however, be relied upon too much, because affected trees have been frequently found on which the fruit ripened near the usual time, and was about as large as healthy fruit. The second year the fruit will be much smaller. There is no high coloring or blotching of the fruit, as in Yellows. The most characteristic and reliable symptom of the disease is the peculiar way in which the leaves curl and cluster, and turn an unhealthy yellowish

and often reddish color. Most of these leaves appear shorter and flatter than usual, and they turn down at the tip in a claw like manner. It takes some experience and care to recognize the disease. Often trees are noticed with all the outer or terminal foliage reddish and sickly, but the central and inner foliage green, vigorous and normal. Such trees are not attacked by Little Peach or Yellows, but are lacking in vigor, and often show brown spots upon the leaves, due to Shot-hole fungus. Buds often burst in the axils of the leaves and dormant buds on the main branches, but, unlike Yellows, these shoots never develop into slender, bushy twigs, with narrow-pointed, yellowish leaves.

Yellows and Little Peach are very destructive diseases. These diseases are now widespread in all the peach-growing States north of Alabama, and are now found in the Niagara District of Ontario, where, according to Mr. Caesar's estimate, 50,000 of the 1,200,000 peach trees showed symptoms of these diseases. About nine-tenths of these trees were found in about thirty-five orchards. The cause of the disease is as yet unknown. Care should be taken in the selection of buds by the nurserymen. Every orchard should be carefully inspected in August, and again in September, and diseased trees marked and removed immediately.

Mr. Caesar thought that a good biologist should be appointed to spend his summer studying the diseases, helping inspectors to recognize the earliest symptoms, and encouraging them in their work. He also urged the carrying on of demonstrations in each district, and a better training of inspectors, who, he said, should get higher pay, as the present rate of wages is not high enough to keep the best men, and encourage them to do their best work. He recommended that the inspectors be appointed by and responsible to the Provincial Government, and that the salary be increased to \$3.00 a day and expenses in the beginning, which, on good service, should be increased to \$4.00.

LITTLE PEACH AND YELLOWS IN NEW YORK

Following Mr. Caesar's address, came B. D. Van Buren, Assistant Chief of Bureau of Horticulture, Albany, N. Y. Mr. Van Buren has had a wide experience with these diseases, and strongly favors Government appointment of inspectors. Inspection commenced in New York State in 1902, when forty orchards, including 62,000 trees, were inspected, and 2,633 trees were found diseased. In 1904, 44,000 trees were inspected, and 2,005 found diseased. In 1905, 133,000 trees were inspected, of which only 803 were found diseased. In 1906, 129,327 trees inspected, and 901 diseased. The inspection of 1907 showed 730 diseased trees out of 115,100 inspected; that of 1908, 11,297 out of 418,000; 1909, 96-100 of 1 per cent. of 497,000; 1910, 4,768 out of 506,000; and 1911, 8,410 out of 564,000. This shows the magnitude which the work has attained, in this State, and also demonstrates that, by careful inspection and prompt destruction of diseased trees, these diseases can be successfully held in check. Each diseased tree is marked upon inspection, and all such trees must be removed within ten days of marking. Many of the best growers use the axe freely previous to inspection, cutting out all suspicious-looking trees, with the result that orchards of 6,000, 3,000 and 2,800 trees only showed two, nine and six diseased trees, respectively, in one year. He urged that every fruit-grower be his own inspector, and that no sickly trees be allowed to grow.

ORCHARD LEASING.

Dr. C. H. Riggs, of the Cared-for-Orchard Company, Toronto, addressed the fruit-growers on a somewhat new phase of horticultural enterprise in Ontario, that of leasing orchards. To make a profit, he said that much depended upon the geographical situation, convenience to market, availability of labor, access and egress to a large center, the number of trees available in the locality, the water supply, and the condition of the roads over which the fruit must be hauled. Good foremen should be given definite areas to supervise, and, in his opinion, a late summer spray of lime sulphur is beneficial in promoting high coloring and better development of the fruit. Asked as to what strength he would apply it, he stated that late in July or early August, when the foliage is ripened up and hard, good results follow the application of the lime-sulphur at ordinary winter strength. This statement provoked much discussion, many of the fruitmen present believing that so strong a spray would injure the foliage, even at so late a date. Dr. Riggs showed some apples which had been so treated, and they were very fine specimens, indeed. He was a strong advocate of careful and systematic thinning of fruit, and made the statement that "no orchard can be brought to a successful commercial issue unless thinning is practiced." He also was responsible for the statement that "no other fruit than fancy or first-class should be packed for shipment." He also advocated the establishment of co-operative canning factories in all fruit districts to handle the cull and fallen fruit. This address was of much

interest, and many good suggestions were thrown out by the speaker.

ASSOCIATION DIRECTORS.

The following men comprise the directorate of the association for the coming year: Wm. Alford, Ottawa; W. H. Dempsey, Trenton; Wm. Stainton, Oshawa; L. A. Hamilton, Lorne Park; J. W. Smith, Winona; A. Onslow, Niagara-on-the-Lake; J. Gilbertson, Simcoe; D. Johnson, Forest; R. R. Sloan, Porter's Hill; F. M. Lewis, Burford; Adam Brown, Owen Sound; W. C. Beaven, Bowmanville, and W. J. Bragg, Prescott.

THE DOMINION CONFERENCE OF FRUIT-GROWERS.

Jas. E. Johnson, manager of the Norfolk Fruit-growers' Association, believed that the associations were outgrowing the education of the people. He believed that all the associations should be reorganized, and that each applicant admitted should show qualifications entitling him to become a member of the association. This he claims can only come from educating the growers in up-to-date fruit culture in all its branches. Growers, merchants, dealers, and all concerned, are now agreed that co-operative associations are a great benefit to the industry, and that because of the better quality of the fruit everyone from the grower to the consumer receives great benefit. He urged that a competent man be sent to the Old Country to study co-operation there for six months and bring back a report. He also advocated the meeting of the local associations at least once in two weeks to keep abreast of the work. Small associations, he believed, would be preferable to those of very large membership, because more thorough work could be done.

A. W. Peart, of Burlington, impressed upon those present the great need of fuller fruit statistics. In the annual report of this branch four columns are now given where only two were allotted previously. Apples and small fruits were the only fruits receiving a column before, but now vineyards and gardens have been added. He proposed that the Provincial Government be asked to specialize a fruit list with separate columns for the acreage of apples, pears, peaches, plums and small fruits.

A discussion followed on the advisability of holding a national apple show in Toronto in 1912, but the proposition was turned down almost unanimously, the members believing that better work could be accomplished by retaining the Provincial show.

RESOLUTIONS.

Resolutions to the following effect were passed by the association:

1. That a committee of the association be appointed to procure the latest information with regard to the best style of packing of fruit, and that they report to the directors of the association for publication.
2. That the Ontario Government be requested to provide a short course for fruit inspectors at the O.A.C., Guelph, and that they grant certificates to each successful student; also that schools to instruct apple-packers be provided in the counties.
3. That railway companies be interviewed by the transportation committee, with a view to improving the refrigerator-car accommodation, and to protect fruit, and that the railway companies be asked to guarantee refrigerator cars to move fruit in cold weather.
4. That the Ontario Government be requested to send a capable man to Europe to study co-operation and market conditions and report to the said Government.
5. That the Government have daily market prices of fruit cabled from their agents in the Old Country and published in the daily papers in all Provinces of the Dominion.
6. That the association urge upon the Dominion Minister of Agriculture to appoint a commission of three from each Province, composed of fruit dealers or growers of prominence, to select and recommend for appointment fruit inspectors.
7. That the Dominion Government be requested to have the forms issued to basket manufacturers, so as to insure the uniform size of fruit baskets.
8. That the association endorse the recommendation made by L. Caesar, that Provincial inspectors be appointed to investigate diseases and insects of fruit trees.
9. That the Government be asked to amend the Fruit Marks Act, so as to form a uniform size for each variety.
10. That the Government be asked to amend the Inspection and Sales Act, and appoint a larger number of inspectors, and that inspection be made at point of shipment, and a certificate of same be given.
11. That every effort be made in the propagation of new fruits at Jordan Harbour.
12. That the association convey congratulations to Hon. R. L. Borden, on his good judgment in selecting Hon. Martin Burrell as Minister of Agriculture; also that congratulations be forwarded to Hon. Martin Burrell, whose appoint-

ment was in every way satisfactory to the fruit-growers.

The series of meetings was brought to a close by a very helpful packing demonstration by W. F. Kydd, of Simcoe, followed by addresses and demonstrations in fancy packages for fruits by P. J. Carey, of the Dominion Fruit Division, and Prof. J. W. Crow, O.A.C., Guelph.

Different styles of pack were discussed and demonstrated, as were also the various wrappers and styles of paper used. It was pointed out that in the case of two fancy boxes at the show the apples themselves were equally good in pack, size, shape, color and quality, but that the difference in wrapping paper used gave one a decided advantage over the other. These demonstrations brought to a close by far the most successful convention of the association, and the members went away enthusiastic over the possibilities of the fruit industry, and determined to again eclipse their past record in 1912.

Ontario Vegetable Growers' Convention.

The seventh annual convention of the Ontario Vegetable-growers' Association, which met in the City Hall, Toronto, Nov. 15th, was, in the opinion of many prominent growers, the best in its history, in attendance, enthusiasm and actual profit derived and business transacted. The vegetable-growers certainly show that they are transacting their business in a thoroughly businesslike manner.

IRRIGATION.

The opening address, by President Thos. Delworth, was one of optimism. In spite of the drouth, the vegetable-growers have had a very successful season. The drouth has, however, emphasized the need for some system of irrigation, which need has been felt for several years. In this problem, there are three questions to be considered: (1) Water supply, which must be abundant; (2) power for handling same; (3) method of applying. The Hydro-Electric power is solving the problem in some places, while the introduction of such irrigation systems as the "Skinner" is fast solving the problem of application.

The producer should get nearer to the consumer, said Mr. Delworth. The middlemen are getting too much profit, and the vegetable-growers get the onus for high prices.

The Association have this year had excellent results from seed potatoes from New Ontario. A small quantity of this seed from that district is in Toronto for distribution, but the demand has already exceeded the supply many times. Carload lots are needed to supply the great demand.

Mr. Delworth pointed out the difficulties that frequently arise from the lack of legal standards of measurement, especially potatoes in bags. In concluding, he emphasized the importance of securing the aid of scientific investigators. In his opinion, the vegetable-growers need their help along many lines in which they are especially fitted to give aid.

VEGETABLE POSSIBILITIES IN NEW ONTARIO.

The report of the Secretary-Treasurer, J. Locke Wilson, showed progress in all departments, and especially in point of numbers and the growth of the co-operative spirit and practice. He spoke in glowing terms of our 16,000,000 acres of fertile land in "greater" Ontario. A great future lies before that country, which is especially suited to the production of the potato. With no potato blight, rot or beetles to contend with, Mr. Wilson thinks a man with but a very limited brain power could grow potatoes very successfully in that wonderfully fertile soil. A ready market is available at their doors in the Cobalt, silver and nickel mines. But Mr. Wilson thinks that, if New Brunswick growers can lay potatoes down in Toronto for 70 cents per bushel, the tens of thousands of bushels, that our New Ontario growers have a wonderfully good chance, with only one-third of the distance to ship and the ease with which they may be grown as a special advantage. At present there is a discrimination against New Ontario in freight rates. From St. John, N. B., to Toronto, in carload lots, the rate is 22 cents per cwt. From New Lisard, on the same article, and about one-third the distance, the rate to the City of Toronto is 21 cents per cwt., in carload lots. This condition of affairs should, in his opinion, be speedily remedied.

Mr. Wilson recommended that an organizer be appointed to stimulate old branches and organize new ones.

The example of co-operative buying of the St. Thomas branch is worthy of imitation. It was said that they saved for that branch about \$2,000 cash. Their purchases consisted of a wide variety of materials, including berry crates, arsenicals, salt, plaster, cement, binder twine, etc. The need of live officers in our branches was emphasized by Mr. Wilson. The success or failure of the branch depends upon the officers, who should push the work to the fullest capacity.

A transportation committee, composed of Messrs. Fraser and A. A. Adams, of Leamington; Kerr, of Ottawa; Weaver, of Dunville, and French, of Sarnia, was appointed to wait upon the Railway Commission to have railway and express rates attended to.

ORGANIZATION THE KEY.

C. W. Baker, who has spent considerable time in organization work during the past year, emphasized the importance and the benefits of organization. Organization is the key that unlocks all doors closed against us, said Mr. Baker. And we possess that key; all we need is to use it. The growers, as a rule, are ready to organize. All that is required is someone to lead. We must show the growers where they can make dollars and cents out of it, however, for this is the great drawing-card. Mr. Baker had assisted in the organization of six new branches. This following winter, in his opinion, should see many new branches organized. The convention finally appointed Mr. Baker official organizer for the coming year.

The labor question again came up for discussion. It was clearly pointed out that married men and tenant-houses where boarders may be kept, were necessities on vegetable farms. Constant employment must be given for these men, however. A resolution was then moved and carried unanimously, that a man or men be appointed to secure sufficient labor in the Old Country.

TOMATOES IN BRITISH MARKET.

A very able paper was given by Geo. Cooper, of Grimsby, Ont. He thinks that most of the obstacles may be overcome, and that if we wish to make a place in the British market, we can do so by growing a smaller tomato of better quality, and paying more attention to packing. We may cultivate the English taste to use our tomatoes freely, and get a good price, if agents are stationed at four or five distributing points to place the products in the smaller cities. Previous shipments have been made to the larger cities. Some experimental work, of course, would be necessary. The above address was much appreciated, but as yet the growers see no money for them in the British market, as was plainly shown by the discussion which followed.

SMALL FRUIT-VARIETIES AND METHODS.

"New Methods in Small-fruit Culture" was the subject of an address by W. H. Kerr, Ottawa. He emphasized the importance of getting the variety best suited to the local environment, those which resist disease best, and are the best money-makers. Do not be too free to give up old varieties, and test the new ones very carefully, said Mr. Kerr. With strawberries, he thinks it pays to put up a high quality and get the better price. He laid stress on the importance of all the best methods of planting and cultivation, but especially the securing of good plants. It pays to keep a propagating bed, and rear the plants needed. Moisture is an important consideration, and can be had by fall-plowing, keeping ground as firm as possible, and by sustaining a good earth mulch at the surface. He claims much benefit from having berries graded by picker. Never put poor material in sight of your good market. In raspberries, he recommended for early market, Marlborough; for medium, Herbert; for late, Cuthbert. The Herbert has given best results at Ottawa. Mr. Kerr used some commercial fertilizers this summer, but noticed very little results till late in the season, when he found that the canes, where the potash fertilizer had been used, were fully a foot longer than those where it was not applied. This was the only appreciable result. The work was done on rich clay loam soil. The Dewberry is proving very satisfactory at Ottawa, and is far superior to the large black raspberry.

In speaking of gooseberries, he pointed out that they required clay soils, with plenty of moisture; gooseberries should be pruned severely. He recommended White Smith, Lancaster Lad, and Crown Rob.

In closing, he stated that the way to keep boys on the farm was to pay them better and take them into partnership. Give them the opportunity to learn the value of money. These things, he thought, would solve our labor problem.

W. T. Macoun, of the Ottawa Experimental Farm, gave a short report of the work carried on there. He showed the need of suggestions from the farmers and vegetable-growers to help them in their work.

They are working on early but firm strains of tomatoes, e.g., Central Experimental Farm tomato. An extra early and promising variety of sweet corn has also been introduced, Malchoff. Experimental work is also being done on peas, lettuce and radishes.

Mr. McClelland, of the Ontario Agricultural

College, gave a short report of his work, the main appeal of which was the great need for more greenhouse equipment. That should be the most important line of vegetable work at Guelph, on account of the short season, which makes outdoor work rather difficult. In greenhouse work, Mr. McClelland reports that the sub-irrigation system is the best treatment for tomatoes and lettuce. He has found a cement bottom very unsatisfactory, and has put in cinder bottom for tomatoes.

A resolution was moved, and carried unanimously that an effort be made to meet the needs of this department by increased greenhouse accommodation, and also enlarged lecture-rooms. Mr. McClelland wants something practical to give the students to carry away with them.

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J. B. Lund presented the report from Jordan Harbor Experiment Station. They are now using fewer varieties, but are testing more methods of cultivation and fertilization of these varieties. Their main work consists of testing varieties, cultural methods, and obtaining data for breeding purposes.

SEED POTATOES FROM NEW ONTARIO.

The production of seed potatoes in New Ontario was the subject of a useful address by T. G. Raynor, Ottawa. That great benefit comes from using hardy seed, was proven around Toronto the past summer, in the use of Maritime seed. The farther north, the better the results are. As had already been pointed out, the clay belt had ideal conditions for production of potatoes, but our varieties did not yield so well as other poorer-quality varieties, which sold just as well in the camps. Therefore, growers must pay a good price. But the seed could be easily had if arrangements were made with competent growers. Mr. Raynor thought that seed peas could also be grown to good advantage in that district, for the pea weevil is as yet unknown.

A resolution was then put on record that fifty acres of the Monteith Farm be given over exclusively to potatoes, and that a competent man be put in charge. Also, that another experiment station like that at Ottawa be established at some central point in New Ontario.

DEVELOP PURE STRAINS OF SEED.

Dr. Tracey, of Cornell University, Ithaca, N. Y., impressed upon those present the need of developing and maintaining pure strains of seeds. He claimed that seed producing a uniform product is worth four or five times the ordinary seed. It is essential, he said, to form a clear conception of what is needed, and then select seed plants very carefully, after which make a growing test, and select only the very best, and plant reserve seed of those which have proved best. It is hard, said Dr. Tracey, to get a plant which does not vary, and it is also hard to keep up the type. The seedmen in many cases, he thought, hesitated to put the best seed upon the market, for the simple reason that that particular seed did not pay them for handling. They often do not consider the grower as they should. For this reason, it will pay the grower many times over to grow and improve his varieties, and keep a uniform product.

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A masterly address by C. C. James, in which he spoke more particularly of his tour on the Continent, portraying conditions there very vividly, opened the final session. The farmers there, he stated, are contented, and working in a businesslike way. Mr. James' enthusiasm took a strong hold upon the audience, many of whom have no doubt formed resolutions for bigger, better work in the future.

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Hon. J. S. Duff also gave a very encouraging talk. He emphasized the importance of the fruit and vegetable business in Ontario, and also spoke of the great development which we may expect in New Ontario.

The convention was concluded with an illustrated talk by Paul Works, of Cornell University, Ithaca, N. Y., on "Marketing Problems." He emphasized co-operation, specialization and business methods in the vegetable trade. He also advised getting very close to the retail business, where possible. By means of splendid slides, he illustrated the best packages for different fruit, methods of packing, etc. He clearly pointed out the value of putting up a good article and putting the grower's name on a fancy label, so that the grower may get the benefit of good honest work. "Advertise," says Mr. Works. "It pays." He advised cleanliness at every turn. One point that he made was that at no time did grading pay so well as when a slump occurs in the market. "Method," said he, "is very important in every process of vegetable growing, just as much as in manufacturing." He also illustrated very clearly the importance of specializing in several lines.

The Great Flower, Fruit and Honey Show.

Eight years ago, the exhibit of the Ontario Horticultural Society, as far as box-packed apples was concerned, comprised only thirteen boxes, and the exhibit was made in a small skating rink in Toronto. At the 1911 show, which was held during the past week at the commodious St. Lawrence arena, over three thousand boxes of fancy and commercial apples were displayed. This increase is fairly indicative of the general progress which has been made in apple orcharding in general in this Province. Never before has there been so many apples brought together at an Ontario show, and never has there been apples of such high quality exhibited in this Province, and seldom, if ever, in any Province. Apples were not the only fruit represented. Pears and grapes were there, too, along with vegetables, honey and flowers. Apples, however, formed the bulk of the show.

The sight that met one's eye upon entering the large arena was one to be remembered. The entire West side was one mass of apples from the floor to near the roof. These were all box-packed, and placed on a slope from the floor up. At the north end was to be seen one of the finest, if not the finest, commercial exhibits ever put up in Ontario. This was the exhibit of Lambton County, which comprised upwards of four hundred boxes of select fruit. The exhibit was so arranged as to make a colored map of the county. Lake Huron was shown in green apples, mostly Rhode Island Greenings. The county itself was represented by a solid mass of red apples, Spies, Baldwins, King of Tomkins, and others, while the land borders were shown in neatly-wrapped fruit. It was a great exhibit, and the quality of both fruit and pack, as well as design, were matters discussed by all.

Beside the Lambton exhibit was seen the splendid exhibit from Norfolk County. A box of apples from this lot carried off the sweepstakes prize of the show. It was a box of Spies, highly colored, quite ripe, and packed ruff-raff, or a diagonal side-pack. The total exhibit from this county comprised some three hundred boxes, and, in standard commercial varieties, apples from this county took most of the first prizes.

Next to the Norfolk exhibit was situated a small exhibit from Elgin. It consisted of box-packed fruit of high quality. For the first attempt, it was to be commended, and reflected credit on the county and the District Representative who put it up.

Then came the large exhibit from Ontario County, the largest of the show, comprising about six hundred boxes, all of superb quality and in good condition. A collection of twenty boxes of Spies from this exhibit was worthy of special mention, and won first prize. They were uniform, well colored, squarely, and nicely packed.

Passing to the south end of the building, the good quality continued. Here was situated the Wentworth exhibit of about 140 boxes, and right beside it was placed an exhibit which for quality was unexcelled. This was the display from the Georgian Bay District, Simcoe County. These apples were not showing so ripe as many of those from the southern counties, and gave indications of better keeping qualities. Over 150 boxes made up the exhibit, of which the greater proportion were Spies.

Directly in the center of the south end of the arena was seen the most unique display of the show. The Northumberland and Durham fruit-growers had out about 500 boxes, placed facing each other, in the center of which was an ocean liner, all built of apples. It was a beautiful sight, and received much well-merited attention.

In the center of the building were three exhibits, those of Brant County, Dundas County, and New Brunswick. This was the first year for New Brunswick apples to be on exhibition at this great show, and the good quality shown, and the excellent condition of the fruit in the boxes was commented upon by many. It speaks well for the packing that this fruit travelled all the great distance from New Brunswick to Toronto, and was still in good condition.

The Dundas exhibit comprised about sixty boxes of extra choice McIntosh Reds from Department of Agriculture demonstration orchards. They were very high colored, and of excellent quality throughout.

Brant County was another beginner, showing a few barrels, boxes, pyramids and plates which were a credit to the growers, packers and exhibitors.

Prince Edward's exhibit was, unfortunately, wrecked, but even then it was a large display of really good commercial fruit.

Down the center were tables of plate fruit, and decorating the entire building were chrysanthemums and flowers of all kinds.

The honey exhibit was small, Geo. Laing, of Milton, being the largest exhibitor. The Beekeepers' Association purpose making a large display in 1912.

Vegetables of all kinds were to be found upon tables at the east side of the building. The largest exhibitors of these were C. Plunkett, Wood-

bridge; Prown Bros., E. Bees, J. W. Rush, W. Harris, J. Dondridge, Hunter Bay, and W. G. Watson, Dixie. All the vegetables were of good quality, smooth and medium-sized, and the prizes were well divided.

A very commendable feature was the exhibit of power spraying outfits. A number of different manufacturers had outfits in operation. The manufacturers of farm implements and machinery should be encouraged to exhibit at all shows.

It was the unanimous statement of all officers of the Association and fruit-growers present that this was the greatest show ever held in Ontario, and, although the standard this year was very high, extra effort will be put forth to make each and every coming show better than those which have gone before.

Space does not permit of a full prize list, as many individuals were showing small lots, besides the counties mentioned. The show served to impress upon all those present the great horticultural possibilities of this Province, and the wide area upon which fruit can be successfully grown. It was also a great object lesson, showing clearly the results of careful spraying, thorough cultivation and up-to-date methods of handling both orchards and fruit. Prizewinners in the fruit section follow:

APPLES.

Export varieties—barrels ready for shipment:—Baldwin—1, Jas. E. Johnson & Bros., Simcoe; 2, J. D. Remmer, Pickering; 3, Norfolk F.-G.A., Simcoe. Ben Davis—1, J. T. Duke, Ruthven; 2, Sidney Trevail, Taunton; 3, Wm. Dyer, Columbus. Golden Russet—1, F. M. Lewis, Brant Fruit-growers' Assn., Burford; 2, W. B. Guy, Oshawa; 3, Isaac Higgins, Oshawa. Greening (R.I.)—1, R. T. Michael, Brooklin; 2, Jas. E. Johnson & Bros.; 3, Isaac Higgins. King—1, Jas. E. Johnson & Bros.; 2, Norfolk F.-G.A.; 3, M. Crawford, Whitby. Spy—1, Norfolk F.-G.A.; 2, P. C. Dempsey, Trenton; 3, F. M. Lewis, Burford. Stark—1, W. H. Stainton, Oshawa; 2, Geo. R. Hare, Grafton. Any Other Variety—1, Jas. E. Johnson & Bros.; 2, Norfolk F.-G.A.; 3, Isaac Rush, Norwich.

Export varieties—boxes ready for shipment (fruit unwrapped):—Alexander—1, W. G. Watson, Dixie; 2, P. C. Dempsey. Baldwin—1, Jas. E. Johnson & Bros.; 2, R. Thompson, St. Catharines; 3, W. H. Bunting, St. Catharines. Cranberry—1, Wm. Dyer; 2, P. C. Dempsey. Fameuse—1, W. G. Watson, Dixie; 2, W. H. Dempsey; 3, Geo. Goring, St. Catharines. Golden Russet—1, W. L. Hamilton, Collingwood; 2, R. Stork, Columbus; 3, Isaac Huggins. Greening (R.I.)—1, W. L. Hamilton; 2, W. H. Bunting; 3, Isaac Huggins. King—1, Norfolk F.-G.A.; 2, Jas. E. Johnson & Bros.; 3, Wentworth F.-G.A., Hamilton. McIntosh—1, W. G. Watson; 2, Jos. Baker, Whitby; 3, W. G. Robertson, Iroquois. Spy—1, Jas. E. Johnson & Bros.; 2, R. Stork; 3, Thos. Stainton.

Export varieties—boxes ready for shipment (fruit wrapped):—Fameuse—1, W. G. Watson; 2, W. H. Bunting; 3, J. B. Guthrey, Dixie. Gravenstein—1, W. H. Stevenson, Oshawa; 2, Elmer Lick, Oshawa; 3, S. Snowden, Bowmanville. King—1, Wentworth F.-G.A.; 2, W. H. Bunting; 3, W. G. Watson. McIntosh—1, W. G. Watson; 2, Jos. Baker; 3, The Biggs Fruit & Produce Co., Burlington. Spy—1, Norfolk F.-G.A.; 2, W. G. Watson; 3, Wentworth F.-G.A. Wealthy—1, W. G. Watson; 2, J. B. Guthrey; 3, W. H. Stevenson.

Domestic varieties—barrels ready for shipment:—Blenheim—1, R. W. Grieron, Oshawa. Gravenstein—1, Elmer Lick. Ontario—1, P. C. Dempsey; 2, John Watson, Seagrave. Tolman—1, W. H. Westney, Pickering; 2, G. B. Mothersill, Oshawa; 3, Wentworth F.-G.A. Roxbury Russet—1, Isaac Rush. Any other variety—1, Norfolk F.-G.A.; 2, Jas. E. Johnson & Bros.; 3, B. J. Palmer, New Durham.

Domestic varieties—boxes ready for shipment (fruit unwrapped):—Baxter—1, Isaac Huggins. Blenheim—1, W. G. Watson; 2, F. W. Dawson, Brampton. Gravenstein—1, S. Snowden; 2, Elmer Lick; 3, D. Whyte, Bendale. Ontario—1, W. G. Watson; 2, John Watson; 3, Wm. Dyer. Ribston—1, W. L. Hamilton; 2, Geo. Bannister, Collingwood; 3, W. G. Watson. St. Lawrence—1, W. G. Watson; 2, E. Lick. Wolf River—1, Isaac Huggins; 2, C. L. Stephens, Orillia. Any other variety—1, Norfolk F.-G.A.; 2, Jas. E. Johnson & Bros.; 3, Geo. Goring.

Standard winter varieties—5 boxes of each (fruit unwrapped):—Baldwin—1, Wentworth F.-G.A.; 2, Norfolk F.-G.A. Greening—1, F. G. Stewart; 2, Norfolk F.-G.A. Spy—1, Norfolk F.-G.A.; 2, W. F. Bradley, Georgetown.

Standard winter varieties—10 boxes of each (wrapped):—Fameuse—1, F. W. Dawson. McIntosh—1, J. G. Michael. Spy—1, W. H. Stainton; 2, Lawson & Fairhead, Blenheim.

Standard winter varieties—20 boxes (unwrapped):—Spy—1, J. D. Remmer, Pickering; 2, Milton Fruit-growers' Association, Milton.

Best box apples on exhibition in any section:—James E. Johnson & Bros.

Dessert varieties—plates of five:—Fameuse—1, W. H. Bunting; 2, Geo. Goring; 3, W. L. Hamilton. Golden Russet—1, W. H. Watson; 2, J. B. Guthrey; 3, Isaac Huggins. Gravenstein—1, R.

R. Waddle; 2, Wentworth F.-G.A.; 3, W. H. Stevenson. King—1, W. L. Hamilton; 2, W. G. Watson; 3, Jas. E. Johnson & Bros. McIntosh—1, W. G. Watson; 2, The Biggs Fruit & Produce Co.; 3, W. L. Hamilton. Wealthy—1, John D. McDonald, Cornwall; 2, W. G. Watson; 3, J. B. Guthrey. Spy—1, W. L. Hamilton; 2, Norfolk F.-G.A.; 3, V. G. Hector, Erindale. Spitzenburg—1, Norfolk F.-G.A.; 2, Wentworth F.-G.A.; 3, Jas. E. Johnson & Bros. Any other variety—1, W. G. Watson; 2, Lawson & Fairhead; 3, W. G. Watson.

Cooking varieties—plates of five:—Alexander—1, W. G. Watson; 2, John D. McDonald; 3, P. C. Dempsey. Baldwin—1, Wentworth F.-G.A.; 2, Cared-for Fruit Co., Toronto; 3, Jos. Picket, Dixie. Blenheim—1, W. G. Watson; 2, J. B. Guthrey; 3, J. G. Brown, Humber Bay. Cayuga—1, R. Thompson; 2, F. M. Lewis, Brant Fruit-growers. Greening (R.I.)—1, W. L. Hamilton; 2, F. G. Stewart, Homer; 3, R. Thompson. King—1, Norfolk F.-G.A.; 2, Jas. E. Johnson & Bros.; 3, P. A. Fisher, Burlington. Ribston—1, W. G. Watson; 2, W. L. Hamilton; 3, E. W. Moyle, Langstaff. Spy—1, W. L. Hamilton; 2, V. G. Hector; 3, W. G. Watson. Any other variety—1, J. O. Duke; 2, John McDonald; 3, V. G. Hector.

Standard winter varieties—10 plates of 5 specimens each:—Baldwin—1, R. Thompson; 2, Wentworth F.-G.A.; 3, W. G. Watson. Greening—1, F. G. Stewart; 2, Geo. Goring; 3, W. H. Bunting. King—1, Norfolk F.-G.A.; 2, W. F. Watson; 3, Wentworth F.-G.A. Spy—1, W. F. Watson; 2, J. B. Guthrey; 3, V. G. Hector.

Cones of fruit—(cones with a circular base of 17 inches diameter):—Ben Davis—1, Sidney Trevail; 2, W. L. Hamilton; 3, Wm. Dyer. Baldwin—1, W. G. Watson; 2, P. C. Dempsey; 3, P. A. Fisher. Blenheim—1, W. G. Watson; 2, R. W. Grieron; 3, J. G. Brown. Gravenstein—1, J. B. Guthrey; 2, D. Whyte; 3, E. Lick. Fallwater—1, W. G. Watson; 2, W. H. Stevenson; 3, P. C. Dempsey. Fameuse—1, W. G. Watson; 2, F. M. Lewis, Brant F.-G.A.; 3, J. B. Guthrey. King—1, W. G. Watson; 2, F. M. Lewis, Brant F.-G.A.; 3, Hugh Pugh, Whitevale. McIntosh—1, W. G. Watson; 2, W. G. Robertson; 3, Jos. Baker. Ontario—1, W. G. Watson; 2, W. H. Westney; 3, Wm. Dyer. Spy—1, W. G. Watson; 2, J. B. Guthrey; 3, Isaac Rush. Wolf River—1, John D. McDonald; 2, D. Whyte; 3, Isaac Huggins.

Pears—plates of five:—Anjou—1, J. B. Guthrey; 2, R. Thompson. Bosc—1, P. A. Fisher. Clairegeau—1, Alex. Glass, St. Catharines; 2, J. B. Guthrey. Duchess—1, C. F. Holcroft, Oakville; 2, F. G. Stewart. Kieffer—1, Geo. Goring; 2, Alex. Glass. Lawrence—1, Alex. Glass. Winter Nelis—1, Alex. Glass; 2, P. A. Fisher. Any other variety—1, W. M. Robson, Lindsay; 2, F. G. Stewart.

Export varieties—boxes ready for shipment (fruit wrapped):—Anjou—1, G. A. Robertson; 2, F. G. Stewart; 3, R. Thompson. Clairegeau—1, J. B. Guthrey. Duchess—1, G. A. Robertson; 2, F. G. Stewart; 3, R. Thompson. Kieffer—1, F. G. Stewart; 2, R. Thompson; 3, W. H. Bunting. Lawrence—1, F. G. Stewart; 2, R. Thompson.

