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FARM AND DAIRY

RURAL HOME

PETERBORO, ONT.

JANUARY 28 1909



WASTE LANDS IN ONTARIO—SAND DUNES IN LAMBTON COUNTY

Investigations, that have been made by the Forestry Department under the direction of E. J. Zavitz, B. A., M. S. F., reveal the fact that in Lambton Co., there are 40,000; in Simcos, 80,000; in South Norfolk, 10,000; in Northumberland, 8,000; and in Durham, 6,000 acres of non-agricultural land, most of which is composed of drifting sand as illustrated above. This land in its present state is practically worthless. At one time it produced the best of timber. It can be successfully exploited for forestry purposes again. The Ontario Legislature should not hesitate to provide the funds necessary for the adoption of a comprehensive forestry policy in connection with these areas. Photo by E. J. Zavitz

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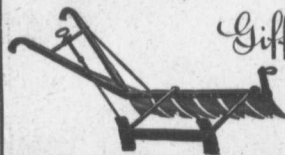
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The Ottawa Winter Fair

The Winter Fair held in Ottawa last week, was a vast improvement over all previous events of the kind held in Ottawa. This was due in a large measure, to the addition of an exhibition of horses that proved a most popular feature. There was a great increase in the number of entries in almost every section of the exhibition. The presence of the Governor-General, Earl Grey, who entered some horses, as well as of other distinguished people, including Dr. Falconer, the President of Toronto University, who delivered a masterly address, and of Hon. J. S. Duff, Minister of Agriculture for Ontario, as well as a decided increase in the attendance, contributed to make the exhibition much more successful than ever. This year, the people who attended the fair pronounced it a success and well worth seeing. This will help the show next year.

INCREASED NUMBER OF ENTRIES

Owing in part to the fact that the prize list had been increased by some \$2,500, or to a total of about \$7,500, the number of entries from the different classes was much larger than ever before. There were 80 horses and over 100 beef cattle showing at the exhibition of beef cattle being larger than the one at Guelph. In the dairy cattle test, a report of which is given in another column, there were 30 animals. The sheep classes were well patronized, about 75 animals being shown, which was more than double the number shown last year. About 2,500 birds were shown in the poultry section, an increase of 300 over last year.

A GREAT IMPROVEMENT

The first great improvement in the exhibition was noticeable when one entered the fair building. In past years, the fair was held in one end, or in about one-third, of Howick pavilion. This year, the whole building was used. The big pavilion contained the exhibit of horses. In the centre, was a large saw-dust exhibition ring. Around three sides of the building were some 80 stalls for horses. Over the stalls, on two sides of the building, were rows of seats, which permitted spectators to watch the judging in the judging ring to excellent advantage. While the judging was in progress, these seats as well as the space around the ring generally were well-filled.

SOME SPLENDID ADDRESSES

Some splendid addresses were delivered in the lecture hall. The speakers at the opening ceremony included Mr. Peter White, K. C., of Pembroke, the president of the show; Dr. Falconer, of Toronto; Hon. J. S. Duff, and Senator D. Derbyshire. The addresses delivered during the week included one on the "Pasturization of Whey, Its Effect on the Quality of Cheese, and the Feeding Value of Whey," by Prof. H. H. Dean, of Guelph; "Winter-feeding of Dairy Cows," by J. H. Grisdale, of the Experimental Farm, Ottawa; "Proper Dairy Type," by D. Drummond, of the Department of Agriculture, Ottawa; "Breeding and Rearing Chickens," by Prof. W. R. Graham, of Guelph; "Farm Weeds, Their Identification and Control," by S. S. Commissioner G. H. Clark, Ottawa; "What the Raising of More Shire Would Mean to Eastern Ontario," by A. W. Smith, Maple Lodge; "The Economical Feeding of Bacon Hogs," by J. H. Grisdale, Ottawa; "Judging Bacon Hogs," by Prof. G. E. Day, of Guelph; "System in Horse Breeding," by John Gardhouse, of Highfield; "Feeding Horses," by John Bright, Myrtle; "How to Select a Heavy Draught Stallion and Unsoundness Frequently Found in Stallions," by Wm. Smith, of Columbus; "How to Make Rough Feeding Stuff Most Palatable," by Robt. Miller; "The Effect of Stack Ventilation on the Profitable Feeding of Beef Cattle,"

by J. H. Grisdale, Ottawa; and one on the judging of beef cattle, by Prof. G. E. Day. Several of these addresses are published elsewhere in this edition. Others will be given later.