Grapes—3 bunches:—Agawam—1, R. Thompson; 2, F. G. Stewart. Concord—1, F. G. Stewart; 2, R. Thompson. Lindley, 3 bunches—1, F. G. Stewart; 2, R. Thompson. Niagara, 3 bunches—1, Geo. Goring; 2, W. H. Bunting. Vergennes, 3 bunches—1, R. Thompson; 2, W. H. Bunting. Wilder—1, R. Thompson; 2, Geo. Goring.

Any other desirable variety—1, W. H. Bunting; 2, R. Thompson. Black Grapes, 9-lb. basket—1, Geo. Goring; 2, R. Thompson. Red Grapes 9-lb. basket—1, Geo. Goring; 2, R. Thompson. White Grapes, 9-lb. basket—1, W. H. Bunting; 2, F. G. Stewart. Black Grapes, fancy package—1, R. Thompson; 2, F. G. Stewart. Red Grapes, fancy package—1, F. G. Stewart; 2, R. Thompson. White Grapes, fancy package—1, R. Thompson; 2, F. G. Stewart.

Collections:—Exhibits of fruit in commercial packages (60 sq. ft.):—1, R. Thompson; 2, F. G. Stewart. Display of apples, not in commercial packages (60 sq. ft.):—1, W. G. Watson.

Box or barrel brands—1, W. H. Stevenson; 2, Norfolk F.-G.A.; 3, Oshawa F.-G.A.

Packing:—Commercial package, unwrapped apples, any variety, 75% to be given for package, grading and packing, and 25% for variety and quality of fruit. All entries must grade No. 1, according to the inspection and sales—1, R. Thompson; 2, Wentworth F.-G.A. Commercial package, wrapped apples, any variety; 75% to be given for package, grading and packing, and 25% for variety and quality of fruit. All entries must grade No. 1, according to the inspection and sales act—1, R. Thompson; 2, Wentworth F.-G.A.

Specimen apples of standard varieties:—Baldwin—1, Norfolk F.-G.A.; 2, R. R. Waddle, Hamilton. Fameuse—1, W. G. Watson, Dixie; 2, R. R. Waddle, Hamilton. Greening (R.I.)—1, F. G. Stewart, Homer; 2, G. A. Robertson, St. Catharines. King—1, P. C. Dempsey, Trenton; 2, Norfolk F.-G.A. McIntosh Red—1, Biggs Fruit & Produce Co., Burlington; 2, L. A. Parisien, Summerstown. Spy—1, W. P. Bradley, Georgetown; 2, W. G. Watson, Wolf River—1, D. Whyte, Bendale; 2, John D. McDonald, Cornwall.

THE CANADIAN BANK OF COMMERCE

ESTABLISHED 1867
 Capital paid-up, \$10,000,000.
 Rest, \$8,000,000.

The Canadian Bank of Commerce extends to farmers every facility for the transaction of their banking business, including the discount or collection of sales notes. Blank sales notes are supplied free of charge on application.

Accounts may be opened at any branch of The Canadian Bank of Commerce to be operated by mail, and will receive the same careful attention as is given to all other departments of the Bank's business. Money may be deposited or withdrawn in this way as satisfactorily as by a personal visit to the Bank.

MARKETS

Toronto.

LIVE STOCK.

At West Toronto, on Monday, November 20th, receipts of live stock amounted to 166 carloads, comprising 2,843 cattle, 1,966 hogs, 196 sheep and lambs, 50 calves; quality of cattle the worst of the year at this market. Of exporters, there were few, if any, good enough to ship. Prices in all classes were 25 cents per cwt. lower, and in some classes 40c. to \$5.75; good, \$5.25 to \$5.50; medium, \$4.75 to \$5.10; common, \$3.50 to \$4.50; feeders, \$4.25 to \$5; stockers, \$3.50 to \$4; milkers, \$4 to \$5; calves, \$3.50 to \$5. Sheep, \$3 to \$3.75; lambs, \$5 to \$5.25. Hogs, selects, fed and watered, \$6.75 to \$6.85, and \$6.40 f. o. b. cars at country points.

REVIEW OF LAST WEEK'S MARKETS
 The total receipts of live stock at the City and Union Stock-yards for the past week were as follows:

	City.	Union.	Total.
Cars	366	283	649
Cattle	5,421	3,258	8,679
Hogs	6,860	7,260	14,120
Sheep	5,254	4,803	10,057
Calves	344	93	437
Horses	7	145	152

The total receipts at the two markets for the corresponding week of 1910 were as follows:

	City.	Union.	Total.
Cars	350	229	579
Cattle	5,436	3,682	9,118
Hogs	4,374	2,985	7,359
Sheep	5,273	3,428	8,701
Calves	218	28	246
Horses	7	35	42

The combined receipts of live stock at the City and Union Stock-yards for the past week, compared with the corresponding week of 1910, show an increase of 70 carloads, 6,761 hogs, 1,356 sheep and lambs, 191 calves, and 110 horses; but a decrease of 439 cattle.

The deliveries of live stock at both markets for the past week were larger than the dealers expected, and, notwithstanding this, all offerings were absorbed at about steady prices generally, especially in the different classes of cattle. The quality, however, was not as good as the previous week. Generally speaking, there was a good trade in all classes of live stock, especially for the best finished cattle, hogs, and choice milkers and springers.

Exporters.—E. L. Woodward bought for Swift & Co. 217 steers for London, 1,350 lbs. each, at an average of \$6.20; 136 steers for Liverpool, 1,210 lbs., at an average of \$6.20; 140 hogs for London, \$5.25; and one extra carload of 2,200 lbs. at \$2.20.

to 1,150 lbs., sold at \$4.75 to \$5.30; short-keep feeders, 1,150 lbs., sold at \$5.30 to \$5.40. Stockers sold all the way from \$2.85 to \$4, according to quality.

Milkers and Springers.—There never has been during the past sixteen years that we have been on the market, a better demand and a more active market for good to choice milkers and springers. The local demand was good, and there were orders from Montreal and Quebec for the best class of cows that could not be filled. Good to choice cows sold at \$80 to \$100 each; medium, at \$60 to \$70, and common to medium, \$40 to \$55 each.

Veal Calves.—Receipts moderate. Rough, heavy, grassy calves, sold from \$3 to \$4 per cwt.; veal calves, at \$5 to \$8.50.

Sheep and Lambs.—Receipts of sheep and lambs have been liberal, with prices at the end of the week stronger than at the commencement. Ewes sold at \$3.50 to \$4; rams, \$3 to \$3.25; lambs, \$5.25 to \$5.70 per cwt.

Hogs.—Receipts were liberal, and prices closed stronger at the end of the week than at the beginning. Selects, fed and watered, sold on Thursday at \$7.

Horses.—Manager Smith, of the Union Horse Exchange, reports trade in horses as being quiet, with a tendency to lower prices in the country. Mr. Smith quotes prices as follows: Drafters of good quality, \$200 to \$240; general-purpose, \$155 to \$225; drivers, \$100 to \$150; expressers, \$175 to \$225; serviceably sound, \$35 to \$80.

BREADSTUFFS.

Wheat.—No. 2 red, white or mixed, 87c. to 88c., outside points. Manitoba No. 1 northern, \$1.04½; No. 2 northern, \$1.02; No. 3 northern, 99c., track, lake ports. Oats—Canadian Western No. 2, 45½c.; No. 3, 44½c., lake ports; Ontario No. 2, 44c. to 44½c.; No. 3, 43c., outside points. Barley—For malting, 88c. to 90c.; for feed, 78c. to 80c. Buckwheat—55c. to 57c., outside. Rye—No. 2, 88c. to 90c., outside. Corn—No. 2 yellow, 78½c., f. o. b. cars, bay ports. Peas—No. 2, \$1 to \$1.05, outside. Flour—Ontario winter-wheat flour, \$3.50 to \$3.60, seaboard. Manitoba flour—Prices at Toronto: First patents, \$5.50; second patents, \$5; strong bakers', \$4.80.

HAY AND MILLFEED.

Hay.—Baled, in car lots, track, Toronto, No. 1, per ton, \$16 to \$16.50; No. 2, \$14 to \$14.50. **Straw.**—Baled, car lots, track, Toronto, \$7 to \$7.50. **Bran.**—Manitoba, \$23 per ton; shorts, \$25; Ontario bran, \$23 in bags; shorts, \$25, car lots, track, Toronto.

COUNTRY PRODUCE.

Butter.—The market was firm, with prices strong, at quotations given: Creamery pound rolls, 29c. to 31c.; creamery solids, 27c. to 28c.; separator dairy, 28c.; store lots, 23c. to 24c. **Eggs.**—Strictly new-laid, in case lots, 40c.; country store case eggs, 26c. **Cheese.**—Large, 15c. per lb.; twins, 15½c.

Honey.—Combs, \$2.50 to \$3 per dozen sections; extracted, 11c. to 12c.

Potatoes.—Ontario, car lots, \$1.05 to \$1.10, track, Toronto; New Brunswick potatoes sold at \$1.15 to \$1.20, track, Toronto.

Poultry.—Receipts were liberal, and prices about steady for live shipments, as follows: Turkeys, 16c. to 17c.; geese, 8c. to 9c.; ducks, 8c. to 9c.; hens, 8c.; dressed turkeys, 18c. to 20c.; geese, 9c. to 11c.; ducks, 11c. to 13c.; hens, 8c. to 9c.

HIDES AND SKINS.

E. T. Carter & Co., 85 East Front street, have been paying the following prices: No. 1 inspected steers and cows, 12½c.; No. 2 inspected steers and cows, 11½c.; No. 3 inspected steers, cows and bulls, 10½c.; country hides, cured, 11½c. to 12½c. green, 10½c.; calf skins, 12c. to 15c.; sheep skins, 55c. to 85c., each; horse hides, No. 1, \$3.25; horse hair, per lb., 35c. to 38c.; tallow, No. 1, per lb., 20c. to 22c.

FRUITS AND VEGETABLES.

The Dawson Fruit Company, wholesale dealer in fresh fruit and commission merchants, 350 St. James' street, and 67-69 St. George street, reports the following prices for Canadian vegetables and fruits: Apples—Snows, No. 1, \$4.

No. 2, \$3.50; Spies, No. 1, \$4.50; No. 2, \$3.75; Greens, No. 1, \$3.25; No. 2, \$2.75; Baldwins, No. 1, \$3.50; No. 2, \$3; cooking varieties, No. 1, \$3; No. 2, \$2.50. Pears, 40c. to 75c. per basket; grapes, Rogers, 35c. per basket; onions, bags 100 lbs., \$2.50; Spanish onions, cases, \$3.50; cranberries, Cape Cod, \$10.50 per barrel; cabbage, 50c. to 65c. per dozen; Canadian tomatoes, 35c. to 40c. per basket; carrots, 65c. to 75c. per bag; beets, 65c. per bag; parsnips, 75c. per bag.

TORONTO SEED MARKET.

The William Rennie Seed Company report seed prices as follows: Alsike No. 1, per bushel, \$9.50 to \$10; alsike No. 2, per bushel, \$8.50 to \$9; red clover, No. 1, per bushel, \$11 to \$11.50; red clover No. 2, bushel, \$9.75 to \$10.50; timothy No. 1, per cwt., \$14 to \$14.50; timothy No. 2, per cwt., \$13 to \$14.

Montreal.

Live Stock.—Offerings of cattle on the other side of the Atlantic were lighter last week, and as a result buyers were rather more anxious to obtain stock. Exports of live stock from this port during the past week amounted to 1,315 head, being an increase of 105 head as compared with the previous week. The local cattle market showed a firmer tone, and prices advanced fully ½c. all round. A few loads of steers sold at 5½c. to 6c. per lb., and a few very choice animals brought 6½c. and a fraction over. Good stock sold at 5½c. to 5¾c.; medium at 5c. to 5½c., and common as low as 4c., this being exclusive of canners, which sold at as low as 1½c. per lb. for cows, and 3c. to 3½c. for bulls. The market for sheep and lambs manifested little alteration, and prices held firm under a good demand. Lambs sold at 5½c. to 5¾c. per lb., and sheep at 3½c. to 3¾c. per lb. Calves were \$12 to \$15 for choice, and down to \$3 for common. Demand was active for hogs, and prices firm, selects bringing 6½c. to 6¾c. per lb., and sometimes 7c., weighed off cars, inferior grades being 1c. less.

Horses.—Dealers have nothing good to say of the market. Last week registered little or no improvement. It will be well into December, it is thought, before the market will wake up. Prices held steady, as follows: Heavy draft, 1,500 to 1,700 lbs., \$300 to \$350 each; light draft, 1,400 to 1,500, \$225 to \$300 each; light horses, 1,000 to 1,100 lbs., \$125 to \$200 each; broken-down animals, \$50 to \$100 each, and choice saddle and carriage animals, \$350 to \$500 each.

Dressed Hogs.—The market for dressed hogs was firmer, in sympathy with that for live. Select abattoir-dressed, fresh-killed hogs, were selling at 9c. to 9½c. per lb.

Poultry.—The market for poultry was firm, and demand good, notwithstanding high prices. Turkeys ranged from 18c. to 19c. per lb. for choice; ducks were quoted at 18c.; chickens at 10c. to 14c., fowl ranged from 8c. to 12c., and geese sold around 10c. to 12c. per lb.

Potatoes.—The market for potatoes was slightly higher, Green Mountains costing around \$1.10 per 90 lbs., carloads, on track, and receivers selling them at \$1.20 in loads, and at \$1.25 in less than loads, in bags of 90 lbs.

Eggs.—There has been a sharp advance in the price of new-laid eggs. These were costing from 30c. to 35c. per dozen at country points, and selling in case lots to grocers, at as much as 45c. per dozen, Montreal. Stocks were evidently light, and No. 1 candled were bringing 26c. per dozen, and selects 30c. per dozen.

Honey.—Market was steady, at 11c. to 12c. per lb. for white clover comb, and 7c. to 8c. for extracted; dark comb 8c. to 10c., and extracted 6c. to 7c. per lb.

Butter.—There was a sharp advance in the price of creamery in the country last week, the large shipments from Canada no doubt leaving stocks light here. At country points, 28½c. per lb. was paid, and the quality is never choicer at this time of year. Finest creamery was quoted at 29c. and 29½c., wholesale, and was selling to grocers in smaller quantities at 30c. per lb., it was declared, although demand at that figure was not active.

Cheese.—The end of the season is here, and prices range from 14½c. to 14¾c. per

lb. for Westerns, and from 13½c. to 14½c. per lb. for Easterns.

Grain.—Market for oats showed a slight decline, No. 1 Canadian Western selling at 47½c. to 48c.; No. 2 extra feed being 47c. to 47½c.; No. 3 Canadian Western, 46½c. to 47c.; No. 2 local, 46c. to 46½c.; No. 3, 45½c. to 46c., and No. 4 local, 45c. to 45½c. per bushel.

Flour.—Fair demand, at steady prices, being \$5.60 per barrel, in bags, for Manitoba first patents; \$5.10 for seconds, and \$4.90 for strong bakers'. Ontario flour, \$4.75 to \$5 for choice winter-wheat patents, and \$4.25 to \$4.40 for ninety-per-cent. straight rollers.

Millfeed.—Demand for millfeed active, and prices firm, at \$23 per ton for Manitoba bran, in bags, and \$25 for shorts, Ontario middlings sold at \$27 to \$28 per ton; pure grain mouille at \$32 to \$34, and mixed mouille at \$26 to \$29 per ton.

Hay.—Market firm, and prices were quoted at \$15 to \$16 per ton for No. 1 baled hay, carloads, track, Montreal; No. 2 extra good hay, \$13 to \$14 per ton; No. 2 ordinary, \$12.50 to \$13; No. 3, \$10 to \$10.50, and clover mixed, \$9 to \$9.50.

Hides.—Demand for hides continued good, and prices were unchanged, at 70c. each for lamb skins, and 10., 11c. and 12c., respectively, for Nos. 3, 2 and 1 beef hides, Montreal, and at 13c. and 15c. per lb. for Nos. 2 and 1 calf skins. Horse hides, \$1.75 to \$2.50 each; tallow, 6½c. to 7c. per lb. for rendered, and 1½c. to 4c. for rough.

Chicago.

Beeves. \$4.40 to \$5.10; Texas steers, \$4 to \$5.70; Western steers, \$4.30 to \$7.30; stockers and feeders, \$2.90 to \$5.75; cows and heifers, \$1.90 to \$5.75; calves, \$5.50 to \$8.25.

Hogs.—Light, \$5.90 to \$6.57½; mixed, \$6.15 to \$6.65; heavy, \$6.15 to \$6.67½; rough, \$6.15 to \$6.30; good to choice, heavy, \$6.35 to \$6.67; pigs, \$4.75 to \$6.

Sheep and Lambs.—Native, \$2.50 to \$3.75; Western, \$2.65 to \$3.70; yearlings, \$3.75 to \$4.60; lambs, native, \$3.50 to \$5.85; Western, \$3.75 to \$5.75.

Buffalo.

Cattle.—Prime steers, \$7.25 to \$7.75; butcher grades, \$3.25 to \$7.

Calves.—Cull to choice, \$6 to \$9.50.

Sheep and Lambs.—Choice lambs, \$5.30 to \$5.40; cull to fair, \$4.25 to \$5.25; yearlings, \$3.75 to \$4; sheep, \$2 to \$3.65.

Hogs.—Yorkers, \$6.50 to \$6.55; stags, \$5 to \$5.25; pigs, \$5.90 to \$6; mixed, \$6.55 to \$6.65; heavies, \$6.60 to \$6.65; roughs, \$5.50 to \$6.

Cheese Markets.

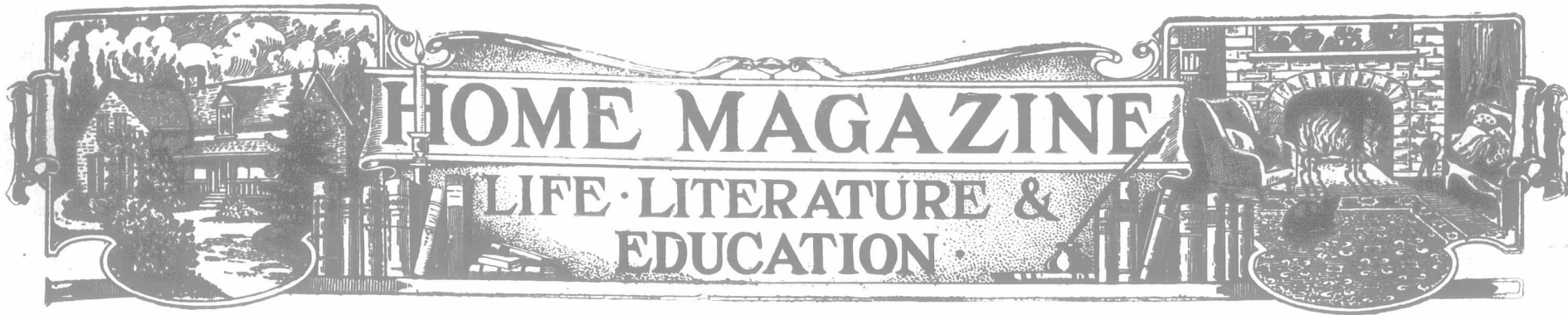
Madoc, Ont., 13½c. Brockville, Ont., 13½c. Kingston, Ont., 13½c. Winchester, Ont., 13½c. Belleville, Ont., 13 13-16c. Canton, N. Y., butter, 33c. St. Hyacinthe, Que., butter, 27½c.

British Cattle Market.

John Rogers & Co., Liverpool, cabled States steers from 12½c. to 13½c.; Canadians, 12½c. to 13½c., and ranchers, 11½c. to 12½c. per pound.

GOSSIP.

The Ontario Provincial Winter Fair, to be held at Guelph, December 11th to 15th, where will be held the great show of horses, cattle, sheep, swine, poultry, dairy-cow milking trials, and seed grain, will be prominent features, should attract farmers and their families from wide distances. The building has been much enlarged and improved by an expenditure of \$15,000. This is by far the best stock show of its kind in Canada, the animals in many classes being shown after slaughter as well as alive, while the addresses in the lecture-room by experts are always of great interest. The whole show is educational and helpful to farmers. The show will open on Tuesday morning, December 12th, and judging, including horses, will commence at 1.30 on that day, and continue probably throughout the two following days.



Little Trips among the Eminent.

Sir Edward Burne-Jones

Some weeks ago biographical sketches on the Pre-Raphaelite Brotherhood appeared in these pages. We now come to one who, although not of the Pre-Raphaelites, was akin to them, especially in his earlier work, but whose personakity was so strong and whose versatility so marked that he has exerted perhaps a greater influence on the general art of the world than any of the famous "P.R.B's."

Edward Burne-Jones was born August 28th, 1833, at Birmingham, England, but was of Welsh descent, hence, perhaps, the strongly imaginative bent of his mind.

Although he gave evidence of some love of drawing and design at an early age, his ambition was not fixed at all upon art as a career in life, and he was destined for the church.

Accordingly, after completing the course at King Edward's, where he threw himself zealously into study of the classics, he went up to Exeter College, Oxford. But on that same day, in January, 1853, there entered another student who was destined to have a strong influence on the life of the young Burne-Jones. This was none other than the afterwards famous William Morris.

Thrown together from the first, the two soon became close friends. They walked together, studied together, read "Modern Painters" and "Morte d' Arthur" together, made drawings and designs together, each finding in the other his other self, such a friendship as can only be born of similar tastes and interests.

Morris also had entered with the intention of taking orders, but as time went on the liking for a clerical career lessened, and art began to loom above the mental horizon of the two young men as the walk of life for which they were best fitted.

To Burne-Jones the awakening came with seeing two pictures by Dante Gabriel Rossetti, one a woodcut in a book of poems, the other a water-color. Almost at once he decided to leave the college without taking his degree, a decision not reached without some of the pain that comes, almost invariably, on forsaking a plain and sure way for one fraught with struggle and uncertainty. As Mr. Malcolm Bell has said in his excellent biography, "He was casting away from him, he knew, an assured livelihood, and grasping at a nebulous uncertainty; he was flouting the ingrained prejudices of those near and dear to him; he was, in their eyes at any rate, wilfully deserting the high-road to social recognition, and throwing in his lot with vagabonds and wastrels. On the one hand was the good opinion of his kin, and at least a comfortable competence, on the other disapproval and very possible penury. Yet he scarcely hesitated."

At the next turn we find him in London, settled with Morris at 17 Red Lion Inn, in the curiously interesting rooms already described in these columns in the sketch on William Morris. About the same time he met, with delight, Rossetti, and henceforward there were great foregatherings at Red Lion Inn.

Of the three Burne-Jones found himself perhaps, in most precarious plight. He had cast himself upon the world as an artist, yet he had had no previous training, either as

a draughtsman or in color. What he lacked in instruction, however, he made up for by unremitting work and the force of his vivid imagination, which gave to his fingers the magic touch in everything that he did.

At once he began to take lessons from Rossetti, and so rapid was his advancement, so positive the quality of his genius, that ere long his master declared that he had nothing to teach him. In the meantime he was wresting a living from the world by

and other public buildings in all parts of England, and in many of the cities on the continent.

He was, however, painting pictures also, at first chiefly in water-color, and with such success that he was one of the artists chosen to take part in the unfortunate decoration of the walls of the Oxford Union (already referred to in previous articles in these columns).

In 1859 he went to Italy to study, and in 1860 was married to a Miss Macdonald, just one month

Water-Colours, and exhibited among other works "The Merciful Knight," the first picture to reveal his ripened personality as an artist. For six years he was a constant exhibitor at the gallery of the society, six of the bitterest years, perhaps, of his life. The artists were inclined to look with contempt upon the work of a man who had had no regular training. The public could not understand his dreamy, poetic work. Nothing like it had heretofore appeared. It was essentially "decorative." Burne-Jones did not try to paint "life" as it was around him, and England as yet could not grasp his meaning. Hence he was reviled on every hand, criticized in the newspapers, and neglected by his fellow artists to such an extent that in 1870 he abruptly resigned all connection with the society.

For the next six years he was almost unheard of. In all that time he exhibited only two pictures, small water-colors, but he was working, working, as assiduously as ever, now finding his ground in oils.

At last came the day of recognition, with the opening of the Grosvenor Gallery, at which were shown his six panels, representing the Six Days of Creation, the Beguiling of Merlin, The Mirror of Venus and other canvasses.

"His reappearance at the Grosvenor Gallery," writes a biographer, "was so dramatic and so convincing in its proof of the amazing development of his powers, that he leaped at one bound into the place among the greatest of his artistic contemporaries, which he was able to hold for the rest of his life."

Praise now came thick and fast from all quarters. He was recognized as a power in the art world, and during every succeeding year was one of the foremost contributors to the annual exhibitions, among the pictures shown being the well-known "Golden Stairs" with its graceful figures in 1880, and "King Cophetua and the Beggar Maid," marvellous in its depth and richness of coloring, in 1884. This picture is now in the National Collection, London.

In 1885 Burne-Jones was again elected, as an honored member, to the Society whose indifference had once driven him forth. At first he declined to accept the membership, but yielded on the personal request of Leighton, then President of the Academy. He never, however, sent pictures to the Academy, and in 1893 again resigned.

After 1886 he ceased sending to the Grosvenor Gallery, as he had become one of the chief members of a group of artists who founded the New Gallery, to which he sent all of his pictures for the rest of his life, which ended after a short attack of pneumonia on the 17th June, 1898.

Burne-Jones was one of the sweetest in character as well as one of the most brilliant among English artists. At no time in his career did he try to attract attention; quietly and industriously he went on his chosen way, refusing to be turned aside from his conception of art by neglect or contumely. Nor when success came, and all England flocked to admire work which it had once scorned, was he ever spoiled by success. All unsought came honors at home and abroad, even the honor of knighthood conferred upon him by Queen Victoria. To the end he remained the same Burne-Jones, simple of life, industrious, poetic, high-minded, loyal to his friends and



The Golden Stair.

From a painting by Burne-Jones.

the very multiplicity of the works he had to offer. He was making designs for stained glass, for tapestry, for mosaic, for metal relief work and many other things, and by this work alone, after the establishment of the firm of "Morris & Co.", for whom he thenceforth worked exclusively, he was enabled not only to make a living, but to achieve a world-wide renown. To-day stained-glass windows and mosaics from his designs may be found in churches

after Rossetti's marriage with Miss Liddal.

As yet his work bore some resemblance to that of Rossetti, but from this time he began to make excursions in art on his own account, a broadening which was no doubt much assisted by a second visit to Italy, which he and his wife made, in 1862, in company with John Ruskin.

In 1864 he was elected an Associate of the Society of Painters in

ideals, generous to his foes, the highest type of man and gentleman, as well as an artist of originality and power.

Burne-Jones painted in all over two hundred pictures, beside executing an almost astounding amount of work in pure design. He also illustrated many books, among them the splendid edition of Chaucer's Poems, issued by Morris from the Kelmscott Press in 1897.

Hope's Quiet Hour.

The Sabbath Was Made for Man.

I am the LORD your God; walk in My statutes, and keep My judgments, and do them; And hallow My Sabbaths; and they shall be a sign between Me and you, that ye may know that I am the LORD your God.—Ezek. xx.: 19, 20.

"This is the day of prayer; Let earth to heaven draw near; Lift up our hearts to seek Thee there, Come down to meet us here."

In these days there is a tendency to forget that the Fourth Commandment is part of God's Law, and that those who break it suffer great loss. Our Lord has told us that the Commandment: "Remember that thou keep holy the Sabbath day," was not intended to be a heavy burden, but was a gift of love from the Father to His dear children—the Sabbath was made for man. Those who refuse to spend God's holy day with God, are doing great injury to their own bodies and souls.

Bishop Thomson says that you may safely write over thousands of graves this epitaph: "He kept no Sunday." He declares that strong men are cut down in their prime, and the doctors give a dozen names for the cause of their untimely death—softening of the brain, paralysis, heart failure, nervous exhaustion—but, sifted to the bottom, the real fact is that the men kill themselves by breaking Sunday—"Business men, statesmen, lawyers, students, are all getting into the habit of going out at a moment's warning, dropping dead as they stand, in a way that has never been known before."

There are two very good reasons for keeping the rest-day of the week as clear as possible from everyday work. One reason is because it is our duty to God, and the other reason is because it is our duty to ourselves. The Fourth Commandment is the link which joins together our duty towards God and our duty towards man. We owe at least one-seventh of our time to God, as we owe at least one-tenth of our money. Of course, we belong to Him, with all that He has been pleased to give us; but He has given back to us for common use much the largest part of both time and money. If He did not claim any of it, we should probably soon forget that it was not our own, but only lent to us; if we were asked to devote a month at a time especially to the worship of God, we might forget Him for a good part of the year.

But once a week our Father calls us to visit Him in His own House, to stop for a few hours the rush of work which wears out body, brain and spirit, to regain the peace which gets so used up in rubbing against our neighbors.

Those who hunger and thirst after steady progress upward, can never afford to let their Sundays become secularized. If our bodies are refreshed for the week's work by a real rest on Sunday, if our minds are inspired by being turned in a higher and nobler direction, if our hearts are our spirits revived and quickened by close communion with God and with the saints, are like ourselves—trying to climb ever higher.

Our best rest is that if men keep God's Day, it shall be a sign, between Him and them, and they shall learn that the Sabbath of God which is the eternal seal of His love. We have a right to His Sabbath, as we have a right to His love, and we have a right to His thoughts, as we have a right to His life. We all want to be like Him, and should



Summer.

[Burne-Jones.]

prize very greatly this invitation to draw near to Him Whose very Presence never fails to uplift our hearts and souls. It is not enough to go to church. We might do that regularly, and yet often come away with little added strength or refreshment. We want to make the church a "Tent of Meeting," like Israel in the wilderness. We seek to be made whole—to grow strong and beautiful in spirit—therefore we must reach out, like a poor woman long ago, and touch the hem of Christ's garment. Many others were pressing near to Him in body, but only the one whose spirit was eagerly reaching out after Him was healed. "Who touched Me?" He cried. The disciples thought that multitudes had touched Him, but the Master knew better. He always knows when one here and there in a crowded congregation has reached out consciously to touch His hand or grasp the hem of His garment.

If we heard that next Sunday our Lord would be visibly present in a certain church, ready to cheer and counsel and help all the weary and heavy-laden, that church would be filled to overflowing. I am afraid we don't quite believe His promise to be "in the midst" of every little group of worshipping disciples.

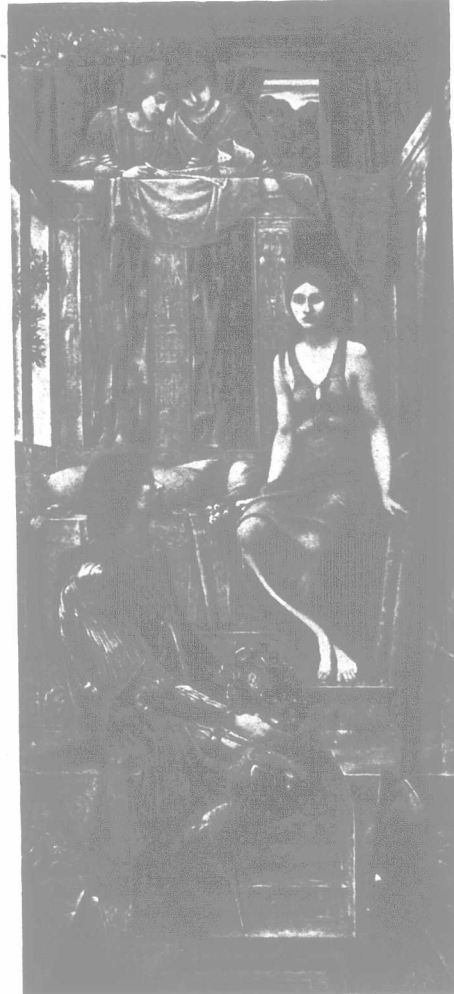
Perhaps we think: "If Mr. So-and-So is the preacher, I can always realize that Christ is present." But how unjust it would be if Christ only came to meet His friends when a very special preacher was there to draw Him. No matter how dull the sermon may be, our unseen Master is always present where two or three are gathered together in His Name. If you are not one of the two or three—if you have stayed at home unnecessarily—you have not only missed the help He is eager to give you, but you have missed the opportunity of worshipping Him in family fellowship with your brothers and sisters. If you are reading this "Quiet Hour" when the Lord is even now inviting you to come into His own House, do not suppose that He will overlook your absence from the crowd. He loves you too much to fail to miss you.

Why don't the men go to church? Why don't the men go to church? Why don't the men go to church? They are looking for higher ideals

and for nobler lives. Who can help them to climb?—there is only one answer to that question. To drop the habit of church-going is to cut one's self off from one of God's greatest channels of grace. To really go to church on Sunday—to go there, I mean, in mind and spirit as well as in body—is to draw very near to God, and to start the week with new courage and vigor.

Especially should we try to be in our places when our dear Master keeps the Feast with His disciples, drawing very near to us at His own Holy Table. There He presses His own Life into our souls, and we can reach out in wonderful fellowship, touching Him and the other members of His Body, the Church. There we can touch the hand of a friend, who is far away in body, but very near in deepest spiritual reality. As we touch the hand of our Lord, we can feel within His tender grasp the presence of another loved hand. We can go away rejoicing that in Christ there is no sea to part loyal hearts, no death to drop a cold and clammy mist between those who love each other.

If you want to touch Christ, if you want to keep in close fellowship with a loved friend, then come regularly and often to the Holy Supper. Why should you be afraid of coming too often? When



King Cophetua and the Beggar Maid.

[Burne-Jones.]

the Master was on earth, did He ever reprove anyone for trying to get too near Him? He is "the same yesterday, and to-day, and for ever"—how can you think He has no welcome for you? If you lift up your heart to seek Him, it is because, all your life, His Heart has been seeking you.

The Sabbath was made for man—and, if ever man needed rest for body, mind and spirit, it is in this restless, strenuous age. Our souls, especially, grow weak, weary, and unfit for service, just because we too often allow Monday or Saturday to spoil the quiet sunshiny peace of Sunday, just because we pay no attention when our Master tenderly pleads: "Come ye yourselves apart . . . and rest awhile."

"Come ye yourselves apart and rest awhile,

Weary, I know it, of the press and throng;

Wipe from your brow the sweat and dust of toil,

And in My quiet strength again be strong.

"Then, fresh from converse with your Lord, return And work till daylight softens into even: The brief hours are not lost in which ye learn More of your Master and His rest in Heaven."

Many of our hours are more or less wasted, but those we spend consciously with God bring great gain to our own souls, and to the souls of others. The nearer we press to Him, the more He can reach out through us to touch the nations. Only by walking with God can we keep in close touch with our fellows.

DORA FARNCOMB.

The Beaver Circle.

Our Senior Beavers.

[For all pupils from Senior Third to Continuation Classes, inclusive.]

The Longest Word.

"What is the longest word in the English language?" asked Uncle Tom. "Valetudinarianism, I suppose," replied James, who had taken a prize in spelling.

"No," spoke up Susie; "it's 'smiles,' because there is a whole mile between the first and last letters."

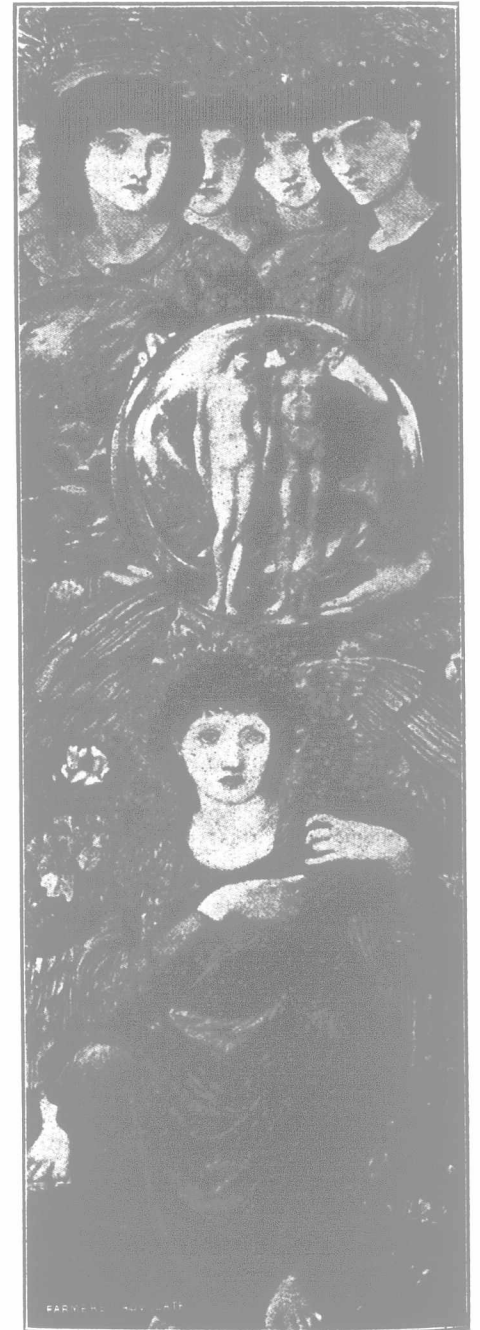
"I know one," said Jack, "that has over three miles between its first and last letters."

"What word is that?" asked Uncle Tom.

"Beleaguered," cried Jack, triumphantly.

"I know one," said Philip, "that is longer than that. 'Transcontinental' has a whole continent between its beginning and ending."

"Interoceanic" beats them all," exclaimed Elsie, "for it contains an ocean, and an ocean is larger than any continent."—Lippincott's.



Sixth Day of Creation.

[Burne-Jones.]

The Teacher's Dream.

And then she lifted up her face,
But started back aghast—
The room, by strange and sudden change,
Assumed proportions vast.

It seemed a senate hall, and one
Addressed a listening throng;
Each burning word all bosoms stirred,
Applause rose loud and long.

The 'wildered teacher thought she knew
The speaker's voice and look,
'And for his name,' she said, 'the same
Is in my record book.'

The stately senate hall dissolved,
A church rose in its place,
Wherein there stood a man of God,
Dispensing words of grace.

And though he spoke in solemn tone,
And though his hair was gray,
The teacher's thought was strangely
wrought:
'I whipped that boy to-day.'

The church, a phantasm, vanished soon;
What saw the teacher then?
In classic gloom of alcoved room
An author plied his pen.

'My idlest lad!' the teacher said,
Filled with a new surprise—
'Shall I behold his name enrolled
Among the great and wise?'

The vision of a cottage home
The teacher now descried;
A mother's face illumined the place
Her influence sanctified.

'A miracle! a miracle!
This matron, well I know,
Was but a wild and careless child
Not half an hour ago.'

'And now she to her children speaks
Of duty's golden rule,
Her lips repeat in accents sweet
My words to her at school.'
—W. H. Venable, in Our Dumb Animals.

the winter and spring, the river often rises over the bridge, if it is very wet weather, and we can't go to school. We have a boat, and when the river is over the bridge we have to go over in the boat. I am very fond of boat riding. It is very muddy when the river goes down.

In the winter there are large pieces of ice floating down the river. Quite a few girls and boys skate there.

I have four cats and one big cat and a dog. The cats names are Pat, Queenie, Mattie, Tiny and Fluff. Our dog's name is Fannie. She is a very pet dog; she is a very good dog to mind. We take her with us every time we go after the cows. Three of our cats are very good to catch mice and rats; the others are almost too small yet to catch any mice. The old cat catches mice and rats back in the barn.

er's Advocate" for a long while. I thought maybe you would like to hear about a Song Sparrow's nest I found. The bird flew to the hedge with some grass and hair in its mouth. Soon after I went to the hedge and the nest was built. The bird laid four little brown and white eggs in it. They all hatched out. They had a few feathers on their wings. Soon they flew away. Maybe I saw them after and didn't know them.

One day when I was walking in the woods I saw a black squirrel come down a tree with a butternut in its mouth. They were very scarce around here; but they are coming back again. The same day I walked to a big hill near my house. It has a tower on it. From this tower you can see Lake Scugog to the north-east, Lake Ontario from Whitby to Toronto, Caledon mountains to the west. I had to walk five miles home.

DOUGLAS DICKINSON

(Age 10, Sr. III. Class).

Claremont, Ont.

Our Junior Beavers

[For all pupils from First Book to Junior Third, inclusive.]

A Shadow Menagerie.



Going to Bed on November Nights.



The Cat: Raise the outside knuckles of the right hand and put a cloth over the arm to show Tabby's body. Her tail, which you may twitch from side to side, is made by the index finger of the left hand hanging below the right elbow.

The Rabbit: This is most realistic. The left hand is placed on the right, back to back, first finger and thumb of the left hand grasping the first and second of the right. The thumb of the right hand should point downward, and the third and fourth fingers directly outward.

A slight movement of the fingers will animate Bunny.

The Elephant: Bend down the fingers of the right hand and hold the thumb straight out. Place the left hand over

About the Competitions.

The results of our "Fall Fair" competition will be announced at an early date.

Our books from Scotland have at last arrived, and really I feel that I cannot say too much in praise of the large ones, "The Lives of Great Men—written by Great Men," which are to be given, this winter, to all who really earn them by sending in extra good essays in the competitions.

We have been resting on our oars, somewhat, waiting for these books, but now there is no reason why we should not get right down to work for the winter, in earnest. And remember that all boys and girls up to the age of 16 or 17 are eligible for these Senior Beaver contests. After that they are expected to graduate into the Roundabout Club class.

Our next competition, then, will be on the following subject:

"Should home-work be abolished?"

Rules:—(1) All compositions must be received at this office not later than December 20th.

(2) All compositions and letters for this department must be addressed "The Beaver Circle," Farmer's Advocate and Home Magazine, London, Ont.

(3) Full name and address, age and class at school must be given.

For the best essay the award will be one volume of "Stories of Great Men" (large volume, splendidly illustrated in color). Smaller books will be given for second and third class essays.

Senior Beavers' Letter Box.

Dear Puck,—This is the first letter that I am writing to you, and I hope you will publish it. My father has taken "The Farmer's Advocate" for nearly a year, and we like it fine. I enjoy reading your Beaver's letters. Father likes to read your "Advocate" too.

I read the letters every week. I go to school every day. I have a mile and a quarter to go. I have two sisters and four brothers. There are three of us going to school. When we are going to school we have to cross four hills and two bridges. One bridge is what they call the low-water bridge. In

In the spring we make maple syrup. We tap our trees every year. I have very much fun watching them boiling the syrup and gathering the sap. We made quite a lot of syrup, and we sold a number of gallons.

I am taking music lessons, and I like it very well. I just live a mile and a quarter from Middlemiss.

In the winter we are driven to school. There are thirty scholars going to our school. I have very much fun skating and sleigh-riding.

and the others are very fond of staying at the house.

I know this is almost too long now, so I will close, wishing the Beaver Circle every success.

MAGGIE BEACH (Age 11, Sr. III.).
Middlemiss, Ont.

Write on but one side of the paper next time, Maggie. It is much more convenient for the printers.

Dear Beavers,—I have read "The Farm-



Choosing Sides.

the right, with fingers easily bent, to make the top of the head.

The Swan: The two hands and right arm are used for this shadow. The position of the fingers of the right hand, to form head, is rather difficult, the first two being bent and the others straight.

The left hand, nearly open, forms the swan's wing, and may be gently moved to suggest flapping.—Pictorial Review.

Junior Beavers' Letter Box.

Dear Puck,—This is my first letter to the Beaver Circle. I have two miles to go to our school. This year I have seen a great many different kinds of birds. I want to tell of a little bird I saw in the woods one day last summer.

As I was walking along in our harvest field, shortly after the crop was taken off, I heard something screaming like a bird. I walked on, and it became plainer. At last, as I got nearer still, I saw a little bird sitting on a branch of a cedar tree, and it was the one that was screaming. I stopped and looked, and noticed a snake on the ground beside it, then I knew that it must be "charming" the little bird. At first I tried to kill the snake, but it was in vain, then I called and away flew the bird. I did not follow the bird, because I thought it would be all right, but I kept track of it by sight, till at last I saw it flying ever so high, with a flock of other birds. The bird I think was a sparrow.

ENA WHITE (Age 8, Book II. Jr.).
R.R. No. 3, Braemar, Ont.

Dear Puck and Beavers,—This is my first letter to the Beaver Circle. My father has taken "The Farmer's Advocate" for 7 years, and I like reading the letters. I would miss it very much now, I go to school every day. We have a lady teacher. I like her very much. I have a mile to walk to school. I am in the part second. I have a pet dog, I call him Nero; and a pet cat, I call her Tag. My father lives on a rented farm. We have three sheep and four horses and six cows. I attend to the geese and feed the ducks night and morning. I am eleven years old. I have three sisters and one brother. We have an organ, and my mother wants me to take lessons, as I would like to know how to play. I think this letter is quite a long one for this time.

GERTRUDE WARD.
Laskay P.O., Ont.

Dear Puck and Beavers,—As this is my first letter to the Beaver Circle it will not be a very good one. I and my brother go to school. I live on the farm. I have lots of fun when we have a holiday. I like going to school in the winter better than in summer, for daddy takes us to school in the sleigh, and we get under the buffalo-robe and keep warm. MARGARET RENWICK
(Book Jr., III, age 9).
Keene P.O., Ont.

"The Vision of His Face."

This book, written by the author of Hope's Quiet Hour, in "The Farmer's Advocate," contains seventeen chapters, over 200 pages.

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The book will be sent, postpaid, to all of our subscribers who send in ONE YEAR'S yearly subscription to "The Farmer's Advocate," with \$1.50.

Order at once.
THE WILLIAM WELD CO., Ltd.,
London, Ont.

Women's Institute Convention.

The report of the Women's Institute Convention will appear in next week's issue (November 30th).

The Ingle Nook.

[Rules for correspondents in this and other Departments: (1) Kindly write on one side of paper only. (2) Always send name and address with communications. If pen-name is also given, the real name will not be published. (3) When enclosing a letter to be forwarded to anyone, place it in stamped envelope ready to be sent on. (4) Allow one month in this department for answers to questions to appear.]

The Absent Minded.

A charming man, beloved by all the students, and with a reputation for geniality extending far beyond the walls of the college, was Prof. Williamson, of Queen's University. This professor was brother-in-law to Sir John Macdonald. He had the professional fault—preoccupation. Passing from his house one morning to deliver his college lecture, he had not gone far when the high wind caused him to turn around. The wind fell, and the professor resumed his journey. But he had forgotten to turn again, and the result was that he was soon back home, sitting before the fire, and wondering why he had returned. Of the same gentleman the story is told that, when knocking for admission to his own house, a servant, who mistook him for a visitor, declared from the window that the professor was not at home; whereupon, overlooking his own identity, he remarked, in a resigned manner, "Oh, very well, I'll call later."

GEORGE BROWN'S BLUNDER.

But absence of mind is not the exclusive possession of the professors. Hon. George Brown was subject to that peculiarity. This gentleman went to Scotland to be married, and brought back with him his bride, a daughter of Thomas Nelson, the Edinburgh publisher. Mr. Brown was himself until he was near Toronto. Then the thought of his business took possession of his mind, and he gradually became more and more anxious to reach his office, and to find out how matters had been going on during his absence. By the time he had arrived at the railway station he had forgotten his companion. When the train stopped, he made one great bolt for the platform, and was in a moment in a cab and on his way up town. It was some little time before he thought again of Mrs. Brown, to whose rescue he promptly hastened. This was the absent-minded blunder of a Scotchman in Canada. The Scotch have a companion story of recent date which turns the joke upon us, because it is the mistake of a Canadian in Scotland.

SIR WILLIAM'S FUNNY BREAK.

The subject is Sir William Mulock, who appears to have been inspecting the postal system of Glasgow. The walking on the stone pavements among so many postoffices was a trifle tiresome, and in a little time Sir William's boots began to pinch. In search of relief, he went into a near-by shoe store, and tried on a large proportion of the stock. After much searching for a comfortable boot, and prolonged disappointment, Sir William's countenance suddenly lighted up with pleasure. "I've got it," he exclaimed. "The very thing; a most comfortable fit." "Excuse me, sir," said the salesman, "but it's your old boot that you've just put on." This was a case of mental abstraction extending to the pedal extremities.

Clergymen are frequently absent-minded, and when any one of their number is thus affected, the solemnity of the service is marred. A worthy Ottawa pastor, new to the congregation before which he was preaching, undertook to proclaim the virtues of a departed elder. Everything was all right about the sermon, except the name of the deceased, which, through some mental evolution, explainable only on the basis of absent-mindedness, was dropped by way of that of a member of the congregation who was still in the flesh.

BLEFF ERRORS.

The absent-mindedness of the pulpit, however, takes the form, usually, of verbal transposition. Words become unbalanced and fall into the wrong spots. These transpositions are surprising when they are called upon to sing, "From the top of Grassy Mountain" (1841). The poet was astonished to

learn that there was in the book such a production as "Kinkering Kongs Their Titles Take." These absent-minded mistakes are the result of the concentration of the mind upon something yet to be done. The sermon is, in all probability, worrying the speaker, and withdrawing him from the particular exercise of the moment. In a similar way, the mistakes which are attributed to absent-mindedness come from the circumstance that the victim is engaged in something which he regards as of more importance than the matter in respect of which he makes a slip. The mind is fixed upon a given problem, or question, and the body acts without adequate mental guidance on minor points.—[Ex.]

Unfinished Work.

When Helen Jackson realized that in the race between her last novel and death the latter would win, she determined that if her story was to be completed by another, it should be on her own lines. This is the brave and pathetic letter she wrote to her publisher from her bed of sickness: "I am sorry I cannot finish 'Zeph.' Perhaps it is not worth publishing in its unfinished state, as the chief lesson for which I wrote it was to be forcibly told at the end. I suppose there will be some interest in it as the last thing I wrote. I will make a short outline of the plot of the story."

DICKENS' SUDDEN CALL.

When death came to Charles Dickens with such tragic suddenness at Gadshill, on the 8th of June, 1870, he was in the middle of "The Mystery of Edwin Drood," the first chapters of which had appeared in serial form but two months earlier. How the story would have proceeded had he been spared to finish it, must always remain a subject for speculation. His friend and biographer, John Foster, made a painstaking effort to supply the conclusion, but it must always be a matter for regret that the hand of the master was not allowed to finish his last work.

It is a remarkable thing that five years earlier, almost to a day—it was on June 9th, 1865—Dickens narrowly escaped a violent death in an accident on the South-Eastern Railway. This tragic experience long haunted him; and some time later, on finishing "Our Mutual Friend," he wrote: "I remember with devout thankfulness that I can never be much nearer parting with my friends forever than I was then, until there shall be written against my life the two words with which I have this day closed this book—The End."

THACKERAY'S LAST WORDS.

Thackeray was just warming up to his novel, "Denis Duval," of which only three numbers had appeared, when he had to lay down his pen forever, on Christmas eve, 1863. It almost seems that he must have known the end had come, for the last words he wrote were full of tragic significance: "Behold Finis itself came to an end and the Infinite began."

Wilde's Collins was more provident than his great friend and master. When he died, a good fourth of his story, "Blind Love," remained unwritten; but he left behind him an elaborate synopsis of the concluding chapters, from which Walter Besant had no difficulty in bringing the novel to a satisfactory conclusion. Robert Louis Stevenson died at Vailima, with at least two novels unfinished: "Weir of Hermiston," which was published in 1895, and "St. Ives," which was very cleverly completed by Mr. Quiller Couch, and made its appearance two years later; and among other writers whose hands have been stayed in the middle of stories were Mrs. Gaskell, Mrs. Henry Wood, and many another.

UNFINISHED POEMS.

Byron had planned a continuation of both "Don Juan" and "Child Harold," when rheumatic fever laid him low at Missolonghi, and the cantos were never written. Laurence Sterne was stricken down by pleurisy while the manuscript of his "Journal to Eliza" was lying unfinished on his desk. Coleridge never finished "Christabel," though for many a year before his death he had intended to complete the poem. And among many other works which will always remain fragments of the original design, are Wordsworth's "Excursion" and Macaulay's "Armada."—[Ex.]

Are You Making the old People Happy.

There should not be any unhappy old people. Age should bring its compensations of serenity and philosophy. As a matter of fact, however, the average old man or woman is far from content.

The problem which confronts sons and daughters in caring for their parents is a grave one. Old age is sensitive, and the feeling of uselessness fills many an active soul with restlessness and discontent.

Perhaps the greatest mistake that is made by young people is that in their eagerness to relieve father and mother, or grandfather or grandmother, of burdens, they take away everything that makes life interesting. Those who have for a lifetime been eager workers do not want to sit with their hands folded, and so it often happens that father "butts into" his son's business affairs, and mother "meddles" with her daughter's housekeeping. Then comes friction, and the son and the daughter have shown plainly that they desire no interference, cannot understand that their rebuffs have seared the souls of the anxious, active old people.

It is always well, if possible, to provide something for the aged to do. If they can be made to feel that they are helping, their satisfaction will be supreme. If father has been a wise financier, it surely cannot hurt his son to talk over the affairs of the store or office. If mother has been a practical housekeeper, her daughter need not be too "snippy" to take advice.

I know one dear lady whose daughter insisted that she should sit with folded hands. Then, when the old face took on unhappy, haggard lines and the frail little body drooped, the anxious daughter asked the doctor, "What's the matter with her?"

He was a bluff old person, and he thundered: "Give her something to do; she is pining for action."

"But the maids don't like to have anyone around the kitchen," the daughter said.

"Then let her go there when the maids are out," the doctor suggested.

So on Thursday afternoon the dear old lady cooked the dinners. The whole family learned to look forward to them. And the satisfaction that mother got out of that one day in the week lasted her through the other six.

She made chicken pies; she baked beans; she concocted sauces and soups and gravies after old-fashioned recipes; and when they were served, she beamed across the table as if to say, "Should I be put on the shelf when I can cook like this?"

The duty of children toward their grandparents often forms a great problem; but I believe that if there is any question of preference, it is the grandparents who should have first consideration. No child can be hurt by being made to have an attitude of deference toward the aged. Often, if any old people are eccentric, the children's sympathies will at once be aroused if we tell them that "grandfather has borne so many weary burdens" or that "grandmother has had sorrows." On the other hand, to say, "Never mind, grandfather is peculiar," or "grandmother is fussy," will foster a contempt which will be evidenced by the child's manner.

To those of us who grow up impatient with the faults of old age, there will come a day of reckoning. Some day all of us will be old. Do we wish our children to treat us as we are treating our parents? Would you be happy under the circumstances with which we have surrounded our aged father and mother? —[Dolly Madison, in Reformed Church Messenger.]

LIKE FATHER, LIKE SON.

"You look like a fool!" thundered the disgusted man to his swell son just in from college, "more and more like a conceited, unrestrained, helpless fool every year!"

Just then an acquaintance of the old gentleman entered the office and saw the youth.

"Hello, Charlie, back eh?" he exclaimed genially. "Say, you're getting to look more and more like your father every year."

"Ya-as," said Charlie, "that's what the governor's just been telling me."

EATONS WILL HELP YOU TO AVOID DISAPPOINTMENT

CHRISTMAS TIME



THE BIG BOOK OF CHRISTMAS SUGGESTIONS

"NOW IS THE TIME"
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HOLIDAY GIFTS

As everyone knows, December is a busy month, busy for everybody preparing for Yule Tide time.

AVOID THE RUSH. Thousands of people let their Christmas shopping go to the last week when the rush and hum is at the highest point. Why not avoid all this bustle and confusion and **do it now?** Do not wait till the last minute before sending us your order. We make this appeal to you now so that you will avoid all anxiety and worry and receive "all" your purchases in plenty of time for Christmas.

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THE T. EATON CO LIMITED
TORONTO CANADA

Dream Stories.

Some of the most popular novels in our language owe their origin entirely to dreams, for the wonderful workings of the brain during sleep often furnish material which the author is not slow to turn to good account. Had it not been for a dream, "Robinson Crusoe" would probably never have been written. At the time the plot was first conceived Defoe was suffering from great mental worry that resulted in his slumbers being broken by incessant nightmares. On one of these occasions he dreamed that he was stranded on a desert island alone, and began to work out in the dream a means of existence. So pleased was he with the experience that Defoe confessed to feelings of disappointment when he awoke, and he hastened to put his vision into readable form.

"Rienzi" was the dream offspring of Lord Lytton's brain, the whole plot appearing before him in the short space of two hours' sleep between violent attacks of neuralgia. Kingsley, after a hard day's fishing, went to sleep, only to get a shadowy outline of "Westward Ho" in his dreams, though what connection the story had with his sport it is difficult to understand. Few people know why Coleridge's entrancing poem, "Kubla Khan," remains unfinished, but this masterpiece has a very remarkable history. The poet has just taken an anodyne and dropped off to sleep, when the poem began to shape itself in his mind, and the lines to run in rhyming order. When he awoke, he rushed to his writing table and wrote out the lines as we now have them, without a second's pause, but his memory failed him at the conclusion, so the work was never completed. An-

other famous poem composed in a dream was "The Bells," while the same author, Edgar Poe, formulated one of his finest pieces of prose, "The Masque of the Red Death," during the hours of unconsciousness.

"The Strange Case of Dr. Jekyll and Mr. Hyde" probably caused Stevenson more mental trouble than any of his other works, but a dream got him out of the difficulty. He began a story about a man's double, but it appeared so unsatisfactory to him that he tore it up without banishing the theme from his mind. One night, however, he dreamed the scene at the window and a few minor incidents, while the second night the remainder of the plot followed, and the story was soon on paper.

Only two authors are known to have gone so far as to cultivate dreams for the purpose of plot manufacturers. Dry-

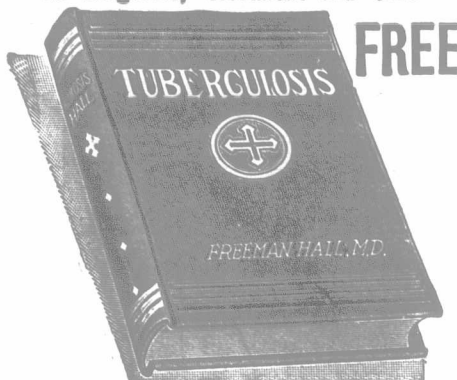
den often ate raw beefsteaks at night, and the nightmares that followed originated some of his most notable poems. Mayne Reid confessed that his prolificacy in producing novels was due in some measure to his habit of eating a handful of chestnuts ere he retired to rest, when in need of a plot.—[Ex.]

TRADE TOPIC.

The Children's Aid Society of Toronto, in an advertisement in this issue, indicate that they would be pleased to hear of good Christian homes in the country for a few bright boys between the age of five and ten years, where they would be cared for as children of the household. Address W. Duncan, Secretary, 229 Simcoe street, Toronto, Ont.

Consumption

Its Diagnosis, Treatment and Cure



NEW TREATISE ON TUBERCULOSIS

By FREEMAN HALL, M.D.

This valuable medical book tells in plain, simple language how Consumption can be cured in your own home. If you know of anyone suffering from Consumption, Catarrh, Bronchitis, Asthma or any throat or lung trouble, or are yourself afflicted, this book will help you. Even if you are in the advanced stage of the disease and feel there is no hope, it will instruct you how others, with its aid, cured themselves after all remedies tried had failed, and they believed their case hopeless.

Write at once to **The Yonkerman Co.**, 1630 Rose St., Kalamazoo, Mich., and they will gladly send you the book by return mail free and also a generous supply of the New Treatment absolutely free, for they want you to have this wonderful remedy before it is too late. Don't wait—write to-day. It may mean the saving of your life.



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How many ladies think it's vanity to look sweet by taking care of their hair and complexions, preferring pretty gowns that accentuate a bad skin.

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A Crocheted Belt.

Dear Ingle Nook Folk,—My last achievement in the fancywork line is a crocheted belt, and so pleased am I with it that I intend to make one or two more before Christmas. Would you like to make one too? If so, here are the directions:

Get two skeins of heavy mercerized crochet cotton (I used D. M. C.) and a heavy steel hook, No. 1 or 2. Chain about 18 stitches, more if you want to make a very wide belt, then put the hook through the first stitch and draw up to a loop, continuing until you have drawn a loop through each stitch. You will now, for a belt the width of mine, have 18 loops on the needle.

Next throw the thread around the needle and draw it through two loops, continuing in the same way until you have come to the end of the row.

Now, draw loops through again, as you did for the first row, 18 in all on the needle.

Throw the thread around needle and draw it through two loops, as you did for the second row.

The belt is all made in this way, a row of loops, then a row made by drawing the thread through two at a time, alternately, until the right length is made. You never turn the work in your hand at all, just work straight ahead. When making the rows of loops, be sure you catch the needle each time into the long loop that shows on the side of the work next you,—the right side when finished.

The belt is a neat, nicely-fitting one, in a sort of basket pattern, firm and close, and, when fitted with a pretty buckle or belt-pin, would make a very acceptable Christmas gift for any girl or woman.

I used pure white crochet cotton for mine, but you can get any color you like in the mercerized thread.

The same stitch may be used for making men's ties, or little scarfs to wear inside of the coat.

Ginger Cookies.

Someone asked for a ginger cookie recipe. I enclose mine. We think they are fine. We also think "The Farmer's Advocate and Home Magazine" fine.

Ginger Snaps.—Take 1 cup molasses, $\frac{1}{2}$ cup butter, lard or clarified dripping for shortening, 3 $\frac{1}{2}$ cups of flour, 1 teaspoonful soda, 1 tablespoonful ground ginger, and 1 teaspoonful salt. Boil the molasses and shortening for five minutes. Have the dry ingredients well mixed and sifted; add these; chill thoroughly. Take one-fourth of mixture out on floured board and roll thin as possible. Shape with a round cutter dipped in flour; bake in a moderate oven. Gather up the trimmings and roll with another portion of the dough, which must be kept cold or more flour will be needed, which will make cookies hard rather than crisp and snappy.

Ginger Snaps, No. 2.—Two cups molasses, 2 cups shortening, 1 $\frac{1}{2}$ teaspoonful soda, 1 teaspoonful salt, 1 $\frac{1}{2}$ tablespoonful ginger, 1 teaspoonful allspice and cloves, 1 tablespoonful vinegar, 5 cups flour. Roll out thin.

Muffins.—One egg, 1 $\frac{1}{2}$ teaspoonful sugar, 1 tablespoonful butter, 1 cup sweet milk, a little salt, 2 cups flour, $\frac{1}{2}$ teaspoon soda, 1 teaspoon cream tartar. Mix well together. Bake quickly. To be eaten hot.

MRS. F. O. S.

Col. Co., N. S.

Ginger Cookies—Scarf—Recipes.

Dear Dame Durden,—I am sending a good tested recipe for ginger cookies. Two cups blackstrap, 1 cup maple syrup, $\frac{1}{2}$ cup lard or beef drippings, 1 tablespoon cinnamon. Boil till thick. Let cool till you can handle, add 1 egg and 1 dessertspoon of soda beaten together, 5 cups flour. Roll when warm.

Will someone give the rule for banana pie? Also rule for making hand-made Shetland floss scarf.

I am also sending rule for peanut cookies, which I find very good. One cup butter, 3 eggs, $\frac{1}{2}$ cup brown sugar, $\frac{1}{2}$ cup granulated sugar, 1 teaspoon cream tartar, $\frac{1}{2}$ teaspoon soda, 1 big tablespoon thick cream, 1 cup chopped peanuts, not too fine, flour to thicken. Roll very thin, and bake. These are a very rich cookie, but badly.

Stormont, Ont. G. L. P.

Banana Pie.—Line a deep pie tin with nice rich paste. Into it slice one large banana or two small ones. Pour over it a boiled custard made with 1 pint rich milk, 2 beaten eggs, 2 tablespoons sugar, pinch salt. Bake slowly in a moderate oven, and finish with a meringue of whites of eggs or stiffly-whipped cream.

A friend of "The Farmer's Advocate and Home Magazine" says that if you can knit the plain "garter" stitch, you can easily make a Shetland floss scarf or shawl. Use heavy needles, and knit a "double" thread, one of the floss, the other of zephyr. Finish the ends with fringe. For a small, thick scarf, use comparatively small needles, and knit rather tightly; for a large one, such as is so much worn now, use large bone needles, and knit loosely. About 300 stitches across will be needed for a large, double shawl.

Mark Rutherford.

Dear Madam,—We notice in your column, entitled "Marie Bashkirtseff," on page 1797, of your issue of November 2nd, a reference to Mark Rutherford and his books.

We would be pleased to say in answer to your correspondence, that this book is published by our firm in two volumes, "Pages from a Journal," Volume 1; and "More Pages from a Journal"—both these by Mark Rutherford.

These books have been published for some time, but are not very well known in Canada.

HENRY FROWDE PUB. CO.,
25-27 Richmond St., Toronto.

We thank the writer of the above very heartily for this information.

An Attractive Bedroom.

Dear Dame Durden,—It is so long since I have written you that I feel almost a stranger, though not a stranger to the many helpful suggestions from you and the chatters, which appear from time to time. It is in reference to one of these that I am writing you to-day.

I feel very good just now, that you chanced to change your boarding-house, Dame, and thus found that alabastine-tinted bedroom, for your description of it led me to reflect on the appearance of my own (from which the faded green and white paper was commencing to peel), and I had been dreading the thought of paper-hangers for some time past, though the alabastine I have used for some time on my kitchen walls; and I thought why not try the bedroom as Dame Durden tells us? I procured two shades of green, also the moulding, at once, and set to work, and lo! the result—is delightful. We have just finished it to-day, and I thought it only fair to tell you how I, for one, profited by that letter.

I am just wondering if my room is prettier than yours. But no; it is not, for there are no Indian novelties to adorn it, just a few nice pictures and two sunshiny windows. My ceiling is of the palest green tint, and the walls are just a trifle deeper. I have a green and fawn wool square, green shades, and white net curtains; the floor is stained oak, so I bought an oak moulding.

Now, dear Dame, I have reason to be thankful to you, for telling us about your pretty room.

I wonder where are all the old-time contributors? To Forget-me-not, I must say that the "cherubs" have doubled in number since she last heard from me, and I am very glad she did not have to "buy" a baby. With best wishes to our hostess and all the Nookers.

HELEN.

Bruce Co., Ont.

Your description gives us a picture of a very pretty room, Helen. I am not at all sure that most people would care for my Indian things. Collecting them is just a little fad of my own.

The Scrap Bag.

CLEANING FURNITURE.

When cleaning upholstered furniture in winter when it cannot be taken out of doors, put a damp cloth over it and beat well, changing the cloth as required. The dust will go into the cloth instead of the room.

REMOVING RUST.

Cream of tartar will remove rust from



Helps to a Beautiful Home

"The many splendid uses of Diamond Dyes might all be grouped together under two heads, viz.: 'Helps to a Beautiful Home' and 'Helps to a Beautiful Wardrobe.'"