THE SEED EXHIBIT

The seed exhibit was considerably larger and better than last year. The quality of the exhibits was much better than formerly. The location was such as to give it a good general appearance, consequently it attracted considerable attention. It is gradually dawning upon us that there is a good deal in seed selection. The display of oats from the field crop competition, which took place at Toronto, was a fine addition to the display of grains, corn and potatoes in the general classes.

There were some educational features put up by the Seed Branch, Ottawa, which were of note. Besides some charts and the mounted specimens of weeds there were several boxes of growing grains which illustrated the value of a good fanning mill selection of the seed which will be sown this spring. There were illustrations of hand selected plants as well. Some illustrations showing pure and adulterated seeds of red clover, timothy and alsike were also shown.

The exhibition afforded an opportunity for some of the exhibitors to find a ready sale for their surplus seeds. This was notably the case in seed corn. Several hundred bushels were ordered in the ear by eastern farmers, which took the corn exhibitors from Kent County.

The only feature of the exhibit which was undesirable, was that in a few cases, the professional exhibitor had tried to play a little fast and loose apparently. This will right itself in time. At present it is somewhat discouraging to those who put up the goods, they can swear they grew themselves.

FEEDING RESULTS

One of the exhibits most worthy of mention was that of Shorthorn cattle of the Central Experimental farm, representing two groups bred and fed under different conditions. The first group of steers was an average age of 20 months and weight of 1,135 lbs. cost \$46 to feed from birth to date, giving a profit therefrom of \$4 a steer. Each steer consumed in 12 months ensilage and roots to the extent of 14,729 lbs.; hay, 1,608 lbs.; meal, bran, corn, gluten, oats and oil-cake, 1,265 lbs. and skim-milk, 1,638 lbs. The second group steers consumed scarcely more than half what the others did, but their gains were fully in accordance. Their cost of feed was only \$28 and they had an average weight of 620 lbs. There was an ultimate loss of \$6 a head on them.

WINNERS IN THE HORSE SECTIONS

The principal winners in the draught classes of the horse exhibition, were Messrs. Smith and Richardson, of Columbus, who won first, third and seventh, on Clydesdale stallions foaled in 1907; January 1, 1906, in strong competition; first on Canadian bred Clydesdale or Shire mare, foaled in 1906; first and second on stallions, foaled in 1907; first on stallions foaled in 1905, which was won by their splendid stallion Black Ivory, and third in the same class. The championship for Clydesdale stallions foaled in 1907, was won by their President Roosevelt, the reserve championship going to Black Ivory. The championship for Clydesdale or Shire mares any age, was captured by Lady Glenlivet, Kawawa, owned by their President Roosevelt, the reserve championship going to Black Ivory. The championship for Clydesdale or Shire stallions in the same class, The Hatcher championship won by J. J. Black & Sons, of Winchester for Rillington Grandee. The first for heavy draught team went to Adam Scharf, of Commins's Bridge.

(Continued on page 10.)

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FORMERLY THE CANADIAN DAIRYMAN AND FARMING WORLD

Vol. XXVIII.

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No. 4.