The above is quoted from a letter written by Mrs. Mary Oliver, of Winnipeg, Manitoba, who further says:

"I think the greatest lesson Domestic Science can offer is the use of Diamond Dyes. There isn't a housewife in the country whose home and wardrobe couldn't be enriched by the use of Diamond Dyes from time to time."

Mrs. Oliver's opinion is one that is shared by thousands upon thousands of practical women throughout the land.

Diamond Dyes

There are two kinds of Diamond Dyes—**one for Wool or Silk**, the other for **Cotton, Linen, or Mixed Goods**. Diamond Dyes for **Wool or Silk** now come in **Blue envelopes**. And, as heretofore, those for **Cotton, Linen, or Mixed Goods** are in **White envelopes**.

Here's the Truth About Dyes for Home Use.

Our experience of over thirty years has proven that **no one dye will successfully color every fabric**.

There are two classes of fabrics—**animal fibre fabrics and vegetable fibre fabrics**:

Wool and Silk are animal fibre fabrics. **Cotton and Linen** are vegetable fibre fabrics. "Union" or "Mixed" goods are 60% to 80% Cotton—so must be treated as vegetable fibre fabrics.

Vegetable fibres require one class of dye, and animal fibres another and radically different class of dye. As proof—we call attention to the fact that manufacturers of woolen goods use one class of dye, while manufacturers of cotton goods use an entirely different class of dye.

Do Not Be Deceived.

For these reasons we manufacture one class of **Diamond Dyes** for coloring **Cotton, Linen, or Mixed Goods**, and another class of **Diamond Dyes** for coloring **Wool or Silk**, so that you may obtain the **very best results on EVERY fabric**.

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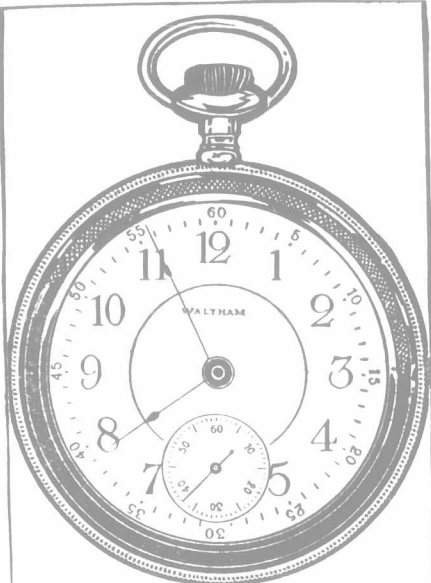
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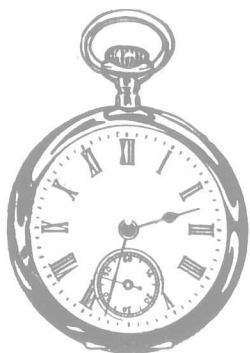
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TIME TO BUY CHRISTMAS WATCHES

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BS9220. Men's 16 size Gold-filled Watch, hand-engraved, plain or engine-turned cases, dustproof, screw back and front, with a 17-jewel nickel Waltham movement, patent brequet hairspring and regulator, exposed winding wheels, ruby-jewelled escapement, all jewels set in solid gold. We guarantee this watch an accurate timekeeper. PRICE DELIVERED..... **\$15.50**



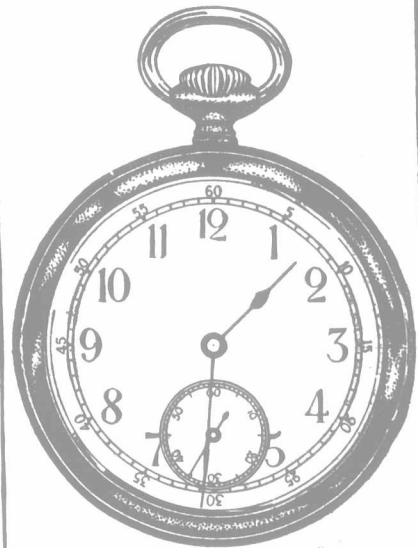
BS9221. Women's Wrist or Chateleine Watch, sterling silver, open face, plain case, suitable for engraving; fitted with a 7-jewel nickel lever movement, guaranteed a perfect timekeeper, neat in appearance. Engraved free with any script mono-gram. PRICE DELIVERED..... **\$5.65**



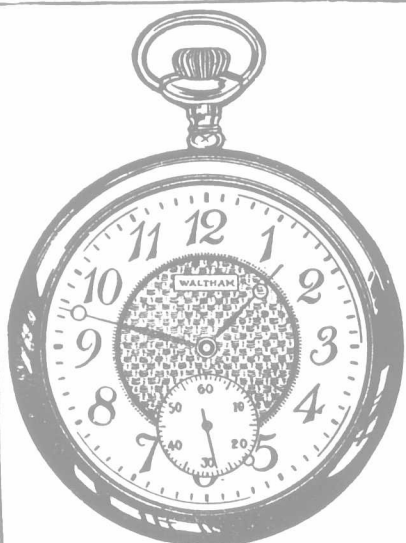
BS9222. Women's Gold-filled Watch, Cashier hunting case, 0 size, fitted with a high-grade Waltham, P.S. Bartlett movement, 16 jewelled, ruby jewels set in gold, exposed winding wheels, patent brequet hairspring, adjusting it to the heat and cold, highly guaranteed. PRICE DELIVERED..... **\$15.45**



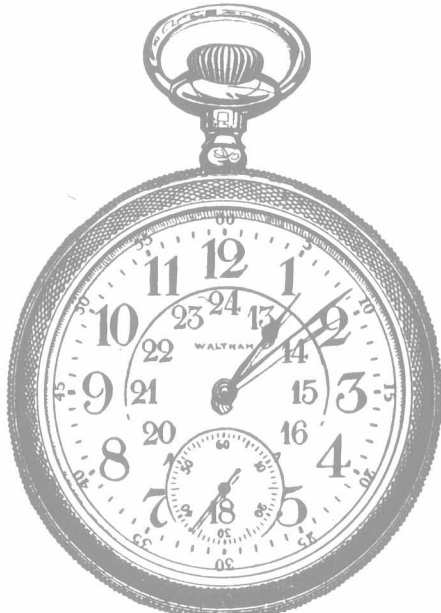
BS9223. Women's Sterling Silver Open Face Watch, 00 size fancy engraved case, fitted with a fine Swiss movement, balance wheel running on jewels, an ideal watch for the young lady at school. To be worn on the wrist or as a chateleine. PRICE DELIVERED complete with leather wristlet..... **\$2.85**



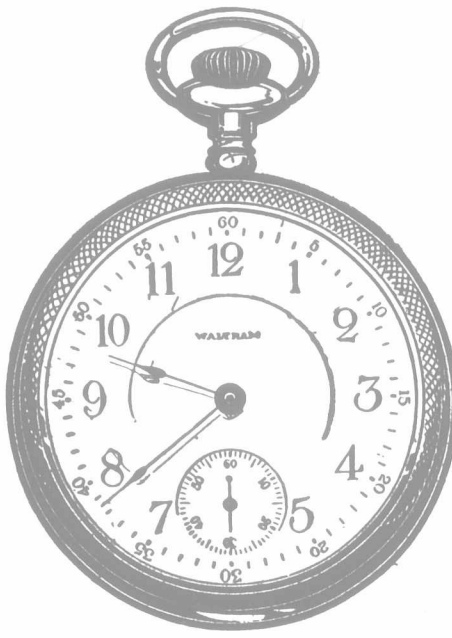
BS9224. Men's or Boys' Gun Metal Finished Watch, thin model, open face, 12 size, gold crown and bow; fitted with one of our celebrated 7-jewelled nickel Lonville movements. This watch we highly recommend to you for this reason, i.e., that we have been selling this make of watch for years, having tested it thoroughly and found it accurate. A watch that cannot be excelled at this price. PRICE DELIVERED..... **\$2.50**



BS9225. Men's 14 Size Gold-filled Watch, dustproof Fortune case, screw back and front, fitted with a 15-jewelled Waltham movement, patent brequet hairspring, adjusted to heat and cold, 3/4 plate ruby-jewelled escapement, your choice of a plain, or the new Waltham gold dial. We consider this a very handsome watch for business men, being a very thin model. Our usual guarantee accompanies every watch. PRICE DELIVERED..... **\$12.95**



BS9226. Men's 18 Size Railroad Watch, in a gold-filled Fortune case, screw back and front, in plain engine-turned and richly engraved cases, fitted with a high-grade 21 ruby-jewelled Waltham nickel movement, double roller escapement, patent regulator with brequet hairspring, examined and adjusted in 5 positions, guaranteed to pass any railroad inspection. PRICE DELIVERED..... **\$35.00**



BS9227. Men's 18 size Gold-filled Watch, in hand-engraved, engine-turned, or plain cases, fitted with a high-grade Waltham, P.S. Bartlett, Damaskened movement, set with 17 genuine ruby jewels, set in gold-burnished settings, full plates, positively dustproof, patent brequet hairspring and regulator, with safety pinion, adjusted to positions and climatical conditions. We have tested this watch thoroughly, and found it to be an accurate timekeeper. PRICE DELIVERED..... **\$15.00**



BS9228. Women's 6 Size Cashier Gold-filled Hunting or Open Face Watch, in richly hand-engraved, plain, or engine-turned cases, with a high-grade 16-jewelled Waltham, P.S. Bartlett movement, ruby jewels set in gold-burnished settings, highly finished patent brequet hairspring, regulator and safety barrel, compensated balance adjusted to the variations of heat and cold; neat in appearance. PRICE DELIVERED..... **\$14.50**

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That guarantee means that I believe Cream of the West to be the best bread flour on the market. If your bread doesn't beat any you ever baked before, if it fails to rise or doesn't give extra satisfaction in every way, your grocer will pay you back your money on return of the unused portion of the bag.

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If people will fairly and honestly try Cream of the West they will have success with it. That's why we guarantee it. We are sure of it.

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St. Lawrence Sugar

It is brilliantly white and sparkling—looks dainty and tempting on the table—and goes further because it is absolutely pure sugar of the finest quality. Make the test yourself. Compare "ST. LAWRENCE GRANULATED" with any other.



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MONTREAL

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TWELFTH INTERNATIONAL LIVE STOCK EXPOSITION

December 2nd to 9th, 1911

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Union Stock Yards
CHICAGO

The International Horse Show, embracing all that is paramount in horse world, will be held evenings during the Exposition. Thirty National Live Stock Association Conventions. Premiums over \$75,000. Entries more than 11,000 animals. Grand carload exhibit. Numerous new attractions.

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On Tuesday, Dec. 5th, at 1 p.m., the Rambouillet Sheep Association will hold a sale. For further particulars write Dwight Lincoln, Sec., Milford Center, Ohio. Shropshire sale, Wednesday, Dec. 6th, 10 a.m.; for further information apply to J. M. Wade, LaFayette, Ind. Also on Thursday, Dec. 7th, at 1 p.m., the American Hampshire Swine Association will hold a sale. For catalogue, write E. C. Stone, Sec., Peoria, Ill.

EDUCATION ENTERTAINMENT PLEASURE TRIP ALL IN ONE
LOWEST RATES ON ALL RAILROADS

Place a small lump on each spot and rub in well, then put the clothes into the boiler.

* * * * *

"Economics changes man's activities. As you change a man's activities, you change his way of living, and as you change his environment, you change his state of mind. Precept and injunction do not perceptibly affect men; but food, water, air, clothing, shelter, pictures, books, music, will—and do."—Boston Cooking School Magazine.

PLANTS IN WINTER.

Harper's Bazar says that morning-glories, nasturtiums and cobaea scandens may all be grown nicely in the house in winter. Put tumblers over them until they get started.

The Kindly Fruits of the Earth.

By Annie Oakes Huntington, in Youth's Companion.

In the small vegetable garden overlooking the white cottage farmhouse, where Leah Fay and her aunt, Miss Susan Fay, kept house together, Leah was picking out stones. It was just before planting-time in spring, and the pleasant afternoon sunlight had drawn her out, with the same sure touch that was quickening into growth the little green blades of grass on the bank at the south side of the house, and was swelling the flower-buds on the elms in the front dooryard. Leah, with her strong back and arms, worked as a boy works, without consciousness of fatigue. Now and then she cast a glance toward the side door of the house below, and sometimes stopped a minute to listen.

There was something about Leah Fay that made you like her at once. Her neighbors were discussing her one evening down at the store, and one of them, a man who lived on Temple Hill, remarked:

"Most everyone's got two sides. You see one side and like 'em, and I see round the other way, and don't like 'em any, but I tell you what 'tis, Leah's just got one side, and everyone in town sees her just one way, and likes her, from the minister down to Susan Fay's pigs."

It was not so much that she was pretty—although a fresh complexion and waving hair and kind, brown eyes, did much to make her seem so; it was rather her manner, which expressed ready good feeling and latent force of character. Even strangers felt her lovable quality.

At the house a door closed. Looking up, Leah saw a man go into the barn, lead out his horse, and drive slowly up the road. She dropped her rake, crossed the field, and climbed over the wall just as the wagon passed behind the hill, out of sight of the house.

"Mr. Allen!" she called, and the man drew up. While the bluebirds flew overhead and the shadows lengthened and the old horse pawed holes in the road, the two stood in earnest talk. Long suspected by Leah, although bravely kept from her by her delicate, impoverished aunt, it was the old story of one debt and a small mortgage on the farm, then more debts and a larger mortgage, until, after her father's death, a crisis had come, and foreclosure stared them in the face.

"But there," Mr. Allen concluded, "I don't know as I'd ought to tell you this, Leah. I guess Susan doesn't mean you to know. Maybe something can be done before September, and you're smart enough to hire out down to the Flat, if worse comes to worst."

"To hire out down to the Flat!" The words rang in her ears. To hire out, and leave her frail aunt stranded among well-meaning relatives who did not understand her ways, to see her dear home sold at auction, the hens given to the neighbors, and the old family horse, Tug, carried off to be sold—the tears blinded her eyes as she pictured it all.

That evening, in the intervals of talk during supper, and while she washed the dishes, the question, "What can I do?" burned in her brain. To Miss Susan she gave no outward sign, although she glanced whistfully at the thin, pale face of her aunt as she sat with her knitting unheeded in her lap.

"Good night, Aunt Sue!" she said, at bed-time. "Let's you and me go to the Center to-morrow morning; it will do you good to ride out and get a change, and

you know Mrs. Moulton's been counting on your coming for ever so long."

The suggestion sprang from a definite plan which had been slowly taking shape in Leah's mind, and which she wished to discuss with Mr. Atwood, the lawyer, an old family friend and counselor.

Alonzo T. Atwood, attorney-at-law, justice of the peace, superintendent of schools, and deacon of the First Parish Church, sat swinging in his office chair the following morning, when he heard a knock. The next moment Leah Fay stood before him, her eyes glistening, her cheeks flushed.

"Good morning, Miss Fay! What can I do for you? Have you come about your will, or to discuss the new minister's salary?"

"O, Mr. Atwood, please don't joke!" said Leah, and she hurriedly told him what she had heard the day before, while Mr. Atwood listened with an attention that was all kindness.

"And what I came to see you about was this," Leah continued. "You know I've raised all the green stuff in our garden for two summers. I thought that if I could only borrow enough money to plow up another piece this spring, and buy some dressing, I could raise vegetables to sell round to summer people, and pay off the back interest, if I don't make enough to pay any more. We've only got till September, and it's all the home we have in the world"—and she broke off abruptly, not trusting herself to speak.

Unlike many jovial men who make a practice of being funny, Mr. Atwood knew the point at which to stop, and his heart was easily touched.

Crossing the room to an open safe behind Leah, he took from it some bank-notes, which he placed before her on the desk.

"My dear little girl," he said, "your father and I were friends from the time we were boys at school together, and I don't understand why Susan has never told me about the state of things at home. I believe that you have it in you to make this scheme of yours a paying one, and I want you to take your start in business as a present from me. No, my dear," he interrupted, "don't try to thank anyone in this office,—we don't allow it here,—but come in often and see me, and tell me how you get on."

Busy days for Leah followed this talk in Mr. Atwood's office. Every spare hour was devoted to her undertaking, and she not only consulted the successful farmers of her neighborhood, but also those in near-by towns who could give her advice.

On a large sheet of brown paper she drew a plan of her garden to scale, and here she arranged the different vegetables, with planting dates two weeks apart, to allow for a succession of crops.

It was done with such system that later in the season, after the dressing had been spread on the ground, and the rich, brown earth had been plowed and harrowed, it was a simple matter to direct the planting. When the fertilizer and seeds, and the work of the hired men had been paid for, there was still enough money left to buy a wheel-hoe, which reduced the amount of Leah's manual work in weeding and cultivating between the rows.

It was a wonderful spring that year. The rains came in warm showers at frequent intervals, without rough winds and storms, and the sunshine quickened Leah's seeds into thrifty little plants, while she weeded and thinned out and encouraged each kind to do its best. Up and down the rows of beans she scattered nitrate of soda to hurry them along and make the string beans tender and snappy.

She had been warned to give less than a handful to each plant, for too much would burn them. At the roots of the green peas Leah mixed in wood ashes, but no nitrate of soda. Old Mel Plummer made her wise on that point.

"Sody'll run 'em up, all leaves," he cautioned her, "and if you ain't calculating to turn them vines into shade-trees, you'd better feed 'em ashes."

She loved her work, and her garden showed it. Never were there lettuce so crisp, never sugar-peas so melting, never cress and radishes with such a peppery snap, never rows so straight and free from weeds. Her ability was discussed of an evening in the country stores beyond the limits of three villages.

On the hills facing the mountains at the north end of the town, and below on the borders of a lake, cottages and camps had been built, and at last the morning came when Leah hitched old Tug into an open wagon, filled with vegetables, and started out to seek a market among the summer people.

Besides filling baskets with peas and beans, young onions and vegetable marrow, she had tied up bunches of small beets, pulled before they were much bigger than a hen's egg—at the very moment when the beet is sweetest and tenderest.

Then there were young kohlrabi, with funny topknots, corn-salad, Swiss chard, the queen of garden greens, and bunches of parsley and cress temptingly spread out in boxes lined with white paper.

It was the crucial moment of the summer for Leah. She had planned, watched, labored and waited for this first harvest. To the utmost she had done her part; the garden had responded by doing its lavish best; all now hinged on the question, "Would these people buy?"

Seven weeks were left before the money on the mortgage was due, and so far only small returns on a few early vegetables sold at the Flat had come in. Her success or failure rested wholly with these strangers.

She was driving by a thicket of alders when the sound of something crashing through the bushes, followed by a blood-curdling, agonized cry, brought her to a standstill. In an instant she jumped down, and broke her way into the underbrush. There on the ground lay a beautiful, terrified Angora cat, its pink ribbon torn and smeared with dirt, its soft coat matted with burs, and one of its paws held fast in the jaws of a steel trap, evidently set for some thieving skunk.

Although in the end her hands were bleeding from scratches, Leah succeeded in freeing the poor creature, and with it on the seat beside her, drove on to the first house of the summer colony.

As she went up the driveway, a handsome boy in riding-breeches came across the lawn, and catching sight of the cat, ran into the house, only to reappear with a lady, evidently his mother.

"My dear child, where did you find my poor pussy-cat?" she asked, in such a pleasant voice that Leah, forgetting her shyness, gave an animated account of her little adventure. "And what have you here? Fresh vegetables to sell, and you raised them yourself? We must have some at once," and to Leah's astonished delight, she made so many purchases that the money fairly poured into her canvas bag.

When Leah finally drove away, she was escorted by Harold on horseback, who went to point out the different cottages, and to introduce her to his mother's friends.

"And when everything is sold, come back here and have lunch with Harold and me," his mother said, with such cordial hospitality that Leah could not refuse.

That afternoon she returned home with every spear of green sold out, and a list of customers who had given her standing orders to supply them with fresh vegetables, three times a week, throughout the season. Her summer's success was assured.

Three months later Leah had earned enough from her garden to pay back interest on the mortgage, besides a first instalment toward clearing the debt, and a sufficient sum had been put aside to carry on the business a second season. And—what seemed to her best of all, as she watched her aunt knitting by the fire, the freedom from anxiety had changed the older woman's expression—she seemed pretty, and almost young. For the color had come into her cheeks, and the look of hopelessness, due to years of waiting for an inevitable blow to fall, had at last gone from her eyes.

The Test of the Heart.

It is easy enough to be pleasant
When life flows like a song,
But the man worth while is the man who
Will smile
When everything goes dead wrong:
For the test of the heart is trouble,
And it always comes with years,
And the smile that comes with the
Praises of earth
Is the smile that shines through tears.

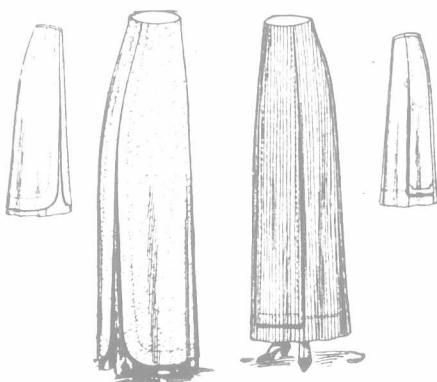
The "Farmer's Advocate" Fashions.



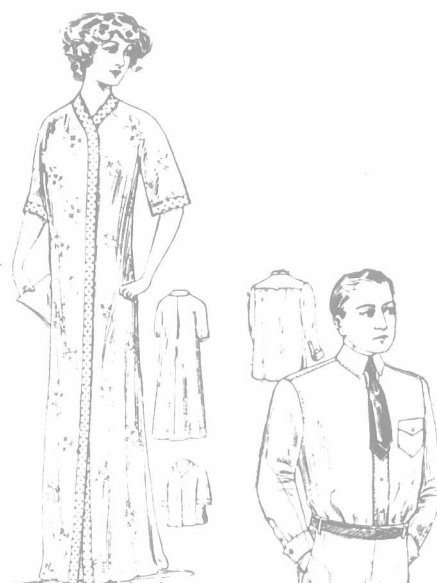
7151 Girl's One-piece Night Gown, 4 to 12 years. 7165 Child's Bishop Dress, 6 mos., 1 and 2 years.



7120 Two-Piece Cover for Misses and Small Women, 14, 16 and 18 years. 7148 Fancy Tucked Blouse, 34 to 40 bust.



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7163 Long or Short Kimono, Small 34 or 36, Medium 38 or 40, Large 42 or 44 bust. 7164 Men's Outing or Negligee Shirt, 34 to 46 bust.

Please order by number, giving age or measurement, as required, and allowing at least ten days to receive pattern. Price, ten cents per pattern. Address, Fashion Dept., "The Farmer's Advocate," London, Ont.

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BOVRIL

IS ALL THAT IS GOOD IN BEEF. The 1-lb. size is the most economical to use.

Poultry Fencing that is Stronger than Seems Necessary

We make our poultry fencing close enough to turn small fowl—then we make it extra strong, so it will last for years and keep the cattle out. The heavy, hard steel top and bottom wires hold it taut and prevent it from sagging.

PEERLESS POULTRY FENCE SAVES EXPENSE

It is well galvanized so as to protect it from rust. It makes such a firm, upstanding fence that it requires less than half the posts needed for the ordinary poultry fence, and that means a big saving to you. Write for particulars.

We make farm and ornamental fences and gates of exceptional quality. Agents wanted where not now represented.

The Banwell Hoxie Wire Fence Co., Ltd.
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KNECHTEL KITCHEN CABINETS SPELLS

KOMFORT, KLEANLINESS, KONVENIENCE

What will a kitchen cabinet do for you? It will concentrate in one place everything you use in preparing meals. It will keep everything clean and prevent waste. It will stop that running from cupboard to pantry, pantry to kitchen, kitchen to storeroom and back again. Saves your time, your money, your patience and your feet.

LOOK FOR THIS TRADE-MARK.

Extension top of bright aluminum. Will neither tarnish nor rust.



Makes things easy in the kitchen. Helps to get meals ready quickly.

MADE IN FIVE HANDSOME STYLES

Has flour, sugar and meal bins, spice jars, airtight canisters, bread and cake box, plate racks, pot cupboard, sliding shelves, and other features.



You can see the KNECHTEL KITCHEN CABINET at any good dealer's. The cost is not excessive, and it's a boon to any woman.

Booklet D mailed on request.

KNECHTEL KITCHEN CABINET CO., Limited
Hanover, Ont.

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Louden's Feed Carriers

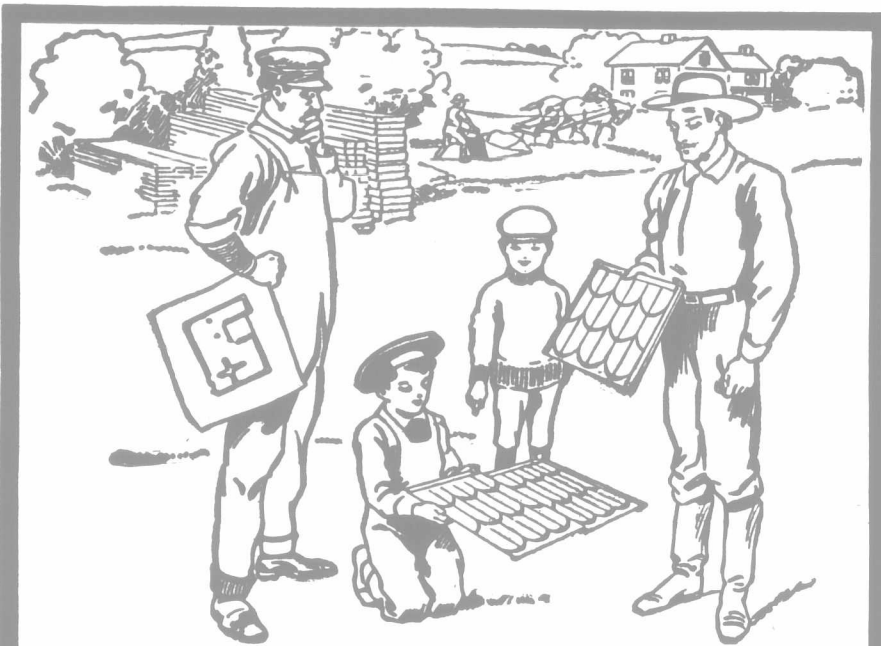
have the same kind of gear as the Litter Carriers. The box, however, is wholly different, having ends shaped so that the feed can be easily got into or out of it. Our Feed Carriers run on a steel track which can be curved in any direction and yet run perfectly.

See our exhibit at the Winter Fair Building during Fat Stock Show, which is held December 12, 13, 14 and 15.



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Manufacturers of Hay Tools, Feed and Litter Carriers, Cow Stalls and Stanchions, Barn-door Hangers, Pumps, Hardware Specialties, etc.



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In justice to yourself, you should at least investigate "Galt" Steel Shingles before deciding on the roof for your new barn or the new roof for your old barn. Present wood Shingles are failures and are being discarded—to use them is a step backward. Don't put a fourth-class roof on your first-class barn. "Galt" Galvanized Steel Shingles is the roofing, now and for the future. Roof your new barn with "Galt" Steel Shingles and you won't have to apologise for it now or at any time in the future.

Listen, you won't have time two months hence to investigate this roofing question. And yet the roof of your barn is an important part of your real estate and should be selected carefully.

Won't you drop us a card now for our booklet "ROOFING ECONOMY" telling all about "GALT" Shingles?

If you haven't paper and ink handy, tear out this advertisement, write your name on the line at bottom and mail to us. We'll know what you mean. You'll never have a better chance than right now.

Name _____ Address _____
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 SOFT AS A GLOVE
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SOLD BY DEALERS EVERYWHERE

The Queen City Oil Co., Limited.

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Herculaneum.

By T. Ashby, Litt. D., the Director of the British School of Rome.

The name of Herculaneum, owing to the initiation by Professor Waldstein of a scheme for its excavation by international co-operation, has been much before the public during the last three years. The Italian Government has now decided that the work shall be done by Italian archeologists and with Italian money, and are of opinion that better results will be eventually attained by proceeding gradually at first than by commencing the enterprise on a large scale. Of that the officials of the Naples section of the Archeological Department of the Ministry of Public Instruction are no doubt the best judges, and we may fairly hope that, now that Italy has reserved to herself the right to carry out this important work, she will commence it promptly and carry it through to its completion, unless (which is improbable) preliminary investigations unmistakably indicate that the results of further work would not justify the undoubtedly considerable pecuniary sacrifices involved.

In the meantime let us, by shortly examining the history of Herculaneum and of the excavations which have already been made on the site, try to form an idea of what may reasonably be expected from it.

Herculaneum, according to our classical authorities, was situated between two streams at the foot of Mount Vesuvius, on a hill overlooking the sea, with a harbor which was safe at all seasons.

Of its earlier history we know nothing; its name, of course, led to a tradition of its foundation by Hercules, on his voyage, it is said, from Spain to Italy. It was in all probability of Greek origin, and belonged successively, we are told, to the Oscans, Etruscans and Samnites. It fell under the power of Rome during the Samnite wars (Liv. viii., 25), and remained faithful until the Social War, in which it joined the Italian allies. It escaped, apparently, with comparatively mild treatment for its rebellion, and was much frequented as a resort by Romans of wealth, the imperial house being among the owners of villas there in the first century A. D. It owed its vogue, no doubt, to the beauty of its situation on the shores of the Gulf of Naples, sheltered by Vesuvius on the north-east, and easily accessible by the coast road from Naples, from which it is only five miles distant. In 63 A. D., however, it suffered considerably from an earthquake, which did considerable damage throughout the region between Naples and Nocera, and was very severe at Pompeii. As to Herculaneum itself, Seneca tells us that part of the town fell, and that the stability of the rest was none too secure.

We have a contemporary record in the shape of an inscription of the restoration in 76 B. C., by Vespasian of the temple of the Mother of the Gods, which had been overthrown by this earthquake. Only three years later the town was utterly destroyed by the famous eruption of Vesuvius, which overwhelmed Pompeii, in which Pliny the Elder, then in command of the fleet at Misenum, perished from suffocation at Stabiae (the modern Castellammare), a victim both to his zeal as an observer, and to his energy in rendering aid to the distressed.

The configuration of the coast was entirely altered by this catastrophe. The rocky ridge on which the town stood—an older lava stream, no doubt, and therefore the safest place for a settlement, inasmuch as subsequent streams might be expected to take the depressions on each side of it—and these depressions themselves have alike disappeared, and the coast runs in a straight line several hundred yards further out than it did before.

Herculaneum, was, like Pompeii, overwhelmed by dust and ash, but the conditions under which they were deposited were somewhat different. At Pompeii, the ashes remained almost entirely dry, and did not, therefore, solidify; but at Herculaneum, which is closer to Vesuvius, torrents of rain must have rushed down and mingled with the ashes, which were thus, in parts, consolidated into a harder mass, though in parts they would be a good deal softer. Heavy rain acting on the material thrown up in the spring of 1906, has produced precisely similar results.

The lava streams which are found on the site of Herculaneum are at a higher level, overlaying the ashes, and belong to a later eruption. Nor is there any basis for the supposition that Herculaneum was buried by a mass of volcanic mud, which would by this time have become homogeneous and very compact.

The history of previous excavations has been told by Prof. Michele Ruggiero ("Storia degli Scavi di Ercolano," Naples, 1885).

It is commonly, but erroneously, stated that the site of Herculaneum was absolutely unknown until, in 1709, the Austrian General, Count Elbeuf, accidentally hit upon the theater, his workmen being engaged in digging a well. As a fact, he was actually searching for antiquities, and sank, not a well, but a shaft (the Italian word pozzo may mean either), with this purpose in view. The work continued for about five years, but was carried on quite irregularly, various points of the theater (which was not then recognized as such) being tried, and some portions of the buildings near it. Some statues were found, two of which (female portrait heads) are now in Dresden. In 1738, King Charles III. of Naples, commenced operations in a more thorough manner. The excavations continued for many years, and led to the discovery of the true character of the theater, to the finding of what may be a part of the forum, of three temples, of a building with colonnades erroneously called a basilica, resembling the building of Eumachia at Pompeii, adorned with fine statues, among them those of the Balbi, of a few tombs, and of a large villa, in which were found the famous papyrus rolls, now preserved in the museum at Naples, comprising the library of the owner of the villa, a follower of the Epicurean School of Philosophy. Here were also discovered some of the finest bronzes of the Naples Museum, such as the seated Mercury, the head of the bearded Dionysus, and others. In 1755 the King founded the Academy of Herculaneum for the investigation and publication of the results, and the magnificent work issued by this institution in nine folio volumes ("Le Antichità di Ercolano") caused a considerable interest in the learned world. Its publication began in 1757, and was completed in 1792.

Pompeii, however, was a good deal more easy to excavate, and the work there progressed somewhat faster. For, while at Herculaneum it was necessary to work entirely by tunnelling, at Pompeii the buildings of the ancient city could easily be laid bare in the ordinary way, owing to the lightness of the material with which they were covered.

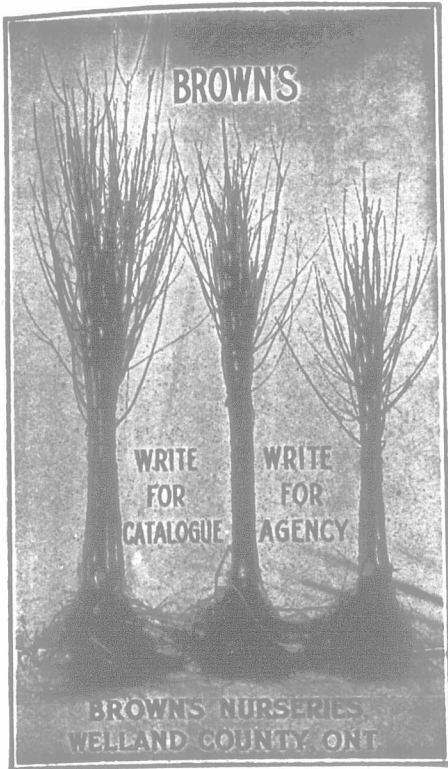
It has sometimes been believed that the excavations of Charles III., though not carried on with sufficient care, had at least crossed, with their tunnels, the whole area of the city. Professor Barnabee, however ("Atti dei Lincei," Sec. III., Vol. II., p. 751), is of the opinion that the area covered by these researches was not very extensive. Nor do we know with accuracy the extent and size of the ancient city.

The excavations were carried on for a while under his successor, Ferdinand IV., but abandoned in 1776, and not resumed until 1828. A group of houses was discovered at a depth of only forty feet, and the work was continued until 1855, with many interruptions.

It was not taken up again until 1869, when very little success was attained, and since 1875 practically nothing has been done except repairs.

The work has always been carried on under considerable difficulties, owing to the existence of the town of Resina above the site, and the considerable depth of the excavations below the surface, necessitating their prosecution entirely by subterranean galleries, except in the case of the Scavi Nuovi of the nineteenth century. It has, indeed, often been the case that the materials from the cutting were simply used to fill up a previous one, instead of being transported to the surface; and the system of excavation led to the buildings themselves being often seriously damaged.

The theater is the only one of the buildings examined in the eighteenth century which is still accessible, and, faintly lighted as it is, its plan obscured by the buttresses which have been built to support the rock above, it is no easy matter to form an accurate idea of it. The



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STOP!

And before reading further, turn to page 1914 of this issue and "Read."

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We are the largest buyers of raw furs in Canada, and we pay the highest cash prices. Write at once for price list and other particulars.

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A GREAT COMBINATION

Bulls eight months old for sale, combining the blood of Pontiac Korndyke and Hengerveld De Kol, with five 30-lb. cows in their pedigree, whose milk contains 4.4 per cent. fat. These are the two greatest Holstein-Friesian bulls in America.

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**NOTICE TO HORSE IMPORTERS
GERALD POWELL**

Commission Agent and Interpreter
Noget Le Rotrou, France
will meet importers at any port in France or Belgium, and assist them to buy Percherons, Belgians, French Coach horses. All information about shipping, banking and pedigrees. Many years' experience; best references. Correspondence solicited.

Homestead Holsteins Headed by Canary Rachel Clothilde, whose dam and sire's dam and two granddams average over 27 lbs. butterfat in 7 lbs. and over 4 per cent. butterfat. Selling bulls for sale. Also a few year-old heifers and cows. Trains met by appointment. Phone connection. **G. & F. Griffin, box 21, Burgessville, Ont.**

so-called Scavi Nuovi of the nineteenth century on the other hand, only lie forty feet below the present surface, and are open to the air. Here a street and several houses, the largest of them known as that of Argus, from a painting found in it, have been brought to light. The street descends steeply toward the shore, which at that period must have been close by. A small portion of a group of public baths (thermae) was also found, but it was not possible to proceed further with the excavation of it, as it lay on the edge of the area which belonged to the Government.

And so we come down to the present time. The expense of a systematic excavation of Herculaneum is such that the problem has never been faced until now; and it is clear that, if the quality and condition of preservation of the buildings and objects found is at all equal to that of those which have already been extracted from the ruins, the work will be of such surpassing interest and importance that to abandon it before its completion would be, to say the least of it, highly regrettable. But we may surely trust that the Italian Government, without prejudice to the considerable amount of other important archeological work now in hand or shortly to be undertaken in Italy, will not fail to carry through this great enterprise which it has, exercising an undoubted right, decided to carry through without foreign assistance.

Blessed is the Man or Woman with a Hobby.

Every vocation has its own dangers, however, and there may be, in any calling, too much dead work for the best return in life. Often, after a period of work in a particular field, one finds that one has used up much of its opportunity for culture and service. What is to be done then? Sometimes, more often than with our money standards we think possible, one may change one's vocation. Many times, however, this is impossible, and even then something can be done: we may cultivate an avocation in the margin of life. I know the words vocation and avocation are often used synonymously; but it is a pity to waste two good words on one idea when both are needed. A man's vocation is his business in life; his avocation is the call he voluntarily accepts aside from his main business. Let me illustrate: we think of John Stuart Mill as a great political economist, leader in reform, author of books that still remain among the best we have in his field. We forget that John Stuart Mill paid his running expenses by working for thirty-five years, eleven months in the year, six days in the week, at his office in the East India Company, drafting telegrams for the government of the native states of India, and that the work by which he will always be remembered was done, in the margin of life that most people waste.

Thus if life is overburdened with routine, add another task, and the demand of both will be less than that of the one. Blessed is the man or woman with a hobby—with some strong interest followed aside from the main business of life; and from this avocation one returns to the work of the vocation freshened and strengthened for the daily task.

In both aspects of the work of life the value of the thing done is the measure of manhood or womanhood put into it; never more and never less. The humblest action is big enough to express the loftiest ideal. It was said that a cup of cold water might be given in such a way as to carry the whole gospel of human brotherhood.

Thus each of us needs a vocation; and only as we follow it reverently, respecting our work and looking up to it as an opportunity to live and grow, and help other people to live and grow, will it take its rightful place as a primary aspect of the path of life that leads up the mountain to the twofold end.

"Is there a good opening here for a man who keeps his wits about him and doesn't care to begin at the bottom of the ladder?" asked a self-assured young fellow of a merchant into whose office he had penetrated. "Yes," was the reply, "there is. A thoughtful builder, calculating for the possibility of a visit from such a young man as you evidently are, provided a good opening in the middle of that left-hand wall. Make use of it, please."

**OK Canadian U Bar
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Steel Stanchions**

The leading and successful dairymen of the country have learned through experience that it pays to stable their cattle comfortably.

If it pays the large dairymen, the smaller one will receive the same profit in proportion to his business.

THE OK Canadian Stalls and Stanchions have been installed by the leading dairymen of Canada, because they are made of high carbon steel, no joints and rivets to come out of order, and are guaranteed that the cattle will not get loose.

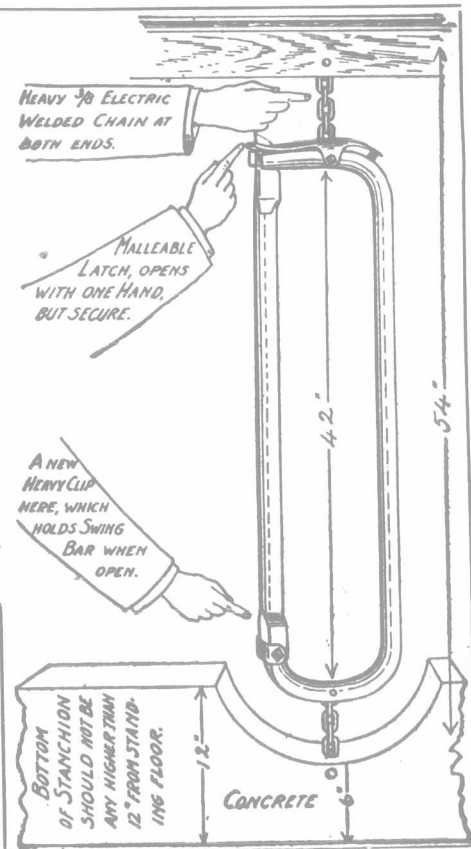
Send in this coupon and get our circulars on barn construction and sanitary stalls and stanchions.

Canadian Potato Machinery Co., Ltd
145 Stone Road, Galt, Ont.

Please send me instruction for barn construction and circulars on stalls and stanchions

Name.....

Address.....



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\$16,000.00 in Prizes

Live-stock entries close Nov. 25. Poultry entries close Nov. 27.
\$15,000.00 has been spent this year on additional accommodations.
Single-fare passenger rates on the railways.
Free return for exhibits shipped by freight.
For prize list and entry forms apply to the Secretary.

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Shirt-comfort and ease for the workman—and long wear as well. Roomy patterns, cut with lots of cloth; amply big around body, good length, wide sleeves, full-shaped shoulders, Neat, well-fitting collars and cuffs—NOT A THING SKIMPED ABOUT THEM. Don't buy any other working shirt but



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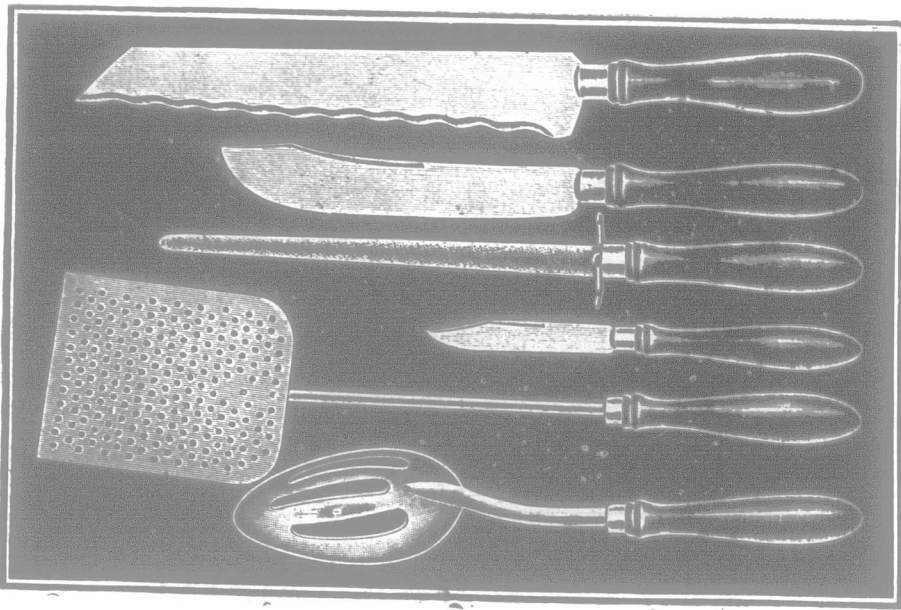
Double-stitched—rip-roof. Gussets re-inforced—tear-proof. Bar-Tacked NO-BREAK buttonholes—and buttons sewed on with linen thread so THEY WON'T COME OFF. Just the loose-fitting, neat-looking long-wearing shirt you have always wanted.
LOOK FOR THE LABEL as above—inside collar.
The price is right

A. R. CLARKE & Co., Ltd.
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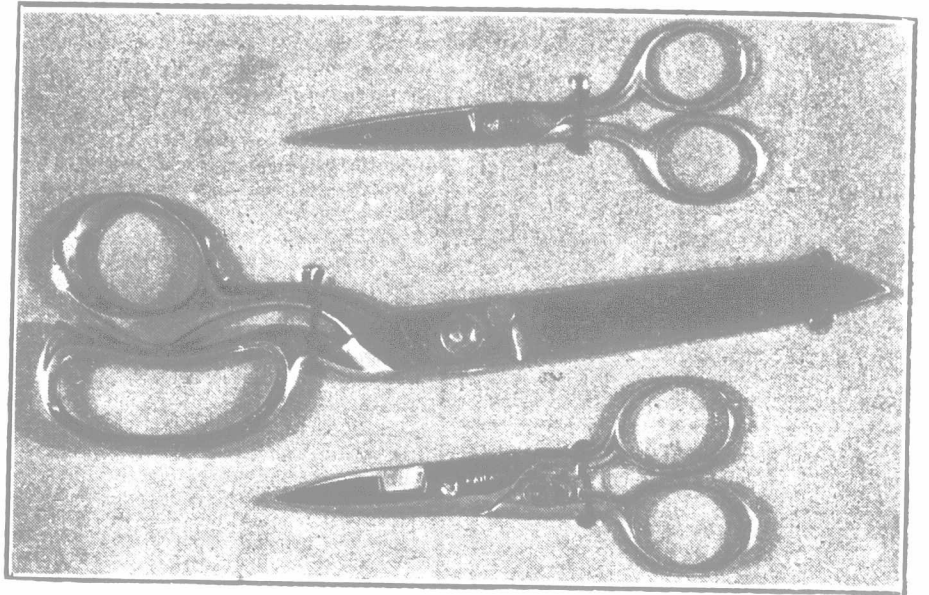
Please Mention The Advocate

READ This Premium Announcement

Below are described some of the premiums which we are offering this season. You will be highly pleased with any of them you secure. The required number of new yearly subscriptions to "The Farmer's Advocate and Home Magazine" is marked after each.



COMPLETE KITCHEN EQUIPMENT.—A utensil for every purpose. All made of the highest grade of crucible steel. Rubberoid finished, hardwood handles, mounted with nickel-plated ferrules. All six articles for **ONE NEW SUBSCRIBER.**



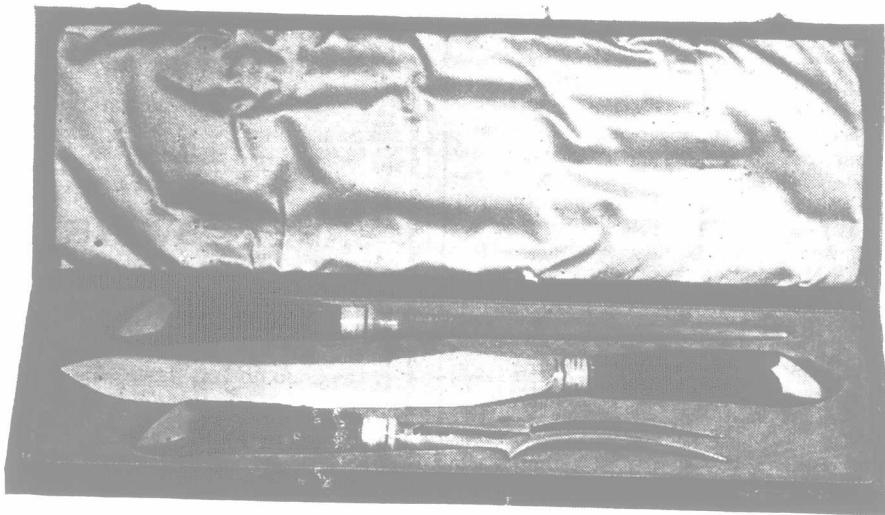
SET SCISSORS.—One self-sharpening scissors, one embroidery scissors, one buttonhole scissors. All good quality steel. **ONE NEW SUBSCRIBER.**

40-PIECE AUSTRIAN CHINA TEA-SET.—Handsome and dainty in shape, coloring and design, ordinarily retailing from \$4.00 to \$6.00, depending on locality. We have only a few sets left, so send your names as soon as possible. **FOUR NEW SUBSCRIBERS.**

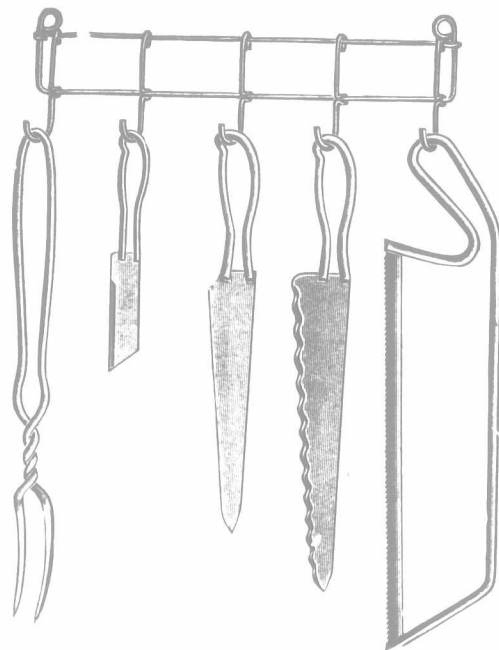
BIBLE.—Old and New Testaments in beautifully clear, legible type; references, concordance to both old and new testaments. Index to names of persons, places and subjects occurring in the Scriptures. Twelve full-page maps; all excellent in type and outline. This book is of most convenient size, being 7 x 10 inches when open; weight, 23 ounces; and would sell at regular retail price from \$1 to \$1.50. **ONLY ONE NEW SUBSCRIBER.**

"THE VISION OF HIS FACE," by Dora Farncomb, writer of Hope's Quiet Hour in "The Farmer's Advocate," contains 18 chapters, 224 pages, in cloth with gilt lettering. One of the many expressions received regarding it is: "I am pleased, edified and comforted in reading it. It is better, fuller and richer than I expected." Cash price, cloth binding with gilt lettering, 75 cents; handsomer binding, richly decorated with gold, \$1.00. **ONLY ONE NEW SUBSCRIBER.**

"CARMICHAEL," by Anison North—A Canadian farm story, bound in cloth, illustrated. Buffalo Courier says: "It is far above the ordinary run of fiction." Toronto World says: "Should be in all the homes of the people." Cash, \$1.25, or **TWO NEW SUBSCRIBERS.**



SET STAGHORN CARVERS.—First quality steel, with staghorn handles and handsome nickel mounting. These carvers will retail from \$3.50 to \$5.00 per set. **THREE NEW SUBSCRIBERS.**



SANITARY KITCHEN SET.—Best quality steel; five pieces and rack which can be hung on the wall. **ONE NEW SUBSCRIBER.**

BARON'S PRIDE.—Handsome picture of the champion Clydesdale. Size, 17 x 13 in., including margin. Suitable for framing. **ONE NEW SUBSCRIBER.**

DICTIONARY.—An indispensable volume in every home. The Chambers' Twentieth Century Dictionary, cloth bound, contains 1,200 pages, profusely illustrated, printed on superior quality of paper. **TWO NEW SUBSCRIBERS.**

THESE PREMIUMS ARE GIVEN ONLY TO OUR PRESENT SUBSCRIBERS FOR SENDING IN BONA-FIDE NEW YEARLY SUBSCRIPTIONS ACCOMPANIED BY \$1.50 EACH.

EIGHT MONTHS CREDIT.—Any subscriber may have the date on his own label advanced 8 months by sending us the name of one new subscriber and \$1.50.

Any of these premiums would make very acceptable Christmas Gifts. You can easily secure several of them.

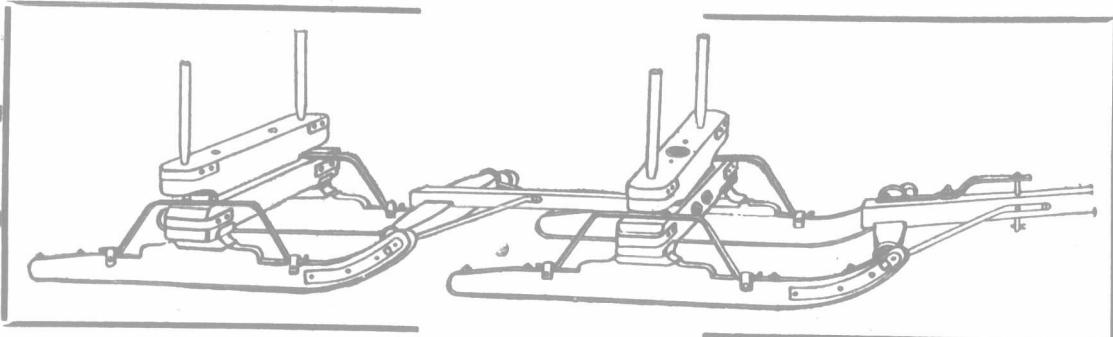
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SELL Muriate of Potash
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THE ONLY Fertilizing Materials recommended by every Provincial Department of Agriculture in Canada, with representatives in every County in the Dominion.

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Our publication is so well known that it is an easy matter for good live agents to make big money.

If you are not able to devote your whole time to the work, you will do well to work at it in your spare time.

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MORRIS Perfect Sight Spectacles

10 days' free trial. Pay when satisfied. A magnificent pair of \$5.00 reading glasses for \$1.00. Write to-day for free home tester.

MORRIS SPECTACLE HOUSE,
202 ARTHUR STREET, TORONTO, CAN.

Keep your eyes open to your mercies. The man who has forgotten to be thankful has fallen asleep in life.—Robert Louis Stevenson.

"Red Cross" Sanitary Chemical Closets



The only perfectly odorless closets on the market. Be sure you ask for

"RED CROSS" CLOSETS

All others are imitations. Best and most acceptable Xmas gift to mother or the family. Winter is coming, be prepared, and save doctor's bills by having one of our closets in the house.

All closets guaranteed to be odorless. Indorsed by best medical men, health inspectors in Canada. Order one to-day, or write for catalogue.

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THE SHERWIN-WILLIAMS Co. of Canada, Limited, Montreal, Toronto, Winnipeg, Vancouver

Please Mention this Paper.

The Plan of Mr. Gray and Santa Claus.

Said Santa Claus, one Christmas Eve
To Mrs. Santa, "I believe
I'll try a different plan this year—
You'll help me with it, won't you, dear?"
"Of course, I will," she said with glee.
"You know you can depend on me."
"Well, then, I'll go to Poor Street first,
And help the 'chicks' that need it worst;
Kind Mr. Gray gave me a bill,
To help a few who're poor, or ill."

"There's Johnny Jones and Ben and Sue,
Who've neither coat, nor cap, nor shoe,
They haven't half enough to eat,
But still they're patient, good and sweet.
They live in one bare, little room—
Their parents now are in the tomb—
Poor tots, they've had a dreary year,
I'd like to take them Christmas cheer."

"Well, do," said Mrs. Santa Claus,
And then, without a moment's pause,
She helped Old Santa load his pack,
And gave the deer a gentle whack.
They bounded off across the snow,
And ran as fast as deer could go.

Next morning, when the Joneses woke
'Twas Susie's happy voice that spoke—
"Look, John! Look, Ben! my brothers
dear,

I think an angel has been here!

"Just see the clothing, good and warm!
'Twill keep us snug in winter's storm,
And we've enough to eat, again,
You see our prayer was not in vain.
Our Heavenly Father, always kind,
Still keeps the little ones in mind."

So Mr. Claus told Mr. Gray
What gladness he had caused that day;
Then Mr. Gray just smiled and said,
"The naked clothed, the hungry fed,
The Christ will count it to Himself,
'Tis better, far, than hoarding pelf."

Just try the plan of Mr. Gray;
It is a plan that's bound to pay;
A rich reward is ever sure
When, in His Name, we help the poor.

"Inasmuch as ye did it unto one of the
least of these, My brethren, ye did it
unto Me."—Christian Observer.

GOSSIP.

Shipments of Clydesdales from Glasgow for Canada November 4th, were consigned to Geo. G. Stewart, Howick, Que.; John D. Duncan, Montreal; W. J. Kellecher, Toronto. The Quebec Livestock Importing Co., Ithamar Martin, Binbrook, Ont.; David Cargill, Medicine Hat, Alta.; W. Meharey, Russell, Ont.

EDMONSON'S HOLSTEIN SALE.

The auction sale of Holstein cattle, property of Chris. Edmonson, at Brantford, Ont., on November 16th, was well attended, and prices were fair. Following is a list of animals that sold for \$100 and upwards:

Females.	
Bessie Spink's Last Beauty, 7 years, to T. W. Craig, Brantford.....	\$180 00
Johannah Spink, 4 years, to E. Burril, Brantford.....	145 00
Luella Tensen De Kol, 4 years, to Wm. Prowse, Dexeham Centre.....	112 50
Maid Pietertje De Kol, 3 years, to A. W. Smith, Dundas.....	150 00
Lady Clare Pietertje, 2 years, to T. W. Craig, Brantford.....	187 50
Alice Pietertje, 2 years, to H. F. Patterson, Alford Jct.....	167 50
Braemer Isoco De Prid, 2 years, to F. Chapin, Newport.....	150 00
Belle of Lynden Lane, 1 year, to Robt. Easton, Paris.....	135 00
Lady Veeman De Kol, 1 year, to T. W. Craig, Brantford.....	155 00
Aaggie Ormsby De Kol, 8 mos., to J. H. Taylor, Scotland.....	105 00

TRADE TOPIC.

Prince Rupert, British Columbia, the Pacific Coast terminus of the Grand Trunk Pacific Railway, is going apace, and for a young city the business that is now done there is remarkable. During the month of September there were 80 steamers called at the port and 81 departed.

Long Ago.

I once knew all the birds that came
And nested in our orchard trees;
For every flower I had a name—
My friends were woodchucks, toads, and
bees;

I knew where thrived in yonder glen
What plants would soothe a stone-
bruised toe—
Oh, I was very learned then;
But that was very long ago!

I knew the spot upon the hill
Where checkerberries could be found,
I knew the rushes near the mill
Where pickered lay that weighed a
pound!

I knew the wood—the very tree
Where lived the poaching, saucy crow,
And all the woods and crows knew me—
But that was very long ago.

And pining for the joys of youth,
I tread the old familiar spot
Only to learn this solemn truth:
I have forgotten, am forgot.
Yet here's this youngster at my knee
Knows all the things I used to know;
To think I once was wise as he—
But that was very long ago.

I know it's folly to complain
Of whatso'er the Fates decree;
Yet were not wishes all in vain,
I tell you what my wish should be:
I'd wish to be a boy again,
Back with the friends I used to know;
For I was, oh! so happy then—
But that was very long ago.
—Eugene Field.

QUESTIONS AND ANSWERS.

1st.—Questions asked by bona-fide subscribers
to "The Farmer's Advocate" are answered in
this department free.

2nd.—Questions should be clearly stated and
plainly written, on one side of the paper only,
and must be accompanied by the full name and
address of the writer.

3rd.—In Veterinary questions the symptoms
especially must be fully and clearly stated,
otherwise satisfactory replies cannot be given.

4th.—When a reply by mail is required to
urgent veterinary or legal enquiries, \$1.00 must
be enclosed.

Miscellaneous.

PLANTING WALNUTS.

Where could I get a good quantity of
walnuts to plant (if possible, for plant-
ing this fall yet)? What kind makes
the most valuable timber? What grows
the fastest, and the best nut, if any dif-
ference? What is the easiest and best
method of protecting young trees the first
winter? I think I have read that the
Government supplies trees free for re-
forestation. Is that so? Do they supply
walnut trees free? I have already re-
ceived information through your paper
worth many times the subscription price.
I would not be without it. W. J.

Ans.—For full information, also applica-
tion for walnuts or seedlings, as pre-
ferred, write E. J. Zavitz, O. A. C.,
Guelph, Ont.

LYMPHANGITIS.

A ten-year-old mare took lymphangitis,
so the veterinary pronounced, last sum-
mer, and when she stands in the stable
over night her leg swells up. Can any-
thing be given to stop it, as I wish to
fit her for sale by spring?

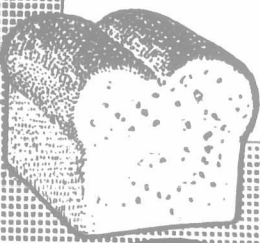
YOUNG FARMER.

Ans.—This swelling of the hind legs
when the mare has been idle for a day or
so, is lymphangitis, or Monday-morning
disease. Horses of sluggish tempera-
ment are predisposed to the affection,
which is brought on by high feeding and
a sudden suspension of accustomed exer-
cise. Treatment of a case bad enough
to require it, consists in giving a pur-
gative of 8 drams aloes and 2 drams
ginger. Follow up with two-dram or
three-dram doses of nitrate of potash,
three times daily. Local treatment con-
sists in long and repeated bathing with
warm water, applying camphorated oint-
ment, or other liniment after bathing,
and excluding drafts. Keep comfortable.
Do not exercise until soreness and lame-
ness have disappeared. When lymphan-
gitis is neglected, there is a tendency to
a chronically-enlarged leg. To prevent
the disease in horses disposed to it, it is
necessary to either give exercise every
day, or to materially reduce the grain
ration for both. Substitute bran in
part, at least, for grain, whenever the
mare has to rest a day or more.

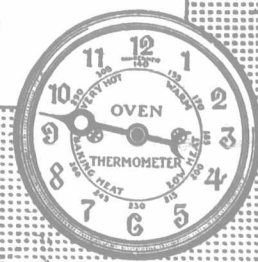
Bakes
Perfectly

Easily
Regulated

Because of the special flue con-
struction and because oven is
built of nickel steel, the heat is
distributed evenly throughout
the Pandora ventilated oven.
Just look at a batch of bread
baked in your neighbor's Pan-
dora. See how uniformly alike
is the crust on each and every
loaf. Pandora oven
is certainly the
perfect baker.



Pandora is simple in construc-
tion—easily regulated. Fire
can be made to burn up quickly
or checked rapidly—drafts
respond immediately. Can be
checked down to hold fire for
24 to 36 hours. Thermometer
is tested for accuracy before
range leaves factory. You'll
find it an infall-
ible guide to baking
success. 13



McClary's
Pandora Range

TWIN HEIFERS.

Is it true that twin heifers won't
breed? H. McI.

Ans.—Twin heifers will breed, but a
free martin, that is an animal of the
male sex having the external genital
organs of a female, and born twinned
with a bull, will not breed. See article,
"Free Martins are not Breeders," in
"The Farmer's Advocate" of November
2nd, pages 1784 and 1785.

TOP DRESSING WHEAT.

When would you advise to top dress
wheat with barnyard manure, in fall or
spring? Would it protect the plant by
fall top dressing? J. H. W.

Oxford Co., Ont.
Ans.—From such experience as we have
had or observed in this matter, our
judgment would favor top dressing
lightly, some time soon, when the ground
is frozen. Readers who have had ex-
perience are invited to tell of it.

SWEENEY—CATARACT.

1. I have a two-year-old Percheron
colt that has been lame in left front leg
for about three months. It seems to be
in her shoulder. She is not so bad as
she was a while ago. Is it a sweeney?
I worked her a little in the spring at
light work. Her shoulder is not so full
as the other. It seems to be shrunken
a little, as if it was a sweeney. If a
sweeney, will a blister do, or should I
have a rowel put in?

2. I have a cow that is blind in one
eye. I noticed it about a month ago.
There is a little white fleecy on the sight.
What will remove it? E. M. B.

Ans.—1. The description given indi-
cates sweeney. Get a blister made of 2
drams each of biniodide of mercury and
cantharides, mixed with 2 ounces of vasa-
line. Clip the hair off the parts. Tie
so she cannot bite them. Rub well with
the blister once daily for two days; on
the third day apply sweet oil. Turn
loose now in a box stall and oil every
day. As soon as the scale comes off,
repeat the blister. Blister every month
until cured. Give rest. Recovery is
slow.

2. This indicates the formation of a
cataract. If so, nothing can be done.
If the white spot be near the surface, it
is likely due to a deposit of lymph be-
tween the layers of the external coat of
the eye, and absorption may be caused
by dropping a little lotion into the eye
twice daily. The lotion consists of
nitrate of silver, 10 grains; distilled
water, 2 ounces.

MR. FARMER!

Do you know EXACTLY
what you are selling?

Is it your knowledge or
the other man's word?



Why not know as much
as the buyer?

Don't give away your
profits.

"The Profit
in the
last ounce."

RENFREW
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SEND FOR OUR BOOKLET

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Dealer.....

Address.....

"British Treasure"

Plain Cast Range for Coal or Wood. Beautiful Design. Smooth Castings. Easy to Keep Clean. All Nickle Parts Removable, Simply Lift Off.



I LOVE
OUR OLD
COOKING STOVE

BUT O!
YOU
TREASURE
RANGE



Large oven, oven bottom made of steel, to ensure even baking and a saving of fuel.

Removable grates, either for coal or wood.

Castings are extra heavy, and will last ordinary lifetime with care.

Ask your dealer to show you the "British Treasure," nothing better made.

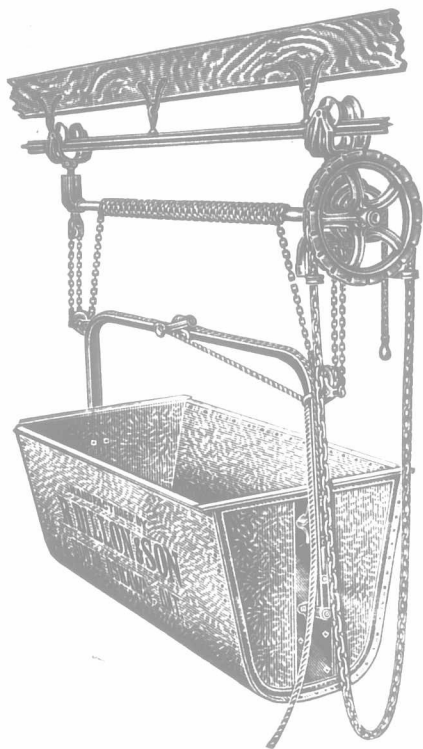
We give a **guarantee** with every range.

Treasure Stoves and Ranges sold by dealers everywhere.

MANUFACTURED BY

The **D. MOORE COMPANY, Ltd.**

Hamilton, Ontario



Compare it with the others.
Then you will buy

Dillon's Litter Carrier

BECAUSE

The track is hung from the centre.
The wheels run on each side of the track.

The tub is all steel. No wood to rot.

The tub will dump both sides.
Every DILLON LITTER CARRIER sold means a satisfied customer.

Write us for information.

R. DILLON & SON
South Oshawa, Ont.

Agents wanted.

GOSSIP.

J. Watt & Son, Salem, Ont., writes: The three young Shorthorn bulls we are offering in our advertisement include one yearling and two calves. The yearling is a good red, from imported sire and dam. He is the makings of a large animal, and ought to do good in any herd. The two calves are from an imported bull, and only one cross from imported on dam's side, and are well worth looking after. Being heavy stocked in females, these bulls are going to be sold at prices anyone can afford to pay.