THE FOREST PROBLEM OF ONTARIO

A. H. D. Ross, M.A., M.F., Faculty of Forestry, University of Toronto

A Comprehensive Review of the Forestry Situation as it Stands to-day, with an Outline of some of the Needs of the near Future

THE Province of Ontario has a land area of 220,508 square miles; some 72,000 square miles of which have been surveyed, of which 38,000 are sold. This leaves over 182,000 square miles of territory still under the control of the Crown; most of which belongs to what is known as the Laurentian formation—consisting of granitic rocks. On being pulverized these rocks form the well-known sands and gravels which are unsuitable for agricultural purposes but are well adapted for the growing of timber. The agricultural lands are confined mainly to the southwestern peninsula of the province, and the "Clay Belt" beyond the "Height of Land." All the rest belong to what are known as "Absolute forest Soils," and make up fully two-thirds of the land area of the province.

ONTARIO'S WASTE LANDS

One of the greatest mistakes in the past has been to allow people to settle on land that was not suitable for the growing of grain crops. In some cases they located on poor farms through ignorance, but in the great majority of cases simply for sake of the timber. With the disappearance of the timber and the burning up of the vegetable portion of the soil in the process of preparing the land for the plow—the capacity of the soil to retain moisture was greatly reduced, and consequently its fertility was lessened. Furthermore, the working of light and sandy soils soon caused them to be washed to lower levels or to be drifted before the wind. In Lambton County alone, there are said to be 40,000 acres of such lands; in South Norfolk, 10,000; in Simcoe, 60,000; in Durham, 6,000, and in Northumberland, 8,000 acres.

From the Muskoka Lakes eastward to the County of Lanark there are thousands of farms upon which the people should never have been allowed to settle. After years of toil, hundreds of them had to be abandoned, and the rest yield the barest kind of a living to their owners. No greater cruelty can be imagined than to allow a poor man to settle upon poor land. The only place for a poor man is on good land, and the only way to "save it so is to first classify the land—setting aside the agricultural lands for farming purposes and retaining the non-agricultural lands for forest growth. In future it is to be hoped that such a policy will be firmly adhered to.

THE FIRE PERIL

Every man in the country should be impressed with the belief that it is an absolute crime to throw a lighted match or cigar stub upon the forest floor, to leave a camp fire burning, to burn brush close to the woods in a dry season, or in any other way of imperil valuable forest property. Prospectors have been known to fire the woods so as to facilitate the work of discovering miner-

ais, and in the northern regions the Indians occasionally burn over certain tracts to make it easier to follow the game. Sparks from railway locomotives are another source of serious fires. Along the northern shore of Lake Superior hundreds of thousands of acres of timberland have been burned over since the Canadian Pacific Railway was built. The carelessness of navvies employed in the construction of railways is an-

For years we have labored under the delusion that we possessed in this fair land an inexhaustible supply of timber. That delusion is a thing of the past. The ever increasing scarcity of saw timber and the steady advances in the price of lumber have caused many to ponder this question long and well. The continued droughts of recent years with their attendant evils, with which we are all too familiar, and which may in a measure be ascribed to the ruthless deforesting that has been practised over Ontario, has brought us face to face with one of the greatest problems that this country ever had before it, namely, the conservation of our present forest areas and the replanting of other areas unsuited to other crops, in the hope of thus undoing the mischief that has been worked. The adjoining article, prepared especially for Farm and Dairy by one of the best authorities on Forestry in Ontario, is a comprehensive outline of Ontario's Forest Problem. It should be read by all.

other source of fires. In the exceedingly inflammable spruce forests of the northern part of the province the fire peril is even greater than in the southern part. Surely it is high time that war should be waged against the useless destruction and needless waste of our forest wealth. It is estimated that there are thirty-five million acres (54,687 square miles) of cut over, burned over or abandoned farm lands upon which tree growth should be retained for all time. Apart from the Forest Reserves, there are about 125,000 square miles of virgin forests and burnt over lands. If we assume that there are 18,000 square miles of muskeg, lakes and other unproductive areas we still have 116,000 square miles left—some 60,000 of which are virgin timber. The remaining 50,000 square miles consist of inferior land which has been more or less burned over within the last fifty years and is unsuitable for farming purposes. The young growth on it should be jealously guarded from fire—every tree of it as though it were

a dollar bill. If so guarded it will soon be worth many millions of dollars.