Volume 2, of the Canadian Aberdeen-Angus Herdbook, compiled and edited in the office of the Canadian National Records, Ottawa, and published by the Canadian Aberdeen-Angus Breeders' Association, has been issued from the press. It is a handsome and substantial volume of 294 pages, containing pedigrees of bulls and cows numbering from 2694 to 5120, a total of 2,426. Also the constitution, rules and by-laws of the Association, and a list of members. Copies are supplied free to all 1911 members of the Association.

GOSSIP.

COMING EVENTS.

International Live-stock Show, Chicago, Dec. 2-9.

Toronto Fat-stock Show, Union Stockyards, Dec. 11-12.

Ontario Provincial Winter Fair and Poultry Show, Guelph, Dec. 11-15.

Eastern Ontario Dairymen's Convention, Campbellford, Jan. 3-5, 1912.

Western Ontario Dairymen's Convention, Ingersoll, Jan. 10-11, 1912.

Eastern Ontario Live-stock Show, Ottawa, Jan. 16-19, 1912.

G. & F. Griffin, Burgessville, Oxford County, Ont., breeders of Holstein cattle, in their advertisement in this paper, call attention to the high-class breeding and productive backing of their herd, which is headed by the richly-bred bull, Canary Rachel Clothilde, a son of Brightest Canary, whose dam claims a seven-day record of 26½ lbs. butter; his sire's dam a record of 30.64 lbs., and his dam's dam 25.161 lbs. Cows in the herd have records of 12½ lbs. for two-year-olds; 16 lbs. at three years, and 20.21 lbs. at maturity.

Volume 18, of the American Galloway Herdbook, a copy of which, by favor of Secretary R. W. Brown, Chicago, Ill., is received at this office, has recently been published. It is a heavy volume of 472 pages, containing pedigrees of 3,000 animals—1,725 cows, 1,269 bulls, and 6 steers; a tabulated list of premiums awarded at State Fairs in 1908-1909. The constitution and by-laws of the Association, a scale of points of the breed, and a list of members. This volume is free to members, and the price to non-members is \$1.25.

J. & D. J. Campbell, Fairview Farm, Woodville, Ont., report as follows: The Shorthorn bulls we offer in this issue of "The Farmer's Advocate" are the best we have hitherto bred. The young Strathallan bulls are growthy, fleshy, and smooth, promising to grow into good large sires, full of quality. Some of them were sired by Prince Victor =77165=, our young stock bull of great promise. The dams are good milkers, yet, when farrow, flesh up rapidly. In sixteen years' breeding Strathallans we have sold many bulls, all of which, with one exception, proved first-class investments to the buyers.

At an auction sale of Percherons at Whitehall, Illinois, November 8th, property of W. S. Corsa, 51 head sold for an average of \$669, the top price being \$1,300, for the black two-year-old filly, Janedare, five other females selling for \$1,000 to \$1,070 each. The highest price for a stallion was \$800, for the black two-year-old, Rebelator. At Pekin, Ill., November 9th, A. L. Robinson & Sons, sold at auction 50 Percherons which made an average of \$561, the top price for a stallion being \$1,425, for the gray yearling, Kanin, and the highest for a female, \$1,530, for the gray four-year-old, Hague.

Duncan Brown & Sons, Iona, Ont., breeders of Shorthorn cattle, write: We have recently sold a bull about sixteen months old, a Bruce Mayflower, a herd-header, to McWilliam Bros., of Wallace-town, Ont., who know a good one when they see it, and have been hunting a long time for one, which they found at last. We have also sold one about sixteen months old to A. J. McLellan, of Iona Station, Ont. He is a Strathallan, a big, thick fellow, the kind that sires the thick, high-class steers. We have sold another one about ten months old to W. H. Bradshaw, of Bradshaw P. O., Ont. He is a Bruce Mayflower, a winner wherever shown. We have also sold another bull about ten months old to John Futcher, of Middlemarch, Ont., a smooth, even fellow, of our dual-purpose family, one that, no doubt, will give good results. We have a few yet for sale, one about fifteen months old, of the Strathallan family, and several younger ones that we will sell at reasonable prices. Our stock bull, Trout Creek Wonder, is still keeping up his reputation as being an impressive stock-getter. We have a few heifers in calf by him that we will sell at reasonable prices.

GOSSIP.

The annual Smithfield Fat-stock Show, at the Royal Agricultural Hall, Islington, London, Eng., is fixed this year for the dates December 4-8.

The party whose advertisement appeared in our "want" column a few weeks ago bearing address Box R, informs us that a very desirable situation has been obtained, and that over forty replies were received from the one insertion.

A young Holstein bull, combining the blood of noted sires, with high milk and butter producing cows in their pedigrees, is advertised for sale by A. A. Farewell, Oshawa, Ont. Parties interested may do well to look up the advertisement and write for particulars.

SALE DATES CLAIMED.

November 27th.—At Wingham, Ont., Wm. Meharey, Russell, Ont.; Clydesdales.

December 6th.—Aberdeen-Angus Consignment Sale, Chicago.

January 2nd, 1912.—Breeders' Consignment Sale, at Springford, Ont.; Holsteins.

In Toronto, day following Holstein-Friesian Association annual meeting, Holsteins; date to be stated later.

April 3rd, 1912.—Belleville Club Consignment Sale, Belleville, Ont.; Holsteins.

TRADE TOPICS.

Persons contemplating purchasing farm lands in the great wheat and stock Provinces of Saskatchewan and Alberta, will be interested in the advertisement of F. W. Hodson & Co., Toronto, whose terms of sale are easy. Reliable agents for the sale of these lands are also wanted.

From present indications, the Second Annual Toronto Fat-stock Show, held at Union Stockyards, Toronto, Monday and Tuesday, December 11th and 12th, 1911, will exceed the first show held along same lines a year ago, both in exhibits and attendance. This year there is added prizes for pure-bred steers and heifers, also separate prizes for long-wool and short-wool sheep. Special arrangements have been made so that cattle can be exhibited at the Ontario Provincial Winter Fair at Guelph, after being shown at Toronto. The feature of the Toronto Fat-stock Show is the auction sale of prizewinners on Tuesday, which is attended by all principal Canadian slaughterers in search of choice cattle for Christmas display.

The Year is on the Wane.

Along the tangled hedgerows
I sought her day by day;
Among the pallid roses,
That longed to own her sway.

Through shattered August cornfields,
Which languished for her smile;
By rushing streams that clamored
Her gift of Rest awhile.

From gray and cloudy dawns,
Untouched by Summer's glow;
Through days that lingered sadly,
In darkness loth to go.

Without the kiss of Summer
Transforming Gloom to Light:
The mystic kiss of Summer
That weds the Day to Night.

The poor old Earth was weary
Of longing for her child:
She missed her laugh and sunshine,
The brightness that beguiled.

The flow'rets lost their color,
The sky its brilliant hue;
And sunbeams sought her sadly
In mists they wandered through.

I sought her still, 'mid weeping
And sobbing of the Rain,—
Till winging Swallows whispered
The year is on the wane!

—Pall Mall Gazette.

QUESTIONS AND ANSWERS.
Miscellaneous.

VALUE OF PRESCRIPTIONS.

1. What is Glauber's salt fed to horses for, and is it good for them?
2. Are Buchu leaves good to clean a horse's water?
3. Give prescription for cough in horses that have a slight cold.
4. Would the following liniment be good to bathe fevered and swollen legs in horses, viz.: Acetate of lead, 6 ounces; chloride of ammonia, 6 ounces; tincture of iodine, 6 ounces; acetic acid, 1 pint; salt, 8 ounces; water, 1 gallon?
5. Is the following prescription a good cough mixture, viz.: Tincture of camphor, 2 ounces; muriate of ammonia, 2 ounces; chlorate of potash, 2 ounces; fluid extract liquorice, 2 ounces; fluid extract belladonna, 1 ounce; syrup, 1 pound. Mix, and apply 1 ounce to tongue twice daily?
6. Is the following a safe drench for colic or indigestion, viz.: Oil of turpentine, 2 ounces; fluid extract belladonna, 1/2 ounce; raw linseed oil, 1 pint. How often might it be repeated?
7. Would Glauber's salt be all right to feed to mare in foal?

F. M. G.
Ans.—1. Glauber's salt is not recommended by professional men as a medicine for horses. In small repeated doses it would have a slight action to allay fever, and act very slightly as a diuretic.

2. The profession does not prescribe Buchu leaves for this purpose. When necessary to administer diuretics, nitrate of potassium is usually given in 2- to 6-dram doses.

3. Give 40 grains quinine, 20 grains acetanilide, and 1 dram chloride of potash, three times daily.

4. It would give fair results, but it would be better to use only half the quantity of acetic acid.

5. This mixture should give fair results.

6. Yes. It might be repeated every three hours.

7. In small doses it would not be injurious, but we do not know of any cases in which its administration would be followed by benefit.

GREASE—BOG SPAVIN OR THOROUGHSPIN.

1. Mare, eight years old, while with foal last winter, commenced swelling in off hind leg. The leg remained swollen after the colt was born. Mare was turned out to pasture all summer, and when put to work this fall the leg got worse, and in a few days she got very lame, and then painful sores resembling boils broke out around the fetlock. These ran bloody matter for a week or more, but have healed up now. The leg still remains swollen, but the lameness has gone; is just a little stiff now. Can you tell me from this description what the trouble is, and what treatment, if any, would be effective?

Filly, two years old, has swelling resembling bog spavin on back joint. She has never been lame, and it never seems painful. Some days it is quite apparent, and at times almost entirely disappears. Can anything be done for this?

L. V. B.

Ans.—1. Symptoms indicate grease leg. Feed moderately to lightly on grain. Give succulent food. Exercise regularly when not working. It is quite probable that on bringing the mare into fall work her ration was increased, and this, coupled with the change from grass to dry feed, may have caused the leg to become worse. Purge with from six to ten drams aloes and two drams ginger, following up with one and a half ounces of Fowler's Solution of Arsenic twice daily for a week. Local treatment consists in applying warm poultices of linseed meal with a little powdered charcoal, every six or seven hours for a couple of days and nights, and then applying three times daily a lotion of one ounce each of sulphate of zinc and acetate of lead, and two drams of carbolic acid, to a pint of water. Do not wash. Treat the fungoid growths which resemble boils with butter of antimony, and it may be necessary to use the knife, or actual cautery, followed by caustics.

2. Get a blister made of 1 1/2 drams each of biniodide of mercury and cantharides, mixed with 2 ounces vaseline.

Clip hair off the spots. Tie so he cannot bite them. Rub well with the blister once daily for two days; on the third day apply sweet oil. Turn horse in a box stall now, and oil every day. As soon as the scale comes off, tie up and blister again, and after this blister once a month until cured.

BLACKHEAD.

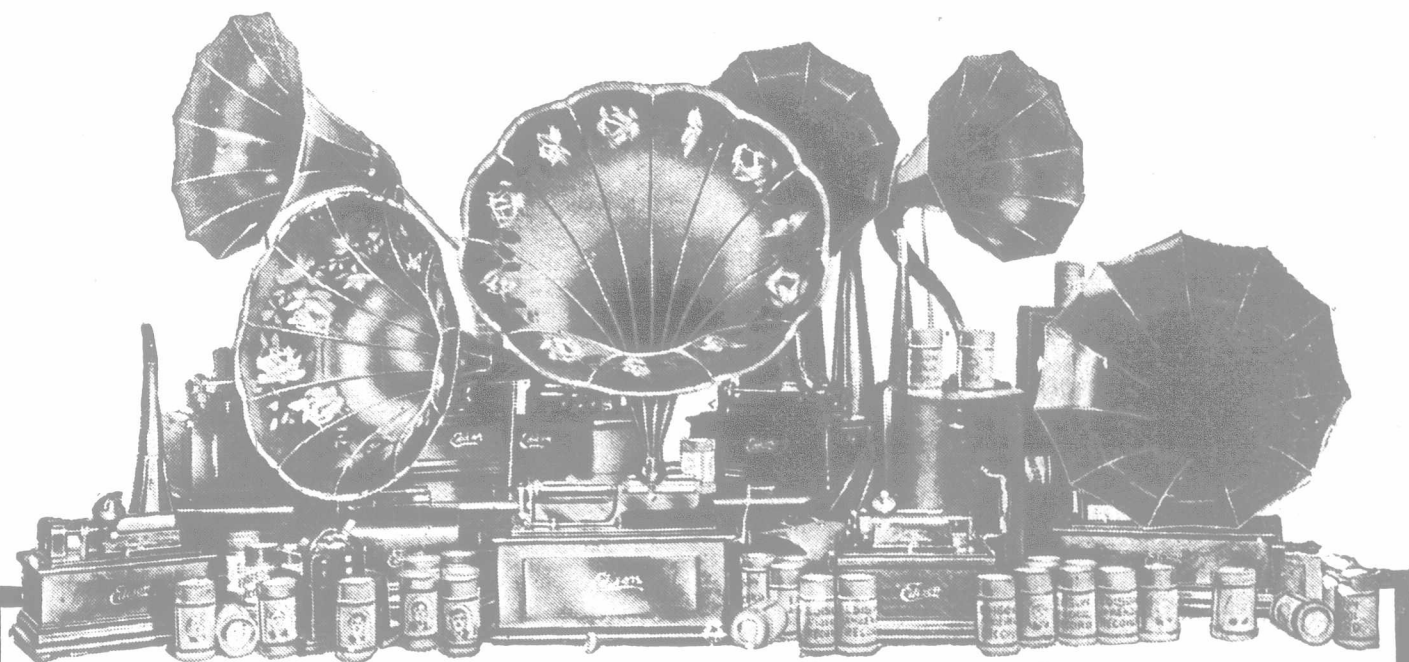
Would like to know if you can tell me what ailed our turkey? Found it almost dead; the others had worried it. Was a nice large bird, but very thin. Upon examination of inwards, after killing the bird, found the liver very large, with cream-colored circles here and there all over it, extending through from side to side, or from front to back, and all inwards presented a very unhealthy condition. We thought at first it was a

rather turkey, but are of the opinion now that it was one of the largest of this year's birds. A READER.

Ans.—The turkey was suffering from blackhead. The disease is very infectious, and land where affected turkeys have ranged is unsafe for poultry the following year. The enlarged liver, covered with the characteristic circular whitish or yellowish spots, together with diseased caeca containing a creamy or cheesy exudate, are post-mortem symptoms that can be relied upon. Young birds are more especially subject to infection of blackhead, and the disease is not confined to turkeys, but may attack hens. On page 1480 of the September 7th, 1911, issue of "The Farmer's Advocate," there appeared a short article entitled "Blackhead in Turkeys." It might be well to look it up.

GOSSIP.

The dispersion sale of the noted Hereford herd of the late William S. Van Natta, at Fowler, Indiana, Nov. 2 and 3, was a very successful event, the entire herd of 114 head, young and old, making an average of \$184. Ninety females averaged \$163, and 24 bulls averaged \$263. The highest price obtained was \$1,005, for the yearling bull, Donald Lad 7th, purchased by O. Harris, of Missouri. The yearling bull, Prime Lad 9th, sold for \$775, to Mozley & Son, and the three-year-old, Donald Rex, for \$710, to J. E. Coffman, Illinois. The highest price for a female was \$505, for the three-year-old, Prime Lady 2nd.



Your Choice of Any of These
Yes, FREE. Shipped positively and absolutely free. You do not have to pay us a single penny either now or later. We don't ask you to keep the phonograph—we just ask you to accept it as a free loan. We do not even ask you for any deposit or any guarantee, not even any C. O. D. payment to us. All we ask is that you tell us **which** of the magnificent Edison outfits you prefer so that we can send that one to you on this free loan offer.

Just Take Your Choice You Don't Have to Buy Anything

Get any of the outfits shown above—your choice of records too. Simply get the phonograph and the records and use them free just as though they were your own. Entertain yourself, your family and your friends too, if you wish, with everything, from the catchiest, newest popular songs, side-splitting minstrels and vaudeville monologues to the famous grand operas, **Amberola** and other records sung by the world's greatest artists. Hear all this to perfection on the Edison Phonograph. After you have had all this entertainment absolutely free, then you may simply send the outfit right back to us **at our expense**. Now, if one of your friends wishes to buy such an outfit tell him that he can get the rock-bottom price, on easy payments, too; even as low as **\$2.00 a month without interest**. But that's not what we ask of you. We just want to send you your choice of the latest style Edison Phonograph **free**—your choice of records too, all **free**—then we will convince you of the magnificent superiority of the new style Edison. It will cost us a little in express charges to get the phonograph back from you—that is true—but we'll feel amply repaid for that, knowing that we have made you a friend and a walking advertisement of the new style Edison Phonograph.

Send Coupon for the New Edison Books FREE Today

Get our handsome Free Edison Catalog and list of over 1500 records so you can select just the machine and the songs, recitations, etc., you want to hear on this ultra generous offer. Remember, there is absolutely **no obligation** on your part. All you need to do is to return the outfit at our expense when you are through with it. If you enjoy good music, and the finest and most varied entertainment that it is possible to imagine, or if you want to give your family and friends a treat such as they could not possibly get through any other means, then you should certainly send the Free coupon today. Don't wait—your name and address on a postal will do but the coupon is handier. No letter necessary. Be certain to write while the offer lasts. Better write today.

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Sold Over 850,000 Acres
in Five Years

WESTERN LAND FOR SALE

In areas to suit purchasers, from
160 acres upwards, situated on or
near railways in the

Best Wheat, Oat and
Stock - growing
Districts of

**SASKATCHEWAN
AND
ALBERTA**

450,000 ACRES TO CHOOSE
FROM

Prices low. Terms most gener-
ous and helpful.

Special Inducements
Given Actual Settlers

Our crop payment plan requires no
payment on land bought until the
purchaser sells his first crop. He
can use all his capital for cultivation
and improvements.

Write for particulars.

RELIABLE AGENTS WANTED IN
EVERY COUNTY.

F. W. HODSON & CO.,
Room 102, Temple Building
Toronto, Ontario, Canada.

Branch Office: North Battleford, Sask.
Also Agents Canadian Pacific and S.

NO NEED FOR WORRY.

Winston Churchill, the young English
statesman, once began to raise a mous-
tache, and while it was still in the bud-
ding stage he was asked to a dinner
party to take out to dinner an English
girl who had decided opposing political
views.

"I am sorry," said Mr. Churchill, "we
can not agree on politics."

"No, we can't," rejoined the girl, "for
to be frank with you I like your politics
about as little as I do your moustache."

"Well," replied Mr. Churchill, "remem-
ber that you are not really likely to
come into contact with either."

NO STORMS THIS WINTER



Let the worst storm or blizzard come
as it may, The man who is wearing one
of these warm Face Protectors won't
feel it. You can look straight into the
storm with comfort. It keeps the face
warm and protects it from drifting snow.
It is the greatest thing in the world for
any person who may be called to face
a storm. Price only \$1.00. Send
name and address for my catalogue.

MARTINIUS DYSTHE
Winnipeg, Canada

Iowa Seeks Round Silo.

The Iowa Agr. Exp. Station has set out
on a nation-wide hunt for a homemade
round silo built in 1898 or earlier, and
incorporating some of the essential fea-
tures of the patented structure of to-day.
M. L. King, agricultural engineering ex-
perimentalist of the station, has offered
a reward of \$50 for the first definite in-
formation about just such a silo. He
expects also to make a trip to several
of the older dairying districts of the
United States for a personal search for
pioneer silos.

Back of this unusual hunt is the claim
of the wooden silo manufacturers that
American farmers cannot build round
silos of any type or material without
first paying tribute to them in license
fees. They claim a patent monopoly,
and they have organized themselves to
enforce it. In the past summer of ex-
tensive silo building, they sent out thou-
sands of letters warning farmers who
were putting up homemade silos, and
threatening suit for infringement.

This claim of a silo monopoly concerns
the Iowa station, because two of its ex-
perimenters, Prof. J. B. Davidson and
M. L. King, designed a successful hollow
tile silo three years ago, which they
dedicated to the American farmer and his
free use. This silo has been made the
special object of attack in Iowa, where
nearly a thousand are in use. Letters
warning farmers building these silos have
been sent out, and intimations of dam-
age suits have been frequent. Whenever
appealed to, the station has made the
positive statement, based on investiga-
tion, that neither brick, tile, nor
masonry silos, in any way infringe upon
wooden silo patents. After further in-
vestigation, the station has taken the
new stand that it is doubtful if the
manufacturers really have a monopoly, as
they claim, on wooden silo building.

"We have good reason to believe,"
says Mr. King, "that the special features
of wooden silos for which patents are
claimed, were used in some of the silos
built prior to the date of the patents,
June, 1899. Those features are the con-
tinuous door, reinforced door-jamb,
door-jamb braces and devices for holding
the doors in place. Round wooden
silos were in use long before 1899. We
want additional information about them.
For the first information received about
such a silo containing some of these men-
tioned features, \$50 will be paid, if it is
sent to the Iowa Agricultural Experi-
ment Station, Ames, Ia.

"The Iowa station is not setting out
to fight anybody. It merely wants to
make certain about these disputed points
and to protect the farmers in Iowa and
in every State in what it considers their
right to build round silos of brick, tile
or masonry, and possibly of wood, also."

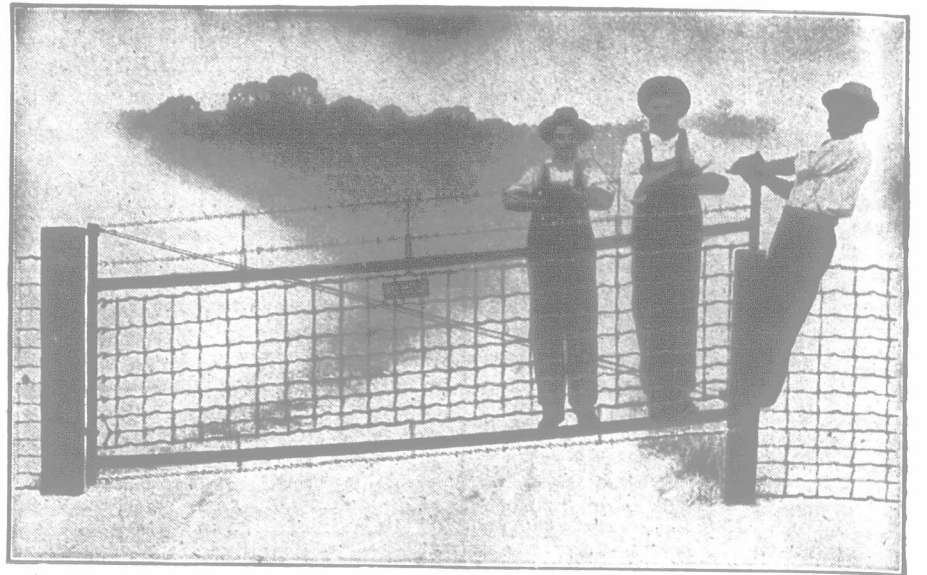
TRADE TOPICS.

REDUCTION IN PRICE OF CEMENT.

—Following upon the reduction in price
of cement announced in November, 1910,
comes an announcement on November 1st,
1911, of a still further reduction of, in
some districts, 10 cents per barrel, and
in others 5 cents, an average of about 7
cents. That the Canada Cement Com-
pany are working upon the idea of in-
creasing consumption by lowering prices,
rather than curtailing production and
obtaining higher prices, is clearly shown
by its President's report to the share-
holders at the last annual meeting, when
he stated: "It is confidently expected
that the increased demand and increased
output will result in further savings in
the cost of manufacture and distribution,
and it is the policy of your directors to
give your customers the benefit of these
reductions." We trust that the expecta-
tions of lower cost voiced by the Presi-
dent of the Canada Cement Company,
will be realized again next year, so that
the company may continue its policy of
giving the benefit of these reductions to
its customers—thereby enlarging the uses
to which cement may be put.

At the Dairy Show in Chicago last
year it was interesting to note the
number of pressing machines used. No
less than a dozen of these machines were
in operation part of the time.

CLIMB ON!



Your weight or a bull's weight won't bend the CLAY Gate. We have tried
five men on a 12-foot CLAY GATE and it didn't even sag.

THERE IS A REASON FOR IT.

Write for circulars and particulars of our sixty-day free trial offer to:

CANADIAN GATE CO., LTD., GUELPH, ONT.
34 MORRIS ST.

The Rayo Lamp



It Never Flickers

The long winter even-
ings give a woman a splen-
did chance for sewing or
embroidery; but her eyes
suffer from the strain unless
she has a good light.

The Rayo is the best
lamp made.

It gives a strong, diffused light that is remarkably easy to the eyes.
There is no glare to it; no flicker. It lights up a whole room.

The Rayo is an economical lamp, too.

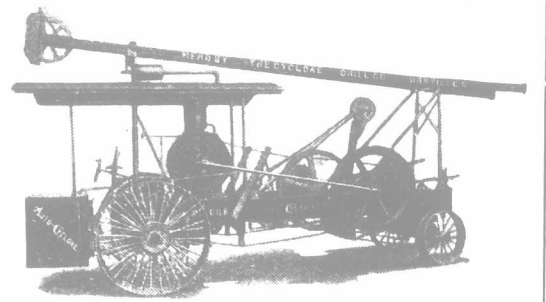
You get the most possible light-value for the oil burned; and the Rayo itself is a
low-priced lamp. Yet it is a handsome lamp—an ornament to any room in the house.
The Rayo Lamp is easily lighted without removing shade or chimney; easy to
clean and rewick. Made of solid brass, nickel-plated; also in numerous other styles
and finishes.

Ask your dealer to show you his line of Rayo lamps; or write for descriptive circular
to any agency of

The Queen City Oil Company, Limited

Pure Wholesome Water

From Drilled Wells



WELL DRILLING is only in its infancy. As the popula-
tion increases, so does the demand for Drilled Wells.

The quickest and easiest way to drill is with

CYCLONE DRILLS

With cable or hollow rod equipment. These drills will meet any
conditions. Send for Catalogue F.A. 60.

MUSSENS, LIMITED

Montreal Toronto Cobalt Winnipeg Vancouver Calgary

When Writing Advertisers, Please Mention "The Farmer's Advocate."

Three Important Facts to Consider When Buying HORSE BLANKETS



A good cover on a horse blanket without a good lining is a poor investment. On the other hand, a good lining without a good cover is really worse, but if you buy a good cover with a good lining and with a poor method of attaching the blanket to the animal, you might as well throw your money away. In order to make an intelligent purchase, bear in mind the following three FACTS:

1st. Choose a blanket with a good cover, one that is brimful of wearing qualities. If it has an A-B. label on the corner you need not worry about the quality, it will be the best.

2nd. See that the lining is well woven in the body, and that it is properly sewn to the cover. Again, if the cover has an A-B. label sewn on the corner the lining will combine these features and be the best obtainable.

3rd. Note the method of attaching, this is the most important fact to consider, no horse blanket made is proof against the animal's sharp calks (study the illustration). This A-B. BIAS attachment will not permit the blanket to come off the animal, the girths cross under the body. Now, go to your best saddlery dealer and see the genuine article, he will tell you more about it. If he has not got it, write us, and we will see that you are supplied.

The ADAMS BROS.' HARNESS MFG. CO., Ltd.

(From Coast to Coast)

Toronto, Ont. Winnipeg, Man. Saskatoon, Sask. Edmonton, Alta.
(Write the house nearest you)

Lumbersoles Keep Feet Warm in Coldest Weather

We guarantee it and refund your money if you find it otherwise. A man in Deloraine, Man., writes: "Had my feet and hands frost-bitten, but NEVER COLD FEET all winter with your Lumbersoles." Hundreds of such letters in our office make us feel safe in guaranteeing Lumbersoles. Strongest leather uppers, lined with 1/4 inch felt. Specially treated WOOD soles, KEEP OUT cold, KEEP IN heat. Lumbersoles don't draw the feet like rubbers and wear ten times as long. They keep out



Men's Best Quality, 2-Buckle Styles, \$2
Half-W lining, Sizes 5-12, \$3
Two-Buckle Style, to fit all ages, Sizes
3-12. (Suitable for ladies), \$1.75

LUMBERSOLE
WOOD SOLES

Remember, delivered free to you.
SCOTTISH WHOLESALE SPECIALTY CO.
134-155 Princess, WINNIPEG, MAN.
\$175 OR \$200 Delivered Free

COLUMBUS CLYDESDALES



50 Imported and Canadian Clydesdale stallions and mares to choose from, and they are good ones and in nice shape. Intending purchasers would do well to see these horses now, as they can be bought for less money at the present time than three or four months from now.

SMITH & RICHARDSON, Columbus, Ont.

Stations: Myrtle, C. P. R. Brooklin, G. T. R. Oshawa, C. N. R.
Phone connections.

For Sale ONE EXTRA FINE Clydesdale Stallion

Four years old, by Benedict. He is a beauty and sure foal getter. AND TWO TWO-YEAR-OLD STALLIONS. VERY CHEAP.

Willowdale Stock Farm, Lennoxville, Quebec



OFF FOR MORE CLYDESDALES!

We wish to announce to all interested in the best Clydesdales that about Oct. 1st we sail for Scotland for our 1911 importation. If you want a show stallion or filly, watch for our return.

BARBER BROS, Gatineau Pt., Quebec.

ROSEDALE STOCK FARM HAS FOR SALE
Imported and Canadian-bred CLYDESDALE and SHIRE HORSES, PONIES, SHORTHORN CATTLE and LEICESTER SHEEP. A choice importation of the above animals was personally selected in June. For further particulars write:

J. M. GARDHOUSE, WESTON P. O., ONT.

8 miles from Toronto by G. T. R., C. P. R. and electric railway, and long-distance telephone.



HIGH-CLASS IMPORTED CLYDESDALES

I have Clydesdale stallions and fillies for sale, every one of them strictly high-class in type, quality and breeding; stallions over 2 tons and very fleshy; fillies of superb form and quality. If you want the best in Canada, come and see me.

JAMES TORRANCE, Markham, Ont.

PERCHERONS AND CLYDESDALES

Full line of prizewinning stallions and mares always on hand.

HODGKINSON & TISDALE, Simcoe Lodge, BEAVERTON, ONTARIO
Long-distance phone.

CLYDESDALES (Imported) CLYDESDALES

SPRING HILL Top Notchers. Stallions, mares and fillies, 65 per cent. guaranteed with stallions. Every mare guaranteed in foal. Ages, 3 years old and upwards.

J. & J. SIMPLE Milverton, Ontario, and La Verne, Minnesota

Shire Stallions and Mares, Shorthorn Cattle (both sexes); also Hampshire Swine. Prices reasonable.

Porter Bros., Appleby, Ont., Burlington Sta. Phone.

Bay View Imp. Clydesdales We have got them home, 11 fillies and 7 stallions, show horses bred in the purple, big in size, and quality all over. If you want something above the average come and see us. Prices and terms the best in Canada.

On the Toronto-Sutton Radial Line. **John A. Boag & Son, Queensville, Ont.**

When Writing Advertisers, Please Mention "The Farmer's Advocate."

GOSSIP.

At a sale of British Holstein cattle, in the possession of W. P. Cowell, on October 25th, at Alm Lee, Essex, England, 47 head brought an average of \$101, the highest price being \$175. There were no printed records of the milk yields, and the cattle were in ordinary condition, and the younger heifers sold well, but the breed is not yet well known in England.

A draft of Shorthorn bulls and heifers recently exported by Geo. Campbell, Hart-hill, Aberdeenshire, to Argentina, and sold at auction, brought fairly good prices. The red two-year-old bull, Elsmere, by Royal Prince, sold for £332, 10s., the highest price of the lot. The top price for a female was £297, 10s., for Jenny Lind 26th, a roan two-year-old, by Midshipman.

The following Canadian breeders have made entries in the classes named at the International Live-stock Show, to be held in Chicago December 2-9: Horses—Clydesdales: Graham-Renfrew Co., Bedford Park. Cattle—Shorthorns: J. A. Watt, Salem; T. E. & H. C. Robson, Sheep—Shropshires: John Loyd-Jones, Burford. Hampshires: Peter Arkell & Sons, Teeswater; Geo. Baker, Simcoe; Oxfords: Peter Arkell & Sons, Teeswater; F. T. Lee, Simcoe. Southdowns: Huntlywood Farm, Beaconsfield; Geo. Baker, Simcoe. Leicesters: A. W. Smith, Maple Lodge; A. & W. Whitelaw, Guelph; L. Parkinson, Guelph. Lincolns: John Lee & Sons, Highgate; L. Parkinson, Guelph. Cotswolds: E. F. Park, Burford; F. T. Lee, Simcoe. All are of Ontario, except Huntlywood Farm, which is in Quebec.

The dispersal of the Tandridge stud of Shire horses belonging to Max Michaelis, High Holborn, England, which took place October 26th, was a remarkably successful event, the 84 head sold averaging \$940. The highest price obtained for a single animal was \$8,000, for the six-year-old stallion, King of Tandridge, by Lockinge Forest King. The highest price for a mare was \$6,000, for the champion eight-year-old, Pailton Sorais, also by Lockinge Forest King. Fuchsia of Tandridge, a five-year-old daughter of the same sire, sold for \$3,750, and 44 others sold for prices ranging from \$500 to \$2,250. Nineteen head were yearling colts and fillies. Two of these colts brought \$2,250, and \$2,050, respectively. The Shires are certainly popular in their home country.

MEHAREY'S CLYDESDALE SALE.