THE ENORMOUS CONSUMPTION OF TIMBER. Every year our forest areas are being steadily drawn upon for the production of dimension timber, sawn lumber, lath, shingles, coopers stock, railroad ties, fuel, pulpwood, mine timber, fencing, telegraph and telephone poles, etc. For the upkeep of our railways alone, immense quantities of timber are required every year. By 1913 Ontario will have about 9,000 miles of track in operation. At the rate of 3,000 ties per mile, and assuming that a tie lasts seven years, this will mean the use of 4,000,000 ties a year; or the equivalent of 112,000,000 board feet of lumber. For the development of our mineral resources, too, large quantities of timber will be required. A mine producing 100,000 tons of ore per annum requires the use of nearly 2,000,000 feet, board measure, of timber. If it has to be imported the cost may be so great that it will not pay to develop low grade properties at all. Besides, large quantities of timber are exported from the province, much of it going to Manitoba and Saskatchewan, for the building of railways, houses, etc.

FOREST AND GAME RESERVES

About ten and a half million acres (16,308 square miles) of land have been set aside as Forest and Game Reserves, so as to preserve the timber upon them from fire and timber thieves, and to protect the fish and game. So far, no attempt has been made to place them under management designed to make them produce a continuous crop of timber. They include non-agricultural lands only, and the young growth upon them is being protected from fire in a fairly efficient manner.

The Temagami Forest Reserve, enclosing Lake Temagami and other lakes, has an area of 5,900 square miles, and is said to contain 4,500,000,000 feet, board measure, of standing pine. The Nipigon Reserve is a rectangular block of 7,297 square miles enclosing Lake Nipigon. The Mississauga Reserve, about forty miles east of Sault Ste. Marie, contains 2,916 square miles, and is reputed to have 3,500,000,000 feet of pine upon it. The Sibley Reserve is a small block, of about 70 square miles, situated about 16 miles east of Fort Arthur; and the Eastern Reserve, in the northern part of Frontenac County, contains about 125 square miles of young growth coming in on lumbered and burned over lands. This makes a total of 16,308 square miles of Forest Reserves, proper. Besides these, there is also the Algonquin National Park, including 1,930 square miles at the headwaters of the Muskoka, Petawawa and Madawaska Rivers; forming a great stream regulator, game preserve and national playground for the people.

Mr. Cy. Warman, in an address before the Toronto Canadian Club, said: "Destroy your forests and your game will go, your rivers will dry up, your fish will die, and desolation will brood over this land that God has made so fair.

Protect your forest while you have it, for when it is gone you will be utterly helpless.

Limits that are sold are sold. What you have done is done, but from this day forward there will be no excuse for any Government that sells timber without reserving its right to boss the job of cutting it."

MORE FOREST RESERVES NEEDED

Instead of 18,238 square miles of Forest and Game Reserves, Ontario should have at least 90,000 square miles. According to the reports of the Crown Lands Department, the average annual income from our timber lands during the last five years has been \$2,082,878. This is another way of saying that our taxes have been two million dollars a year less than they would have been without the revenue derived from our timber lands. Who will pay the taxes when the timber is gone?

DEVELOPMENT OF ELECTRIC ENERGY

In the newspapers we read a great deal about the development of electric energy from the magnificent water powers scattered throughout the province. There can scarcely be any doubt that electricity is to be the great motive power of the future, and that in many metallurgical operations it will play a leading part. In the great mineral belt known to exist in the Huronian

ated the Temiskaming and Northern Ontario Railway with marked success. It has also demonstrated the possibility of regulating mining rights so that the people as a whole may derive some of the natural wealth which properly belongs to them. Does not the timber also belong to them?

Why should the province not make money out of its timberlands as well as out of its mining lands? By all means let us have a Department of Forestry for the administration of our forest wealth. By the adoption of such a policy we would both earn and save money—earning it by selling our forest products for their full market value; and saving it by preventing the present wasteful method of harvesting the crop. The administration of such a valuable estate fully justifies the Government in creating a portfolio of forestry. Under the present system of control nearly as much wood material is left in the bush as is brought to the mill. With the Provincial Government in a position to regulate the cutting of its own timber, however, only the mature timber would be removed, the slash would be disposed of and the young growth would be given a chance to reach maturity. No policy less com-

tion to give the necessary repairs. Having decided to rent, the next thing is the lease. Be very careful in this particular. Short leases are what kill the tenant farmer and spoils the farm. Anything less than seven years is not much good. Remember signing a lease is signing a partnership and unless both parties keep it there will be no satisfaction.

If no fall plowing has been done and no wheat sown, it will be very difficult to make up a full rent of the farm for the first year. Right here is where a great many fall and go behind the first year and get discouraged. The better way is to agree on a lower rent the first year and be ready to make it up after the third year of the term. As to the profit or how much can be made per acre, no one can foretell. It depends largely on the man and what system is followed. If his predecessor has been successful, the tenant will be wise to take a leaf out of his book. Always lean towards the branch that pays the most. Do not put all your eggs into one basket and be very careful not to put too much time in one place. Attention and attendance bring success.

Fall Preparation of the Seed Bed

John Fieter, Macdonald College, Que.

In reply to your correspondents who desire further explanation as to why the fall ploughing of corn and root land is the best method of cultivation and preparing the seed bed for the following crop, I am only too glad to give the question a little further discussion. For the benefit of one correspondent who seems to pride himself on the extent of his knowledge of comparative results of the different methods, and who seems to doubt me as a source of information, permit me to say that I am only giving personal experience and actual observation as a result of 22 years' practice on experimental farms, where I have been privileged to see various methods thoroughly tried.

Let us compare the two methods which seem to be receiving most attention, viz., fall ploughing corn and root land, and simply cultivating and ribbing, instead of ploughing. The first is advisable for the following reasons: It is a cleaner method. The troublesome corn stubble, and often root tops, cannot be gotten rid of or turned under by any cultivator or disc on the market to-day, whereas, the plough if properly handled will turn them down and leave the land perfectly clean on top. This in itself is no small argument, not only to the teamster and the machinery at the time of cultivating, but also in the next spring, and the following summer, in harvest time, a fact which any binder-driver can vouch for. The mowing machine, the rake, the cutting-box, and even the old cow herself, appreciates the use of the plough at that particular time.

PLOW VS. CULTIVATOR

Actual experience goes to show that in most soils, a finer tilth and a decidedly more uniform tilth is possible when the land is ploughed, and turned up to the frost, than where it is torn into lumps by a cultivator and then ribbed up. While the tops of the ribs, which are raked off in the spring, will be pulverized, the bottom will be but poorly prepared and will remain hard, unless a tremendous lot of hard cultivating is done, which latter naturally leaves your corn stubble to decorate the surface. Again the cleaner surface of the soil and the finer, more uniform tilth permits of a far more even distribution of the seed. The machinery will not be interfered with and a part of the seed will not be left riding on top of material that should have been plowed under, while the rest of the seed is sowed at different depths. Consequently, as many have noticed, there is not the unevenness of growth and the patchy appearance where this more thorough and cleaner cultivation is practised.

The most important argument of all, however,



A Beaver Dam in Northern Ontario

This illustrates one effect of forests upon stream flow, and as a game preserve. The severe droughts of recent years and the partial falling of our streams and rivers can be attributed directly to the ruthless deforesting that has been practised so widely over our fair land.

rocks of Northern Ontario, and extending eastward into Quebec, it is certain that much electric energy will be developed for mining purposes and for the reduction of ores. It should be remembered, however, that the efficiency of a stream for power purposes depends upon the amount of energy it is capable of developing at the time of low water. Here we have an additional reason for the preservation of the forest cover. Without it we will have the destructive spring freshets and the long summer drought. With it we will have a much more equable stream flow and the development of plenty of electrical energy for industrial purposes.

FOREST SURVEYS NEEDED

With the creation of more Forest and Game Reserves and the better protection of our timber, the next forward step should be to ascertain the character of the reserved lands: devoting to settlement those suitable for agriculture and reserving the absolute forest soils for the production of timber crops.