At Wingham, Ont., on Monday, 27th, as advertised, Wm. Meharey, of Russell, Ont., will sell at auction 20 carefully-selected and newly-imported Clydesdale mares and fillies, two and three years old. Of this shipment, the Scottish Farmer says: "One of these is by the noted Baron Briton (10678), own brother to the champion Casabianca (10523), with dam by the good breeding premium horse, Baron Beaulieu (11257), by Baron's Pride, and grandam by the world-famed Prince of Wales (673). Others are by the Sir Hugo horse, Sir Adrian (13754); the big, popular premium horse, Pride of Blacon (10837), which was three times first and once second at the H. and A. S. shows; the equally popular Up-to-Time (10475), by Baron's Pride; the Royal Northern first-prize horse, Girvan Chief (13005); the choicely-bred and popular Hiawatha horse, Lord Falconer (11370); the premium horse, Blacon Sensation (12487)—in this case with dam by the H. and A. S. big champion horse, King of the Roses (9927); and the well-known Cinquevalli (11011), with dam by the H. and A. S. first-prize horse, Rosedale (8194). Older mares in the shipment are by the noted premium horse, Baron Hood (11260); the Kirkcudbright prize horse, Ajax (12416); the unbeaten Cawdor Cup champion horse, Prince of Car-ruchan (8151), by Prince of Wales (673), and the well-known Cumberland horse, Abbey Fashion (12793). They are a large, smooth, well-colored lot, and should find ready buyers."

Barn Roofing

Fire, Lightning
Rust and Storm Proof

Durable and
Ornamental

Let us know the size of any roof you are thinking of covering, and we will make you an interesting offer.

Metallic Roofing Co.
Limited
MANUFACTURERS
TORONTO and WINNIPEG
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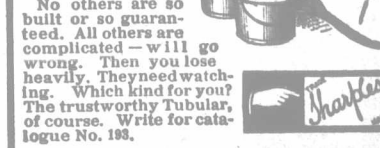
"TRUSTWORTHY" SHARPLES Tubular Cream Separators

Two men ask you for work. One always does as you expect. The other needs watching. Which will you hire?

Apply this rule to cream separators. Sharples Dairy Tubulars are trustworthy. They are free from the many parts and faults of others. No disks. Double skimming force. Doubly clean skimming always. Wear a lifetime. Guaranteed forever by the oldest separator concern on this continent.

No others are so built or so guaranteed. All others are complicated—will go wrong. Then you lose heavily. They need watching. Which kind for you? The trustworthy Tubular, of course. Write for catalogue No. 193.

THE SHARPLES SEPARATOR CO.
Toronto, Ont. Winnipeg, Man.



An overworked woman is a sad sight—sadder a great deal than an overworked man, because she is so much more fertile in capacities of suffering.—O. W. Holmes.

There is no failure of life so terrible as to have the pain without the lesson, the sorrow without the softening.—Hugh Black.

Quickest, Surest Cough Remedy Ever Used

Stops Even Whooping Cough Quickly. A Family Supply for 50c. Money Refunded if it Fails.

If someone in your family has an obstinate, deep-seated cough—even whooping cough—which has yielded slowly to treatment, buy a 50 cent bottle of Pinex and watch that cough vanish. If it fails, money back promptly, and without argument.

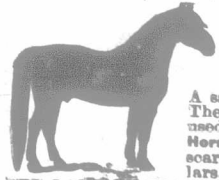
A 50 cent bottle of Pinex, when mixed with home-made sugar syrup, makes 16 ounces—a family supply—of the most effective cough remedy that money can buy, at a saving of \$2. Gives instant relief and will usually wipe out a bad cough in 24 hours or less. Easily prepared in five minutes—directions in package.

Pinex Cough Syrup has a pleasant taste—children take it willingly. It stimulates the appetite and is slightly laxative—both good features. Splendid for croup, hoarseness, throat tickle, incipient lung troubles, and a prompt, successful remedy for whooping cough.

Pinex is a special and highly concentrated compound of Norway White Pine extract, and is rich in gualiacol and other elements which are so healing to the membranes. Simply mix it with sugar syrup or strained honey, in a 16.oz. bottle, and it is ready for use. Used in more homes in the U. S. and Canada than any other cough remedy.

Pinex has often been imitated, but never successfully, for nothing else will produce the same results. The genuine is guaranteed to give absolute satisfaction or money refunded. Certificate of guarantee is wrapped in each package. Your druggist has Pinex or will get it for you. If not, send to The Pinex Co., Toronto, Ont.

HORSE OWNERS! USE
GOMBAULT'S
CAUSTIC BALSAM.



A safe, speedy and positive cure. The safest, Best BLISTER ever used. Removes all bunches from Horses. Impossible to produce scar or blemish. Send for samples. Special advice free.

W. B. LAWRENCE-WILLIAMS CO., Toronto, Ont.

Messrs. Hickman & Scruby
COURT LODGE, EGBERTON, KENT, ENGLAND
EXPORTERS OF

Live Stock of all Descriptions.

Horses a specialty. We buy from the breeder in Europe, and ship direct to our clients, who thus obtain what they require very much cheaper than they can do any other way.

Our Mr. Hickman will be at the International, Chicago, and can be found at the La Salle Hotel, or on the show ground, upon enquiry at the sheep exhibit. He will also be at the mid-winter fair, Guelph, Ont., and can be found at the Wellington Hotel, or on the show ground, upon enquiry at the secretary's office.

All those who are ever likely to want imported stock, should take this opportunity to interview Mr. Hickman, as it may mean a saving of thousands of dollars in the future.

Don't Cut Out A SHOE BOIL, CAPPED HOCK OR BURSITIS FOR ABSORBINE

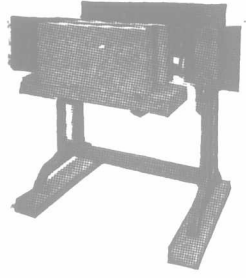
will remove them and leave no blemishes. Cures any puff or swelling. Does not blister or remove the hair. Horses can be worked. \$2.00 per bottle delivered. Book 6 E free. **ABSORBINE, JR.** Liniment for mankind. For Boils, Bruises, Old Sores, Swellings, Goitre, Varicose Veins, Varicosties, Allays Pain. Price \$1 and \$2 a bottle at druggists or delivered. Will tell more if you write. Manufactured only by **W. F. YOUNG, P. D. F., 159 Lyman's Bldg., Montreal, Ca.**

YOU CAN MAKE FROM \$3 TO \$12 A DAY

You need no experience because we teach you everything and help you to get started. If now employed, you can work for us in your spare time and make more money than your regular wages amount to. Write and let us show you our line. We have over 2000 patented articles, all fast sellers. Cannot be bought in stores. **WE WANT AGENTS In Every County** We will point the way to you how to make from \$150 to \$200 per month. Our goods are fully guaranteed, and we refund all money to any purchaser not perfectly satisfied. We start honest men and women in business on our capital. Samples of best sellers FREE. Write to-day for agency.

THOMAS MFG CO. 2544 Wayne Street DAYTON OHIO

Singer Improved No. 4 Concrete Block Machine



8 x 8 x 16 inches Machine \$44.50

Larger outfit at proportionate prices. Write

Department F for full particulars. **VINING MANUFACTURING COMPANY** NIAGARA FALLS, ONT.

BETTER TO SELL THAN TO USE.

Customer—"What is your best rat poison?"

Drug Clerk—"We have two or three; any of them will clean out rats in short order."

Customer—"I have already used your Paragon Destroyer, but the rats got wary, and I thought I'd try a change."

Clerk, incautiously—"Yes, rats are very suspicious. We're overrun with them here ourselves."

It's Easy

SNAP will quickly free your hands, without hard scrubbing, from all sorts of fruit or vegetable stains, ink, paint or anything else that soap will not remove.

At your dealer's. 15c. a can.

QUESTIONS AND ANSWERS.
Miscellaneous.

LINE FENCING.

Is it right for a neighbor to object to having the line fence on the proper place? The line fence is right on front, but running in on me two rods at the back, the greater part being bush on neighbor's place?

Ans.—No.

A SHEEP PAPER.

Are there any papers published in Canada or United States devoted solely to the interests of sheep-breeding? If so, kindly give name and address of one or two of most prominent.

SHEPHERD.

Ans.—The Shepherd's Journal, a monthly journal, published by E. C. Clarke & Company, Chicago, Illinois, is devoted solely to sheep and sheep-breeding. There are no Canadian journals devoted solely to this class of stock.

TITLE TO LAND.

A owns farm, but has not been heard of for 23 years. B, a brother living by himself, has lived on same during that time, paying town rent, rates, taxes.

1. Can B claim farm after 21 years' peaceful possession?
2. B offers farm for sale; has he the right?
3. Does buyer take any risk?

N. B. P. A.

Ans.—1 and 2. It is possible; but we cannot venture to say from the foregoing statement of facts alone, that he has title, and, accordingly, the right to sell. 3. He might, perhaps, safely buy, but he certainly ought not to complete the purchase without the fullest and most searching investigation of title by a solicitor.

FEEDING MOLASSES.

1. What feeding value has treacle, or molasses, for dairy cattle?
2. Where can feeding molasses be purchased, and at what price?
3. What quantity is advisable to feed for best results?

Ans.—1. Pure cane molasses has a feeding value by weight about equal to that of corn. It has been found to be very appetizing, and when fed in moderation, increases to some extent the digestibility of other feeding stuffs. Beet molasses is bitter, and of lower nutritive value. Many molasses mixtures have been placed upon the market; some good and some bad. It is often used in mixtures to disguise material of little feeding value.

2. Molasses meal, from pure cane molasses, is advertised in this journal by a Dundas firm. Manufacturers will quote prices.

3. The amount to be fed will be furnished with the directions from the manufacturers. Marshal & Burns, of Texas Experiment Station, found one gallon of pure cane sugar molasses per head daily to be the maximum profitable allowance for steers. Much less than this would be most profitable under average conditions.

LYMPHANGITIS.

Please tell me in next issue of "The Farmer's Advocate" how to cure lymphangitis, and what causes it. Have two cases in my stable just now, both in foals.

T. P. M.

Ans.—Lymphangitis, or Monday-morning disease, is usually caused by high feeding and want of exercise for a few days. It frequently occurs in work horses on Monday morning, after a day's rest on Sunday. Some horses are normally predisposed to it, and repeated attacks often leave a permanently enlarged leg, called elephantiasis. Prevention lies in giving plenty of exercise and reducing the grain ration and feeding bran when the animal is idle. Potassium iodide, administered in dram doses twice daily is recommended for this trouble, but a pregnant mare should not be given it. The less medicine an in-foal mare receives the better. Such mares are more susceptible to the trouble than other horses. The tendency to swelling of the legs usually gradually disappears after foaling, especially if the mare is on grass. Local treatment consists in bathing several times daily with hot water, and after bathing rubbing with camphorated liniment. Purgatives are advisable in ordinary cases, but with the pregnant mare cannot be safely given in many cases.

ELLIMAN'S EMBROCATION

Royal in the Stable, Universal, Human Use

ELLIMAN'S for Sprains, Rheumatism, Curbs, Splints when forming, Sprung Sides, Capped Hocks, Overreaches, Bruises, Cuts, Broken Knees, Sore Shoulders, Sore Throat, Sore Backs in Horses, Sprains in Dogs, Cramp in Birds, etc.

ELLIMAN'S for Rheumatism, Sprains, Bruises, Lumbago, Sore Throat from Cold, Neuralgia from Cold, Cold at the Chest, Chronic Bronchitis, Cramp, Backache, Soreness of Limbs after exercise, etc. Elliman's added to the Bath is Beneficial.

ELLIMAN, SONS & CO., SLOUGH, ENGLAND.

TO BE OBTAINED OF ALL DRUGGISTS THROUGHOUT CANADA.

Union Horse Exchange
UNION STOCK YARDS,
TORONTO, CANADA.
The Great Wholesale and Retail Horse Commission Market.

Auction Sales of Horses, Carriages and Harness every Monday and Wednesday. Horses and Harness always on hand for private sale. The only horse exchange with railway loading chutes, both G. T. R. and C. P. R., at stable doors. Horses for Northwest trade a specialty.

J. HERBERT SMITH, Manager

Ormsby Grange Stock Farm
ORMSTOWN, P. QUE.

A full stock of CLYDESDALES, imported and home-bred, always on hand, at prices and terms to suit breeders. Correspondence solicited.

DUNCAN McEACHRAN, Proprietor.

Clydesdales, Stallions and Fillies, Percheron Stallions
My 1911 importation have arrived—20 Clyde stallions, 18 Clyde fillies, 6 Percheron stallions. I have many winners at Old Country shows. Big, choice, quality stallions and mares, bred from the champions, and the best Percherons in Canada. Prices right.

Long-distance phone. **T. D. ELLIOTT, Bolton, Ont.**

Mount Victoria Stock Farm, Hudson Heights, P. Q.
We have for service this season the Champion Imp. Clydesdale stallions Netherlea, by Pride of Blacon, dam by Sir Everard; also Lord Aberdeen, by Netherlea, and the Champion Hackney stallion Terrington Lucifer, by Copper King. For terms and rates apply to the manager. **T. B. MACAULAY, Prop., ED. WATSON, Manager.**

Peachblow Clydesdales and Ayrshires—In Clydesdales I am offering several Canadian-bred, high-class in type, quality and breeding. Ayrshires of all ages in females, big, well balanced, choice in quality and producers, and one young bull fit for service. Prices very easy.

R. T. BROWNLEE, Hemmingford, Que.

THE MAPLES' PRIZEWINNING HEREFORDS
The record of our herd of Hereford cattle at the leading Canadian shows for many years has never been duplicated by any other herd in Canada. We have now for sale show and high-class stock in both bulls and females. Look us up at the leading shows.

Phone connection. **MRS. W. H. HUNTER, The Maples P.O., near Orangeville.**

Aberdeen = Angus
Now is the time to buy a bull; eleven for sale; also females any age or price. **WALTER HALL,** Drumbo station, Washington, Ont.

When Writing Please Mention this Paper

ORCHARD GROVE HEREFORDS
Champions of 1911 shows, winning both senior and junior herds at Winnipeg, Brandon, Regina, Edmonton, Toronto and London; also fifteen championships. Young stock, both sexes, for sale at reasonable prices.

Long-distance Phone **L. O. CLIFFORD Oshawa, Ont.**

BAD BLOOD CAUSES BOILS and PIMPLES.

Get pure blood and keep it pure by removing every trace of impure morbid matter from the system.

Burdock Blood Bitters has been on the market about thirty-five years, and is one of the very best medicines procurable for the cure of boils and pimples.

PIMPLES CURED.

Miss J. M. Wallace, Black's Harbor, N.B., writes:—"About five years ago my face was entirely covered with pimples. I tried everything people told me about, but found no relief. At last I thought of B.B.B. and decided to try a bottle. After finishing two bottles I was entirely cured, and would advise any lady who wants a beautiful complexion to use B.B.B."

BOILS CURED.

Mrs. Ellsworth Mayne, Springfield, P.E.I., writes:—"My face and neck were covered with boils, and I tried all kinds of remedies, but they did me no good. I went to many doctors, but they could not cure me. I then tried Burdock Blood Bitters, and I must say it is a wonderful remedy for the cure of boils."

Burdock Blood Bitters is manufactured only by The T. Milbura Co., Limited, Toronto, Ont.

RINGING IN EARS DEAFNESS
INSTANTLY RELIEVED BY THE OLD
DR. MARSHALL'S CATARRH SNUFF
25¢ AT ALL DRUG STORES OR SENT PRE-PAID BY CH. KEITH, 120 CLEVELAND CHIEF

Maple Lodge Stock Farm 1854-1911

A splendid lot of Leicesters on hand. Shearings and lambs bred by imported Wooler, the champion ram at Toronto and London, 1910. Choice individuals and choice breeding.

A. W. SMITH, Maple Lodge, Ont.

OAKLAND SHORTHORNS We have another lot of young bulls ready for fall and winter trade, out of good breeding dual purpose dams and sired by our herd header, Scotch Grey, 77692, one of the best bulls in Ontario; good cattle and no big prices. Will also sell a few cows and heifers; about 50 to select from.

JOHN ELD R & SON, HENSALL, ONTARIO

JOHN GARHOUSE & SONS

Still have for sale a right good lot of young Shorthorns; a few No. 1 Shire stallions and fillies just imported in August; also a choice lot of ram lambs. Weston Station, G. T. R. and C. P. R. Long-distance phone.

HIGHFIELD, ONTARIO.

Shorthorns of Show Calibre

I have only three young bulls left, but every one will be a topper; sons of the greatest stock bull in Canada, Mildred's Royal, out of big, thick Scotch cows. For a show bull or show heifer, write us.

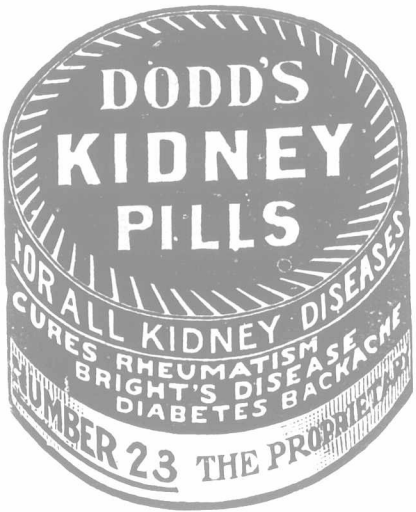
G. F. GIBB & SON, Grand Valley, Ont.

When President Taft was seven years old his mother bought him a pair of short duck trousers. The first time they were washed they shrank badly. The boy was fat, but his mother wedged him into the trousers against his protest. He went out to play, but in a few minutes returned.

"Mamma," he said, "I can't wear these pants. They are too tight. Why, mamma, they are tighter than my skin."

"Oh, no, they're not, Billy," replied his mother. "Nothing could be tighter than your skin."

"Well, all the same, these pants are. I can sit down in my skin, but I can't in these pants."



QUESTIONS AND ANSWERS. Miscellaneous.

MATERIAL FOR BARN.

Would you kindly give me the number of feet of plank required for the frame of a hip-roof barn 10 x 100 feet, frame to be all of plank, with 24-ft. posts; also what amount of sheathing it would take to inclose the structure? A. S.

Ans.—Your local carpenter, contractor or framer, could give you the desired information much more satisfactorily than we could. He is right on the spot, and you can discuss the plans together.

HOLIDAYS FOR HIRED MAN.

Will you please state in your valuable paper how many holidays a hired man is entitled to?

NIL DESPERANDUM.

Ans.—This question has been answered in the columns of "The Farmer's Advocate" several times during the last few months, but we repeat it again. A hired man may claim as holidays, after doing all necessary chores, Sundays, New Year's Day, Good Friday, Easter Monday, Victoria Day, Dominion Day, Labor Day, Christmas Day, and possibly, henceforth, the King's Birthday, together with any other day appointed by official proclamation as a holiday.

COW COUGHS—ECZEMA.

I have a cow that has had a cough since spring. She now seems short of breath. She is in good condition and eats well. Please state what you think is the matter, and if it is contagious.

2. Have a mare that raised a colt the past summer. She did not seem to do well all summer. Since the colt was weaned, she has broken out in dry scabs about the size of a ten-cent piece. Please give remedy. S. T.

Ans.—1. The symptoms given indicate that the cow has tuberculosis. Have her tested with the tuberculin test. If she reacts, remove her from the herd. Tuberculosis is contagious.

2. This is probably eczema. Purge with 10 drams aloes and 2 drams ginger. Follow up with 1½ ounces Fowler's Solution of Arsenic twice daily every alternate week for four weeks. Rub a little of the following lotion well into the affected parts twice daily, viz.: corrosive sublimate, 30 grains to a quart of water. Give regular exercise, and feed on first-class hay, rolled oats and bran, with a little linseed meal. High feeding must be avoided, but as she is in poor condition, she should be fed fairly liberally after the purgation. Before applying the corrosive sublimate, it might be well to give her a thorough washing with strong, warm soap suds. Rub with cloths until dry.

FEEDING QUERIES—BOG SPAVIN.

1. How many pounds of corn on the cob are equal to four quarts of oats?

2. How much oil cake should two colts eight months old have? They are getting three quarts of bran and oats mixed in equal parts, three times a day.

3. Have a young driving horse that has a bog spavin. Is there any remedy that will remove it? It has been on about two months. H. D. C.

Ans.—1. This would depend largely upon the quality of both the oats and corn, and the comparative weight of the corn and the cob. Well-matured corn on the cob will yield a bushel of shelled corn to about 70 pounds weighed on the cob. Figuring the oats at 34 pounds per bushel, and the corn on the foregoing basis, about six pounds of corn and cobs should be, approximately, equal to four quarts of oats.

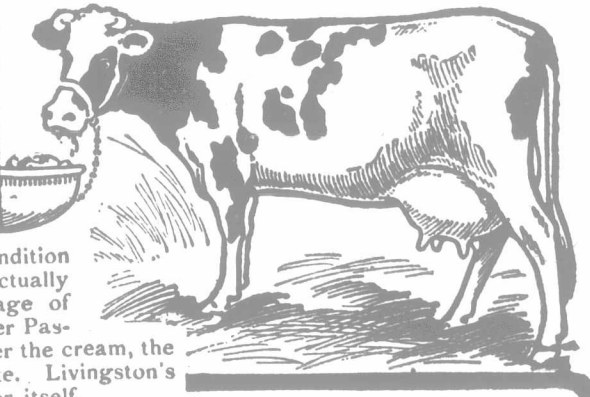
2. Oil cake should be fed in very small quantities to horses. Young colts should get very little. From 1 to ½ a pound a day would be all that they should get. Oil cake makes a soft flesh on horses. If oats and bran are fed liberally along with good hay, oil cake should not be needed for colts.

3. Get a blister made of 2 drams each of biniodide of mercury and camphor, mixed with 2 ounces of vasoline. Clip the hair off the parts. Rub well with the blister once daily for two days; on the third day apply sweet oil. Turn loose the harness and let the horse come off, blistered spots will come off, blister will be gone in about a month until cured.

This Feed Costs Nothing if you count the results it gives.

Livingston's Oil Cake is just what cows need.

It tastes good—is easily digested—keeps stock in prime condition all the year round—actually increases the percentage of Butter-fat by 16% over Pasture Grass. The richer the cream, the more money you make. Livingston's is the feed that pays for itself.



Livingston's Dairy Oil Cake

Write for free sample and prices:

THE DOMINION LINSEED OIL CO., LIMITED, BADEN, ONT.

SHIP YOUR RAW FURS

TO THE LARGEST, MOST RELIABLE AND OLDEST FIRM IN CANADA
E. T. CARTER & CO., 84 Front St. E. TORONTO, CAN.

Write for our Price Lists



ARTHUR J. HOWDEN & CO. ARE OFFERING

15 High-class Scotch Shorthorn Heifers

At moderate prices, including Cruickshank Nonpareils, Cruickshank Villages, Marr Emmas, Cruickshank Duchesses of Glosters, Bridesmaids, Bruce Fames, Kinellars, Claret, Crimson Flowers, and other equally desirable Scotch families, together with a member of the grand old milking Atha tribe, which have also been famous in the showing.

Arthur J. Howden & Co., Columbus, Ont.

Shorthorns and Clydesdales

PRESENT SPECIAL OFFERING:

Seven choice young Scotch bulls, from 9 to 15 months; 25 cows and heifers of choicest breeding. This lot includes some strong show heifers for the yearling and two-year-old classes. A pair of imported Clyde fillies, two and three years old (bred).

W. G. PETTIT & SONS, Freeman, Ont.

Long-distance phone.

Burlington Jct. Sta., G. T. R., ½ mile from farm



SHORTHORNS

Sold out of Bulls. Would be glad to have your inquiries for anything else.

CATALOGUE ON APPLICATION.

JOHN CLANCY, Manager.

H. CARGILL & SON, Proprietors, Bruce Co., Cargill, Ont.

THIS IS A GOOD TIME, AND I HAVE A GOOD PLACE, TO GET A HIGH-CLASS SCOTCH SHORTHORN BULL CALF by my great Whitehall Sultan sire, or a young cow in calf to him, to start a herd that will be gilt-edged. SHROPSHIRE RAMS AND EWES, too, at low prices. CHILDREN'S PONIES. A CLYDESDALE FILLY, such as I can send you, is one of the best things any man can buy. Just write me and say as nearly as possible what you want, and I will surprise you with prices on goods that are genuine. ROBERT MILLER, STOUFFVILLE, ONTARIO

ELMHURST SHORTHORNS & BERKSHIRES I have now a particularly choice lot of young Berkshires; over 50 to select from; bred from imported stock. Strictly high class, from breeding age down. Also choice young Scotch Shorthorns. H. M. VANDERLIP, Cainsville P.O., Langford Sta., on Electric Road, between Hamilton and Brantford.

Scotch Shorthorn Females for Sale I am offering at very reasonable prices, females from one year to five years of age. The youngsters are by my grand old stock bull, Scotch Hero (imp.) = 55042 = (90065), and the older ones have calves at foot by him or are well gone in calf to him. Their breeding is unexcelled, and there are show animals amongst them. A ED VARD M'YER, Box 378, GUELPH, ONT.

SALEM SHORTHORNS Headed by (Imp.) Gainford Marquis, undefeated in Britain as a calf and yearling, and winner of junior championship honors at Toronto, 1911. Have on hand two yearlings and a number of bulls under a year for sale at reasonable prices. J. A. WATT, Salem, Ont. Elora Sta., G. T. R. and C. P. R.

1861 - IRVINE SIDE SHORTHORNS - 1911 Three bulls on hand, all from an Imp. bull, one out of an Imp. cow, two whose grand dams are Imp.; also some nice young cows and heifers. Our prices are reasonable, and would be pleased to have you write us for particulars. J. WATT & SON, Salem, P. O., Ontario

Springhurst Shorthorns and Clydesdales I am now offering a number of heifers from 11 months to the 2 years of age. Anyone looking for show material should see this lot. They are strictly high-class, and bred on show lines. Also several Clyde-sdale fillies, Imp. sires and dams, from foals two years of age off. MARRY SMITH Hay Ontario, Exeter Station

Elmdale Shorthorns, Shropshires and Clydes Our Scotch Shorthorns are Clementines, Misses, Mysies and Nonpareils, headed by the great sire of champions, Prince Gloucester. Young bulls and females of all ages for sale; high-class in type, breeding and quality. Shropshires, the best bred produces, from Imp. stock. Also Clydesdales. Phone connection. THOS. BAKER & SONS, Selina P. O., Ontario Oshawa Station

Fletcher's Shorthorns and Yorkshires Stock bull "Spectator" (imp.) = 50094 = for sale or exchange; also choice heifers. I also offer my (imp.) Yorkshire boar for sale or exchange. GEO. D. FLETCHER, Binkham, Ont. Erin station, C. P. R.

SPRING VALLEY SHORTHORNS

Herd headed by the two imported bulls, Newton Ringleader, = 73783 =, and Scottish Pride, = 36106 =. The females are of the best Scotch families. Young stock of both sexes for sale at reasonable prices. Telephone connection. KYLE BROS. - - - Ayr, Ontario

Ring-Bone




There is no case so old or bad that we will not guarantee

Fleming's Spavin and Ringbone Paste
to remove the lameness and make the horse go sound. Money refunded if it ever fails. Easy to use and one to three 45-minute applications cure. Works just as well on sickbone and Bone Spavin. Before ordering or buying any kind of a remedy for any kind of a blemish, write for a free copy of Fleming's Vest-Pocket Veterinary Adviser

Fleming's Vest-Pocket Veterinary Adviser
Ninety-six pages of veterinary information, with special attention to the treatment of blemishes. Durably bound, indexed and illustrated. Make a right beginning by sending for this book.

FLEMING BROS., Chemists,
78 Church St., Toronto, Ontario


Shorthorn Heifers



Have some excellent heifers all ages. Will make it worth your while if desiring anything in this line to call. Have also got some very nice bull calves.

WM. SMITH, COLUMBUS, ONTARIO

Shorthorns, Cotswolds, Berkshires.



In Shorthorns: 60 head on hand, including cows and heifers and calves of both sexes. In Cotswolds: A few shearing ewes and a good bunch of lambs coming on for fall trade. In Berkshires: A nice lot now ready to ship.

CHAS. E. BONNYCASTLE, Campbellford, Ont.

GEDARDALE SHORTHORNS



A few superbly-bred cows and several heifers in calf for sale; all from imported or highly-bred stock. Herd headed by Lord Fyvie, imp., of Missie and Scottish Archer family.

DR. T. S. SPROULE M. P. Markdale, Ont.

CLOVER DELL SHORTHORNS



Some choice females at tempting prices. Red and roan, of milking strain.

L. A. WAKELY, Bolton, Ontario.
Bolton Sta., C. P. R., one-half mile from barns. Phone.

Shorthorns

Choice selections of bulls and heifers at all times for sale at very reasonable prices.

Robert Nichol & Sons, Ingersville, Ont.

THEY ACT QUICKLY AND ALWAYS CURE

Postmaster tells of quick relief Dodd's Kidney Pills give.

Two of them taken before going to bed clear away his pain in the back—Why they always cure more serious Kidney Diseases.

Buck Lake, Ont., Nov. 20.—(Special).—How quickly Dodd's Kidney Pills relieve pain in the back when taken in time is evidenced by Mr. James Thomas, the well-known and highly-respected postmaster here.

"I wish to inform you that I always find relief for pain in the back by taking Dodd's Kidney Pills," says Postmaster Thomas. "Sometimes in the mornings I cannot straighten up for hours, but if I take two Dodd's Kidney Pills before going to bed the pain all disappears and I have no trouble in the morning."

Dodd's Kidney Pills act directly on the Kidneys. Where pain in the back is caused by slight Kidney disorders, the pain is relieved at once. Where the complaint is of longer standing, and the Kidneys are diseased, the cure takes longer, but Dodd's Kidney Pills never fail. Thousands of Canadians tell of the cure of Kidney Disease of all forms, from pain in the back to Bright's Disease, by Dodd's Kidney Pills. There is not on record a single case of Kidney Disease or of diseases resulting from diseased Kidneys, such as Rheumatism or Dropsy, which Dodd's Kidney Pills have failed to cure if taken regularly and according to directions.

QUESTIONS AND ANSWERS. Miscellaneous.

MISCELLANEOUS.

- Horse calked himself between knee and fetlock and it is discharging a grayish matter. I have been bathing it with a 20-per-cent. solution of carbolic acid, and rubbing with a lotion made of 1 ounce each of sulphate of zinc and acetate of lead to a pint of water.
 - How often should a horse's sheath be washed out?
 - Horse's sheath swelled up a month ago. I cleaned it, but it swells if I allow him to stand a day in stable, but goes down on exercise. His hind legs also were swollen last Monday, but exercise reduced the swellings, and they have not recurred.
 - What should a horse be given for his water?
- Ans.—If any foreign body be in the wound it must be removed. You are treating well, except that you are using too strong a solution of carbolic acid. A five-per-cent. solution (1 part carbolic acid to 19 parts water) is strong enough. Inject a little into the wound three times daily.
- It depends upon the horse. Some never require washing; others require it about once a year.
 - Swelling of the sheath and legs is not uncommon during the fall. It is good practice to give a purgative of 8 drams aloes and 2 drams ginger. This tends to remove the tendency to swell. Give regular exercise, and when not working feed lightly on grain.
 - This depends upon what is wrong. The habit of giving medicine periodically is wrong. If the urine becomes high colored and thick, give a tablespoonful of saltpetre every night for three doses, but do not give anything unless there is something wrong.

DUSTY HORSES.

I have a span of black mares four and five years of age which seem to be right every way except for their hair, which is rough and dirty. In half an hour after they have been cleaned they are as dusty as ever, and look more a mouse color than black. The one will rub in the stall and bite herself about the back and rump. In fact, her whole body back of shoulders seems to be itchy. They have been allowed pasture until this summer, when they only pastured about two months. In spring work they seem to lose flesh, but are always hearty, and are well fed for the work they do, eating three and a half quarts of oats three times a day, and what hay they need. This fall, before they began to shed their summer coat, I fed a small handful of flaxseed twice a day for about a month and a half. This is not the first winter they were in this condition, and it seems rather strange to me, as they are fine haired, and the hair does not stand up. They have a good warm stable, and when cleaned should give a good color. I may say I believe that the one has pin-worms, as I notice she passes some after a feed of salt.

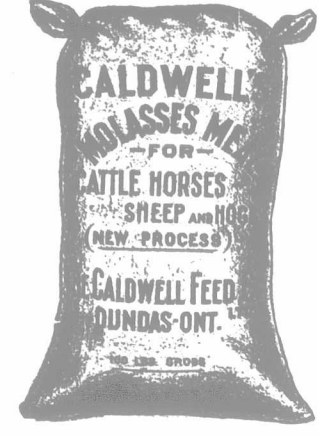
W. R.

Ans.—The cold weather causes a thickening of the horse's coat, and sharp, cold days cause the hair to stand, catch, and retain much dust. Keep the horses clean and well bedded. Currying and brushing loosens the dust, much of which can be removed by using an old cloth. Blanketing the horses will keep their hair very short, and will tend to keep it glossy. Examine them for lice. To remove the pin-worms, give an injection per rectum of a solution prepared by heating 2 pound of quassia chips in 2 gallons of water for 4 or 5 hours, adding more water if necessary. Strain the liquid and make up to a gallon with water. Inject warm water first to remove feces. After the feces is expelled, inject the decoction and hold the tail down for half an hour to prevent it being expelled. The horses may have worms in their stomachs and small intestines. For these, take 3 ounces each of sulphate of iron, sulphate of copper, calomel, and tartar emetic. Mix, and make into 24 powders. Give a powder each night and morning. After all are given, purge with eight drams of aloes and two drams of ginger. Feed bran only before and after purging.