A DEPARTMENT OF FORESTRY NEEDED

After this would naturally follow the organization of a department for the management of the reserves and the disposal of their products to the best advantage. Since 1904 the province has oper-

ated than this will give our province the full benefit of the great timber producing area of the north.

Our people have sufficient public spirit and national conscience to support the establishment of such a portfolio and to put up with such temporary sacrifice of revenue as is necessary to establish a far-sighted forestry policy based upon a scientific and permanent basis.

Renting a Farm in Ontario

J. Keirle, Brant Co., Ont.

A farm in Ontario will produce a greater variety of crops than a farm in any other place in the British Empire and at the present time can be rented for what it is worth. Where shall I rent, asks the enquirer? The best place is where a man knows the land. The soil of some farms is very much impoverished. Find some farmer that has worked his own land and wants to quit. Remember there is nothing like experience and if you do not know the farm, try and find some neighbor that does. The good things are easily seen, but the drawbacks are hard to find out. Spend considerable time finding out the latter. The next thing to do is to find out the character of the owner and if he is in a pos-

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in favor of my system, is the greater conservation of soil moisture, a lack of which, with the other method, was undeniably the fact that one of our correspondent's grain stood up so much better when he didn't plow in the fall, for the simple reason that his growth was not a luxuriant one. This latter was due very likely to a lack of moisture, since his rotation looks like a plant feeding one. The difference, in depth of soil, muleh and uniformity of depth between the two systems is evident to any casual observer. The hard ridges, through the field, that are sure to be left with any ordinary amount of cultivation, allow of no muleh on top and little depth of seed bed. As a consequence a drying out is the result in late spring and summer.

THE PLOW MOST ECONOMICAL

Assuming that your correspondents fully appreciate the value of fine tilth for a seed-bed and uniformity and depth of seed-bed which advantage is evident in seeding and in increased crops, I want to say that the plow on the root and corn ground increases these with more economy than any other implement we have available. Referring to the question of weed seeds, the lower soil, even on the cornfields of our average farms, will contain fewer weed seeds than the surface soil. There are some exceptions to this, it is true, but the man with the surface soil perfectly clean, as a rule, need not worry about the lower soil. In actual practice the balance of argument is with the increased crop the following year.

For the benefit of one of your correspondents who thought our corn stalks so very small that it did not take much of a burrow to cover them, and that I was running a charitable institution I would be glad to publish yields and cost of our last corn and root crop, so that the public may judge from results. These are given on page six of this issue. Yields of grain and hay, the results of cultivation as advised in the foregoing will be given in a later issue, since parts of them are yet in stack, our barn accommodation not being sufficient and they have yet to be weighed. Nothing but the actual weight will be given.

Feeding Horses

John Bright, Myrtle Station, Ont.

As there is a good deal of truth in the old adage, "the feed is half the breed," it is important in breeding horses to understand the best methods of feeding.

Summer conditions, when horses have the natural grass and plenty of fresh air, are the best. We want conditions at all times to be as near those that prevail in summer, as possible.

Ventilation in the stables is of great importance. In order that stock of all kinds may make the best use of their feed it is all important that the stables shall be well ventilated.

DON'T STINT THE FEED

Unless we feed horses just a little more than they require to maintain life they will not prove profitable. Otherwise, the feed we give them goes for nothing. It is the little extra feed they get that enables them to improve in condition and increase in value.

GIVE EXERCISE

Horses, including the brood mares, need exercise. Without it they do not do well and are apt to become sick. Mares carrying foals should be hitched up and exercised every day. If they are turned out in the barn yard they simply eat the straw and take very little exercise. When they are hitched up and driven five miles they get more exercise in a day than they do in a week when left in the barn yard.

The colts, usually, are like their dams. If the dams are soft the colts will be, while if the mares are in good condition the colts come the same way.

*Report of an address delivered last week at the Ottawa Winter Fair.