Feeding Suggestions

Because CALDWELL'S MOLASSES MEAL has come into general use among Canadian stockmen, we believe a few suggestions in regard to the best methods of feeding it will be appreciated.

First: Always mix the meal thoroughly with the rest of the feed. Take a 1,400-lb. horse for example: Begin the feeding of Molasses Meal by adding a handful to the evening meal, mixing thoroughly. During the first week add one pound of meal per day, distributed over the three feeds. During the second week increase to two pounds per day. During the third week increase to three pounds per day, or one pound each feed, and gradually decrease the quantity of oats, which are replaced by the Molasses Meal. In this way the animals are brought on to the feed gradually, and soon begin to show an improvement. Four to six weeks constitute a fair trial. By that time the Meal will have toned up the stomach and expelled any existing worms. Hard flesh will then be put on rapidly.




Caldwell's MOLASSES MEAL

can be bought at wholesale prices direct from the mill. Write for further information and booklet containing additional suggestions on feeding.

CALDWELL FEED CO., Limited, Dundas, Ont.

CALVES WITHOUT MILK



Write for Free Booklet
"How to Raise Calves Cheaply and Successfully Without Milk"

Contains full information and complete feeding directions for using

Blatchford's Calf Meal—The Perfect Milk Substitute

Three or four calves can be raised on it at the cost of one where milk is fed. No mill feed. The only calf meal manufactured in an exclusive Calf Meal Factory. Established at Leicester, England, in 1809.

STEELE, BRIGGS SEED CO., LTD.
WINNIPEG, MAN. HAMILTON, ONT. TORONTO, ONT.

Scotch Shorthorns

FOR SALE: 14 blocky, low-down bull calves, from 6 to 11 months old, all from imported stock. 20 yearling and two-year-old heifers of best Scotch breeding; also one imported bull, an extra sire. Farm 1/4 mile from Burlington Jct. Sta.

Mitchell Bros., Burlington, Ont.

Shorthorns and Oxford Down Sheep

Frout Creek Wonder at head of herd. Young bulls and heifers of richest Scotch breeding. Phone connection.

Duncan Brown & Sons, Iona, Ontario

Brampton Jerseys

Bulls fit for service are getting scarce. Just a few left. Yearling heifers in calf are in great demand; 6 for sale; 6 now being bred. Brampton Stockwell the sire. A few good cows and some calves for sale. Production and quality.

B. H. BULL & SON, BRAMPTON, ONT.

STONEHOUSE AYRSHIRES

Are coming to the front wherever shown. Look out for this at the leading exhibitions. Some choice young bulls for sale, as well as cows and heifers.

HECTOR GORDON, Howick, Quebec.

Just Landed

45 two-year-old Ayrshire heifers, all bred to freshen in September and October. They are a beautiful, strong lot, with plenty of teat. Also 12 bulls fit for service, and a few yearling heifers.

R. R. NESS, HOWICK, QUEBEC.

SPRINGBANK AYRSHIRES

The world's leading herd of Record-of-Performance Ayrshires. Cows and big teats a specialty. A few bull calves, true to color and type, from R. O. P. Three miles south of Hamilton. Visitors welcome. Trains met by appointment.

City View Ayrshires

Several R. O. P. cows and others just as good, 2-year-old heifers, one yearling bull and six 1911 bull calves, with one to three crosses of R. O. P. blood. Prices reasonable. Write or phone.

JAMES BEG & R. R. No. 1, St. Thomas.

Ayrshires

Bull calves, from 4 months to 9 months, from imported sire and Record of Performance dams. Records 50 to 63 pounds per day.

N. Dyment, R. R. No. 2, Hamilton, Ont.

Ayrshires and Yorkshires

We have still some good young bulls. Now is the time to buy for the coming season, before the best go. We have females any age, and can fill orders for carlots of Ayrshires. Pigs of either sex on hand.

ALEX. HUME & CO., Menie, Ont.

CHERRYBANK AYRSHIRES

Imported and Canadian bred, with R. O. P. official records, headed by the renowned champion, Imp. Netherhall Milkman. Richly-bred females and young bulls for sale.

P. D. McArthur, North Georgetown, Que.

CRAIGALEA AYRSHIRES

Our record: Every cow and heifer entered in Record-of-Performance, and retained in herd until test was completed, has qualified. Heifers and young bulls for sale of showing form.

H. C. HAMILL, BOX GROVE P. O., ONT. Markham, G. T. R.; Locust Hill, C. P. R. Bell phone connection from Markham.

For Sale

Netherland Beauty's Butter Boy, pure-bred Holstein bull, fit for service: born March 4th, 1911. His dam, on official test, in seven days; average test, 4.27. Sire's dam, at 12 months of age, gave, in R. O. P., 17,619 lbs. milk and condition and of splendid conformation. Will price him cheap for a quick sale.

W. H. CHERRY, GARNET, ONTARIO

The Maples Holstein Herd

Everything of milking age in the Record-of-Merit. Nothing for sale at present but a choice lot of bull calves sired by King Pesch De Kol. Write for prices, description and pedigree.

Walburn Rivers, - Folden's, Ontario

MENTION "FARMER'S ADVOCATE."

SUFFERED TERRIBLE PAINS OF INDIGESTION.

MILBURN'S LAXA-LIVER PILLS CURED HER.

Mrs. Wm. H. MacEwen, Mount Tryon, P.E.I., writes:—"For more than a year I suffered with all the terrible pains of indigestion, and my life was one of the greatest misery. It did not seem to make any difference whether I ate or not, the pains were always there, accompanied by a severe bloating and belching of wind. I did not even get relief at night, and sometimes hardly got a bit of sleep. In my misery I tried many remedies said to cure indigestion, but they did me not one particle of good, and I fully expected I would always be afflicted in this way. At this time my brother came home on a visit and urged me to try Milburn's Laxa-Liver Pills, and got me a few vials. By the time I had taken one vial I began to improve, and could eat with some relish. I was greatly cheered, and continued taking the pills until all traces of the trouble had disappeared, and I could once more eat all kinds of food without the slightest inconvenience. I am so fully convinced of their virtue as a family medicine, I have no hesitation in recommending them."

Price, 25 cents per vial or 5 vials for \$1.00 at all dealers or mailed direct on receipt of price by The T. Milburn Co., Limited, Toronto, Ont.

HOLSTEIN BREEDERS' CLUB BELLEVILLE DISTRICT WILL HOLD Second Annual Consignment Sale

Belleville, Ont., April 3rd, 1912

HIGHLY-BRED HEIFERS

We have at present some choice yearling heifers for sale off A. R. O. dams and sired by Idalin's Paul Veeman and served by King Segis Pietertje, and one three-year-old heifer just freshened; also some bull calves from 3 to 5 months old sired by Idalin's Paul Veeman. Write for particulars.

H. C. HOLTBY Belmont, Ontario

Purebred Registered HOLSTEIN CATTLE The most profitable dairy breed, greatest in size, milk, butterfat and in vitality. Send for FREE illustrated descriptive booklets. Holstein-Friesian Assoc., F. L. Houghton, Sec'y, Box 127, Brattleboro, Vt.

2 Holstein Bull Calves FOR SALE

One sired by a son of Pontiac Hernes, whose sire was Hengerveld De Kol; sire of dam, Sir Johanna Posch. One by Sir Johanna Posch, dam by Jessie's Butter Barron, a son of Brook Bank Butter Barron. Will be sold cheap, to make room.

R. McVAMARA & SONS, Stratford, Ont. P. O. Box 242. Phone.

Homewood Holsteins!

Headed by GraceFayne II, SirColantha. At Toronto Exhibition his get won 1st, 2nd on bull calf, 1, 2 and 6 on females. Sweepstakes and champion over all females.

M. L. HALEY, M. H. HALEY, Springford, Ont.

Fairmount Holsteins

FOR SALE—Males and females. Must sell owing to scarcity of feed. Herd Headed by Aggie Grace's Cornucopia Lad, whose dams for four generations have averaged 21.30 lbs. of butter in 7 days.

C. R. GIES, Heidelberg, Ontario

Holsteins At Ridgedale—A few choice bull calves up to eleven months old for sale; sired by Imperial Pauline De Kol, whose 15 nearest dams average over 26 lbs. butter in 7 days; also some two-year-old heifers. Shipping stations, Post Perry, G.T.R., and Myrtle, C.P.R., Ontario County. R. W. WALKER, Utica, Ont.

GLENWOOD STOCK FARM Have two yearling Holstein and Yorkshire bulls fit for service, both of the milking strains. Will sell cheap to make room. Thos. B. Carlaw & Son, Warkworth P. O., Ont. Campbellford Station.

Holsteins both sexes for sale from dams that yield 65 to 70 lbs. milk per day, and 14,000 to 15,000 lbs. per year. Records carefully kept. An excellent opportunity to procure foundation stock. Write for prices, or call and see: Neil Campbell, Howlett, Ont.

Holsteins and Tamworths—For sale: "One yearling bull and several bull calves. Two years fit for service (prizewinners); sows bred to farrow in January; pigs ready to wean." Phone 222, via Cobourg. BERTRAM HOSKIN, The Gully P. O.

MENTION "FARMER'S ADVOCATE."

QUESTIONS AND ANSWERS. Miscellaneous.

FEEDING BUCKWHEAT.

What is the comparative feeding value of buckwheat and barley when fed to hogs? With barley at 90c. per bushel, and buckwheat at 60c., would it not pay to sell the barley and feed the buckwheat, rather than vice versa?

E. H. M.

Ans.—The feeding value of buckwheat grain per 100 lbs. is from 75 to 80 per cent. that of peas, and nearly equal to that of barley, being a little lower in digestible crude protein and carbohydrates, and higher in fat. It is not advisable to feed it alone. Better results follow when it is fed in a mixture with other grains, and when buckwheat does not constitute more than one-third of the grain ration. At the prices quoted, it would be profitable to sell part of the barley at least, and fill its place with buckwheat, but care should be taken that too large a proportion of buckwheat is not present in the ration.

FEEDING PIGS.

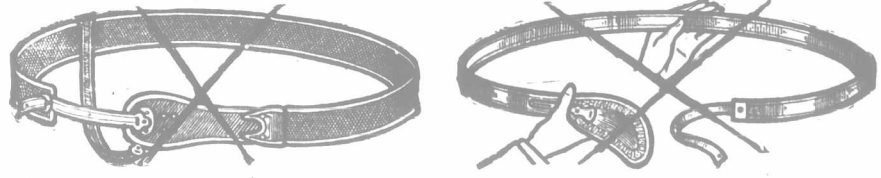
I have eight thrifty pigs three months old. Please advise me as to the best proportions of grain to feed. I have plenty of turnips, wheat and oats. Should I boil the grain with the turnips or have the grain chopped and put on raw or boiled turnips? I intend to have them ready to market about spring.

2. Have eight pigs not thriving well; their skins are dark and scurvy. They don't seem to be very itchy, but are not growing very well. Would sulphur and Epsom salts be good for them? They are about three months old. I intend to sell them in June. What would you advise feeding them? What proportions of turnips, wheat and oats? Should I boil the feed? W. S.

Ans.—1. We would not advise the cooking or boiling of this ration. Boiling would decrease the feeding value of the grain very materially, and while it might increase the palatability of the turnips, it is doubtful whether it would increase their actual feeding value. It would likely prove more satisfactory to feed the grain in a finely-chopped mixture of one part of wheat to two parts of oats. This could be fed mixed with the finely-pulped turnips, or could be soaked and fed separate from the roots. A very good plan would be to feed the finely-pulped roots once a day say, at noon, and feed the grain ration night and morning. If the chopped grain is soaked, it is advisable to soak it twelve hours before feeding. This makes feeding night and morning very handy. The barrel in which the chop is soaked should be kept sweet and clean. If the pigs will not eat the turnips, a little dry chop could be fed on the turnip pulp. As time progresses, the amount of turnips could be reduced and a little higher percentage of wheat fed. In soaking feed, make it the consistency of thick porridge. If fed too sloppy there is a danger in winter of compelling the pig to take too large a quantity of water. If the meal is fed dry, it should be mixed with the pulped roots, and allowed to stand from one feeding to another.

2. If possible, keep the pigs dry and well bedded. A thorough washing, using warm water and castile soap, would doubtless help. A few drops of carbolic acid in the water, and the liberal use of a brush during the operation, would serve to clean their skins. Swine which are confined in pens seem to have a craving for some unnatural substance. A little sulphur and salts would likely prove beneficial. Prof. G. E. Day, of the Ontario Agricultural College, in his book, "Swine," recommends the use of such substances as charcoal, ashes, mortar, soft coal, or rotten wood, one part of sulphur to about ten parts of ashes. This material, as well as salts, should be kept in small troughs before the pigs at all times. Feed them roots as indicated in the answer to question 1. They might be given a little larger proportion than in that case, as they are not to be marketed so soon. Rotten wheat or sweet-thrill roots would also be a good thing to have for the pigs. They could be given in small quantities before in- troducing the turnip and wheat.

Trusses Like These Are a Crime



Get Rid of Elastic Bands, Springs and Leg-Straps. Such Harness Has Forced Thousands to Undergo Dangerous Operations.

Trusses like those shown above—the belt and leg-strap, elastic and spring contraptions—sold by drugstores and many self-styled "Hernia Specialists"—make life miserable for everybody who wears them. Moreover, they often do immense harm—they squeeze the rupture, often causing strangulation—dig into the pelvic bone in front—press against the sensitive spinal column at the back.

The Plain Truth Is This.

Rupture—as explained in our free book—can't be relieved or cured—can't even be kept from growing worse—unless constantly held in place.

Just as a bandage or splint is the only way a broken bone can be held—the right kind of truss is the only thing in the world that can keep a rupture from coming out.

What a difference it will make when you get that kind of a truss.

And you can get exactly that kind of truss—without risking a cent of your money.

It's the famous Cluthe Truss or Cluthe Automatic Massager.

Far more than a truss—far more than merely a device for holding the rupture in place.

Self-regulating, self-adjusting.

No belt, elastic band or springs around your waist, and no leg-straps—nothing to pinch, chafe, squeeze or bind.

Try It Without Risking a Penny.

We have so much faith in the Cluthe Truss—we have seen it work wonders for so many others—that we want to make one especially for your case and let you wear it at our risk.

We'll give you plenty of time to test it—if it doesn't keep your rupture from coming out, when you are working and at all other times—if it doesn't put an end to the trouble you've heretofore had

with your rupture—if you don't get better right away—then the truss won't cost you a cent.

How It Strengthens and Heals.

In addition to holding the rupture, the Cluthe Truss or Cluthe Automatic Massager is constantly giving a soothing, strengthening massage to the weak ruptured parts.

All automatically—the massage goes on day long, all without any attention whatever on your part.

The World's Greatest Cure on Rupture.

Don't go on letting your rupture get worse—don't spend a cent on account of your rupture until you get our free book of advice.

This remarkable book—cloth-bound, 82 pages, 21 separate articles, and 19 photographic pictures—took us over 40 years to write—took us that long to find out all the facts we've put in it.

It explains the dangers of operations and why they don't always cure to stay cured.

And tells—abolutely without misrepresentation—all about the Cluthe Truss—just how it holds—how it gives the curing massage—how it is waterproof—how it ends all expense—how you can get it on trial—and gives names and addresses of over 4,000 people who have tried it and want you to know about it.

Just use the coupon, or simply say in a letter or postal, "Send me your book." In writing us, please give our box number as below—

Box 109—CLUTHE COMPANY 125 East 23rd St. New York City Send me your Free Book on The Cure of Rupture. Name Street Town

LAKEVIEW HOLSTEINS

Young bull, calved Sept. 3rd, 1910, sired by Count Hengerveld Fayne De Kol, and out of an untested heifer, whose dam has a 21-lb. 7-day record and an 88-lb. 30-day record. This is a very smooth bull, mostly white, and is worth while seeing. Also several younger bulls, all of which are described in catalogue, which is sent on demand.

Telephone E. F. OSLER, BRONTE, ONT.

FAIRVIEW FARMS HERD STILL LEADS ALL OTHERS.

We own the world's champion cow, Pontiac Pet, 37.67 lbs. butter in 7 days. We have here her sire and over 50 of her sisters. We can offer you young bulls that are more closely related to her and to Pontiac Clothilde DeKol 2nd, 37.21 lbs., than you can get any place else in the world, and our prices are right. Nearly 200 head in herd. Come and look them over.

E. H. DOLLAR, (near Prescott) HEUVELTON, NEW YORK

Holsteins and Yorkshires—Sir Admiral Ormsby 4171.

our main stock bull, has only had 4 daughters tested so far, and they average 26 1/4 lbs. butter in 7 days as 4-year-olds, and one holds the world's record for yearly work as a 2-year-old. We offer for sale 20 heifers in calf to Sir Admiral Ormsby; also bull calves by him and from 27 1/4-lb., 26-lb. 4-year-old and 25 1/4-lb. 4-year-old cows. Come and see the herd. No trouble to show them. Our Yorkshire hogs will be at Toronto Exhibition, bigger and better than ever. It is our intention to double our breeding herd in order to supply the increasing demand for Summer Hill Yorkshires. See them at Toronto and London Exhibitions. D. C. FLATT & SON, Hamilton, Ont. R.F.D. No. 2. Phone 2471. Hamilton.

RIVERSIDE HOLSTEINS

Herd headed by Prince De Kol Posch; dam was champion two years in succession at Guelph dairy test. King Johanna Pontiac Korndyke; the record of dam and two nearest dams on sire's side average 32.12. Young bulls and females for sale.

J. W. Richardson, Caledonia, Ont.

Evergreen Stock Farm Holsteins Herd headed by Prince Abbekerk Mercena, whose eight nearest dams average over 25 pounds butter in seven days, and whose dam produced \$150 worth of milk at Toronto—wholesale prices—in four months. We have taken a milk contract, and don't want to feed many calves, consequently we will sell young calves, heifers and bulls, at attractive prices. Our females, the dams of these calves, are equal to the best in the country. Bell phone in house. A. E. HULET, NORWICH, ONTARIO.

Centre and Hillview Holsteins—We are offering young bulls from Sir Ladie Cornucopia Clothilde, the average of his dam sire dam and grand dams is 66.2 lbs. milk and 30.58 butter, 7 days, and 2,750.80 milk and 114.5 butter in 30 days; also Brookbank Butter Barron, who is a proven sire. He is sire of champion 3-year-old 30-day, 2-year-old 7-day and 2-year-old 30-day. Long-distance phone. P. D. EDE, Oxford Centre P.O. Woodstock Stn.

MAPLE HILL HOLSTEIN-FRIESIANS

Bull calves, eight to eleven months, by great sires and from official record dams. A few first-class cows and heifers.

BELL TELEPHONE G. W. CLEMONS, St. George, Ontario

Woodbine Holsteins

Herd headed by King Segis Pontiac Lad, whose sire's dam is the champion cow of the world. Sire's sire is the only bull that has sired five four-year-olds that average 30 lbs. each. Dam's sire is the bull that has sired two 30-lb. three-year-olds. His two great grand-sires are the only bulls in the world that have sired two 37-lb. cows. Bulls and bull calves for sale. A. KENNEDY, Ayr, Ontario.

IMPERIAL HOLSTEINS

I can supply bulls ready for service and younger ones, also heifers out of R. O. M. cows, and sired by Tidy Abbekerk Mercena, whose seven nearest female relatives have records averaging 27.19 pounds. W. H. Simmons, New Durham P.O., Oxford Co.

Lump Jaw



The first remedy to cure Lump Jaw was Fleming's Lump Jaw Cure and it remains today the standard treatment, with years of success back of it, known to be a cure and guaranteed to cure. Don't experiment with substitutes or imitations. Use it, no matter how old or bad the case or what else you may have tried—your money back if Fleming's Lump Jaw Cure ever fails. Our fair plan of selling, together with exhaustive information on Lump Jaw and its treatment, is given in Fleming's Vest-Pocket Veterinary Adviser. Most complete veterinary book ever printed. Has been given away. Durably bound, indexed and illustrated. Write us for a free copy.

FLEMING BROS., Chemists,
15 Church St., Toronto, Ontario

Shropshire and Cotswold Ewes

At bargain prices, shearing ewes and a few aged imported ewes, bred to a first-class ram. In Cotswolds, shearing and two shear ewes, bred to the best rams of the breed; also ewe lambs, both breeds.

JOHN MILLER, Brougham, Ont.
Claremont Stn., C. P. R.

Cattle and Sheep Labels

Metal ear labels with owner's name, address and any numbers required. They are inexpensive, simple and practical. The greatest thing for stock. Do not neglect to send for free circular and sample. Send your name and address to-day.

F. G. JAMES, Bowmanville, Ont.

Farnham Farm Oxfords and Hampshire Downs

We are offering very reasonably a number of first-class yearling and ram lambs, by our imported champion ram; also fitly ewes of both breeds. Long-distance phone in house; ask Guelph for 152, two rings.

HENRY ARKELL & SON, ARKELL, ONTARIO

LEICESTERS

C. & E. WOOD, Freeman P. O.

Burlington Jct. Sta., G. T. R. Long-distance phone.

Tower Farm Oxford Downs

12 good shearing rams; also imported shearing ram bred by Geo. Adams. A few shearing ewes, also lambs of both sexes. All by imp. sire.

E. Barbour, Erin, Ont.

Shropshires and Berkshires!

Present offering: Ram lambs from imported stock of best breeding; also one two-shear ram. In Berkshires—pigs 8 weeks old, by imp. boar. Prices very reasonable.

John Hayward, Eastwood, Ont.

Shropshire Sheep, Shire Horses and Poultry

I have bred very many winners in Shropshires, and never had a better lot of both sexes for sale. Order early. Also a big quality shire filly and White Wyandotte poultry.

W. D. MONKMAN, Bond Head, Ont.

Poplar Lodge Southdowns and Berkshires

I can supply Southdown sheep, rams or ewes, ram or ewe lambs, Berkshires, from youngsters up to breeding age, of both sexes; the highest types of the breeds in proper fit.

SIMON LEMON, Kettleby P. O., Schomberg or Aurora Stns., Phone.

Spruce Lodge Leicesters

Just now I am making a specialty of flock headers and show stock, shearlings and ram lambs, shearlings, ewes and ewe lambs, the best type of the breed.

W. A. Douglas, Tuscarora, Ont.

Oxford Down Sheep, Shorthorn Cattle, Yorkshire Hogs

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LARGE WHITE YORKSHIRES

Have a choice lot of sows in pig. Boars ready for service, and young pigs of both sexes supplied not akin, at reasonable prices. All breeding stock imported, or from imported stock, from the best British herds. Write or call on:

H. J. Davis, Woodstock, Ont.

Hilton Stock Farm Holsteins and Tamworths.

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R. O. MORROW & SON, Hilton, Ont.

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Sired by first-prize hog at Toronto and London. Also reg'd Jersey Bulls, from 8 to 10 months, from high-testing stock.

CHAS. E. ROGERS, Ingersoll, Ont.

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QUESTIONS AND ANSWERS. Miscellaneous.

ALFALFA—FEEDING WHEAT.

1. I have some alfalfa three years old that is beginning to grow very short on the ridges. There are lots of plants. Would you advise giving a top dressing of manure this winter?

2. As wheat is about the cheapest grain feed for live stock now, would you advise feeding it to fattening steers alone, or mixed with oats or corn, for meal ration? Steers will have ration of corn silage with lots of ears in it, and clover hay.

Ans.—1. It would be well to try moderate top-dressing with manure. Also, we should experiment with lime and wood ashes.

2. Would suggest mixing with oats in proportion of one part wheat to two parts oats. The further addition of corn and oil-cake meal in small quantities would probably improve your ration.

BALANCED RATION FOR STEERS—MARES FAIL TO BREED.

1. I would like if you would give me the most economical grain ration to feed steers weighing 966 pounds, which I have just put into stalls. I mean a balanced ration. I intend keeping the cattle until middle of January. Would you also kindly inform me as to the fattening qualities of the barley after the brewers have used it, and what it is worth?

2. I have two pure-bred Clyde mares, three and four, and seems impossible to get them to conceive. What procedure would you follow to insure conception?

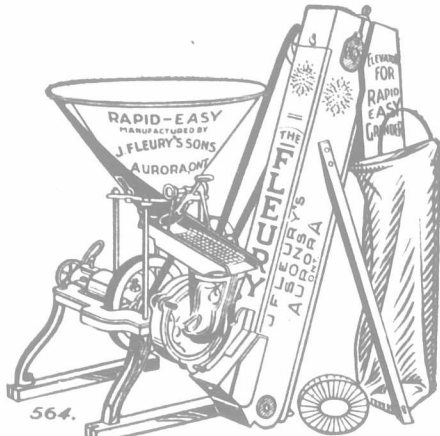
Ans.—Economic balanced rations cannot be figured without the use of roughage. The question does not state what kind of roughage you have to feed, neither does it state the kind of grain you have. The economy of a feeding ration very often depends upon whether or not the feeder has the grains at his disposal. It is often found that the grains and roughage on hand can be made into a very suitable ration without buying other material. We can do no better in this case than assume that you have well-cured clover hay, and silage of good quality.

Steers to be finished in January would require liberal feeding. Using the roughage stated, a nutritive ratio of 1 to 7 or 1 to 8, should prove satisfactory, even when the steers are to be fed for such a short time. If the steers were to be fed longer, a wider ration than this could be used to good advantage. Steers of this weight are likely quite young, and it has been found by experiment that young steers make more economical gains on a fairly narrow ration than on a wider one, while as the steers grow older the reverse gradually comes to hold true.

Corn silage, 40 lbs.; clover hay, 8 lbs.; oat straw, 5 lbs.; corn meal, 2 lbs.; ground oats, 3 lbs.; oil cake, 2 lbs., and barley meal, 2 lbs., should make a very good balanced ration for these cattle, but whether or not it would be the most economical ration possible is difficult to state. In considering this, the price of the different feeding stuffs on the local market must be reckoned. However, the foregoing may serve to give an idea of what is required. Brewers' grains are more suited to the feeding of dairy cattle than for the production of increase on the fattening animal. In proportion to the amount of dry matter contained in them, they contain a large percentage of proteid material suitable for milk production. They, however, contain a fair percentage of both carbohydrates and fat, in proportion to the amount of dry matter, and where they could be bought cheap and handy, might profitably be used to form a part of the ration of the fattening animal.

Leave the mares until next spring to be bred, as mares generally do not conceive readily in cold weather. If they are very fat, reduce them in flesh, and if thin, feed so as to get them in good nursing condition. Give regular exercise before breeding again, get a veterinarian or groom who understands the operation, to examine the neck of the uterus, and if the os uteri is closed, open it with the fingers and breed in two or three days. Allow the mares out on grass.

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Collies that win at the shows and make excellent workers.

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Pine Grove Yorkshires

For sale: A choice lot of young boars fit for service; also sows already bred. Descendants of imported stock. Property of **Joseph Featherston & Son, Streetsville, Ont.**

Spring Bank Yorkshires

For two weeks, at reduced rates, a few choice young sows, registered, four months old. Long-distance phone. **WM. BARNEF & SONS, Living Springs, P. O., Ontario.** Fergus Station, C.P.R. and G.T.R.

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Berkshires, Tamworths, Whites, Poland-Chinas and Duroc-Jerseys. I have constantly on hand both sexes of all ages. Show stock a specialty. **John Harvey, Frelighsburg, Que.**

Hampshire Pigs

Get acquainted with the best bacon hog in existence. Both sexes for sale from imported stock. Write for prices. Long-distance phone. **J. H. RUTHERFORD, Box 62, Caledon East, Ont.**

Newcastle Tamworths and Cotswolds

For sale: Choice young sows, bred and ready to breed; boars ready for service; beauties, 2 to 4 months old, by imp. boar, dam by Colwill's Choice, Canada's champion boar 1901, 2, 3 and 5. Several choice ram lambs and ewes, all ages, and one 3-shear ram. Prices right. Bell phone.

A. A. COLWILL, NEWCASTLE, ONTARIO.

Willowdale Berkshires.

For sale: Nice lot of 5 months' sows, one 5 months' boar. Eggs from my famous flock of R. C. R. 1 Reds, \$1 per 13. Express prepaid on 5 settings or more. Phone 52, Milton.

J. J. WILSON, Importer and Breeder, Milton, Ontario, C.P.R. and G.T.R.

Monkland Yorkshires

I am making a special offering of 50 young bred sows. They will average 200 pounds in weight, and are from 6 to 7 months of age. An exceptionally choice lot, full of type and quality; also a limited number of young boars.

MATTHEW WILSON, FERGUS, ONTARIO

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A lot of fine young boars and sows of different ages. Full strength. Correspondence solicited.

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Boars fit for service; sows ready to breed; younger ones coming on. Show stock a specialty. Price right for quick sale. Milton, C.P.R. Georgetown, G.T.R. **W. W. Brownridge, Ashgrove, Ont.**

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Bred from the best blood in England; both sexes for sale, from 10 months old; young sows, dandies, in farrow to first-class boars. **Chas. Currie, Morrison, Ont.**

ELMWOOD STOCK FARM offers Ohio Improved Chester White Pigs

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THE SPICE OF LIFE.

THE HIGHWAY COW.

Some time ago Peter McArthur, in his "Donald Ban" series of correspondence, quoted a few lines from an old poem, entitled, "The Highway Cow," at the same time hinting, if we are not mistaken, that he would like to be favored with a copy of the verses complete. Half a dozen willing readers came forward with the information, which, however, was not acknowledged in print; and still they come. The last to hand is from a correspondent in Simcoe County, Ont., whose version we have concluded to quote, seeing the stanzas appear to be so popular.

The hue of her hide was a dusky brown,
Her body was lean and her neck was slim,
One horn turned up and the other
turned down,
She was keen of vision and long of
limb,
With a Roman nose and a short-stump
tail,
And ribs like the hoops of a homemade
pail.

Many a mark did her body bear,
She had been a target for all things
known;
On many a scar the dusky hair
Would grow no more where it once had
grown;
Many a parting sporting shot
Had left on her a lasting spot.

Many and many a well-aimed stone,
Many a brick-bat of goodly size,
Many a cudgel swiftly thrown
Had brought the tears to her lovely
eyes,
Or had bounded off from her bony back
With a noise like the sound of a rifle
crack.

Many a day she had passed in the pound
For helping herself to her neighbor's
corn,
Many a cowardly cur and hound
Had been transfixed on her crumpled
horn,
Many a teapot and old tin pail
Had the boys tied to her time-worn tail.

Old Deacon Gray was a good old man,
Though sometimes tempted to be pro-
fane,
When many a weary mile he ran
To drive her out of his growing grain.
Sharp were the pranks she used to play
To get her fill and to get away.

She knew when the Deacon went to
town,
She watched him wisely as he went by,
He never passed her without a frown,
And an angry gleam in each angry eye.
He would crack his whip in a surly way
And would drive along in his one-hoss
shay.

Then at his homestead she loved to call,
Lifting his bars with crumpled horn,
Nimbly scaling his garden wall,
Helping herself to his standing corn,
Eating his cabbages one by one,
Hurrying home when her work was done.

His human passions were quick to rise,
And striding forth with a savage cry,
The fury gleaming from both his eyes,
Like the lightning flash from a sum-
mer's sky,
Redder and redder his face would grow,
And after the creature he would go.

Over the garden, 'round and around,
Breaking his pear and apple trees,
Trampling his melons into the ground,
Overturning his hives of bees,
Leaving him angry and badly stung,
Wishing the old cow's neck was wrung.

The cabbages grew on the garden wall,
The gears went by with their work and
play,

The boys in the village grew strong and
bold,
And the gray-haired farmers passed
away
One by one, as the red leaves fall,
But the highway cow outlived them all.

"Mamma, mamma has a great surprise
for me."

"I know what it is—big bruvver is
been on his vacation."
"Did you know?"
"No, but I don't think he'll rattle any more."



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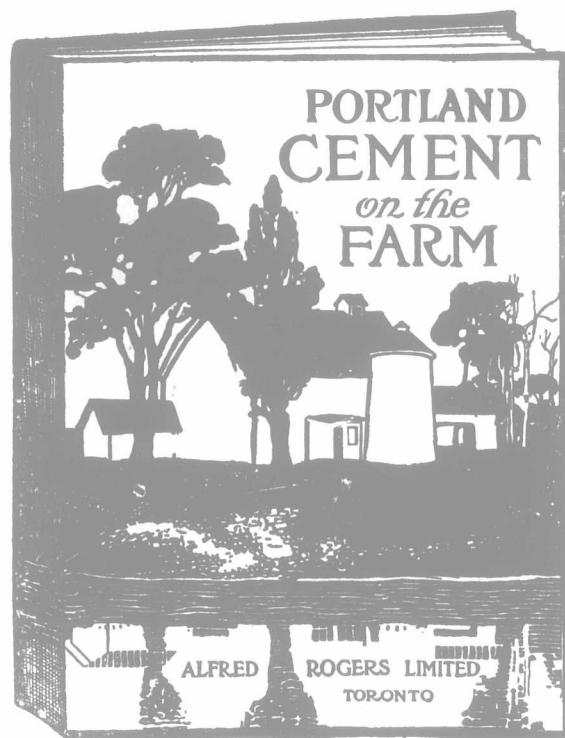
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- Hen Nests
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- Barn Foundations
- Barn Basement
- Floors
- Barn Floors
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- Root Cellars
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