I lost all my colts for two years through not using some antiseptic when the mares were coming in. This was back in the nineties, and since then I have not lost a foal until this year when I lost one because my man used the antiseptic only once a day when three times a day would not have been too much.

We should endeavor to get grade and hereditarily unsound stallions off the road as speedily as possible. It is better not to get a mare in foal than to breed her to an hereditarily unsound

animal.

There is a large mortality among horses because after they have been working steadily and fed liberally they are allowed to have all they want to eat when they are not working. By feeding horses heavily that are not working there is danger of injuring them as they are apt to gorge themselves. When an animal is not working their feed should be cut down or they should be exercised. Don't keep on feeding horses heavily when they are not working as it is only wasting feed.

DANISH AND CANADIAN BACON METHODS COMPARED

"THE trouble is that Danish farmers are not underselling us on the British bacon market, they are overselling us as they are getting higher prices for their product than we are for ours," said Prof. G. E. Day, of the Guelph Agricultural College, in the course of a splendid address and discussion on the bacon hog question that took place last week at the Ottawa Winter Fair. "Worse than that," continued Professor Day, "they are overselling us in spite of the fact that we could drive them out of the business were we to take hold of this question in earnest, because we can feed our hogs more cheaply than they can theirs. We, however, seem to prefer to fight among ourselves and as long as we do they are going to beat us. It is for us to decide how long we want to continue our squabble and if it pays us to do so."

"Is it true," asked one farmer, "that the Danes buy shiploads of our feeds and feed them to their hogs?"

"I can't answer that," replied Professor Day, "but I do know that they buy considerable quantities of United States corn for feeding purposes

lines. This insures a steady supply of hogs for the factories. It enables the factories, also, to dock the price paid a farmer who sells hogs that do not grade first class. This gives a direct incentive to the farmers to produce nothing but the best hogs.

"When the hogs are delivered to the factory a considerable portion of the value of the hog is paid to the farmer. If the pigs afterwards grade out first class and free from blemishes, such as those caused by blows from sticks or kicks, the farmer is allowed the top market price but the balance is not paid to him until the end of the season when the surplus is divided among the farmers who sold hogs to the factory. These methods encourage the Danish farmers, and make it worth their while, to produce a uniform type of hog of high-class quality. We have proved that we can produce just as fine a Wiltshire side of bacon as the Danes do, but the trouble is we do not produce enough and our product, therefore, lacks in uniformity."

"If we produce a good bacon hog will we get a better price for it?" asked some one.

"No, as individuals we are not likely to," replied Professor Day. "Conditions are such that we seem unable to. Our packers claim that they dare not discriminate because if they do the farmers get angry and sell their hogs to some other packer. I believe, however, that our farmers would be acting in their own best interests were they to endeavor to raise the bacon hog because it would tend to raise the general price paid for hogs and they would get their share of the benefit. Then, also, it does not cost any more to raise a bacon hog than it does to raise a fat hog.

THE DANES FOOLED HIM

"When I was in Denmark several years ago," continued Professor Day, "I thought that the Danes had about reached their limit in bacon production. I was told that it cost them about 6 cents a lb to raise hogs. I did not expect that they were going to increase their manufacture of dairy products the way they have. This has enabled them to greatly increase their production of bacon. They do not feed hogs over there unless they can feed skim-milk or whey. Their bacon keeps pace with their dairy industry."

"Are we likely to raise more hogs?" was asked. "If feed gets cheaper, we may," was the reply.

BE CAREFUL WHAT WE DO

"Before giving up the hog business," continued Professor Day, "we want to make perfectly certain that there is no profit in it. I have heard men declare that there was no money in hogs and yet a year later these same men were buying hogs. Buying hogs when they are dear and selling them when they are cheap is not a good way to make a profit. We should not let ourselves become discouraged by the first breath of adversity. It generally is the man who stays with a business who is able to take advantage of high prices when they come.

BACON VS. FAT HOGS

"There is a general impression that it costs more to raise a bacon hog than to raise the ordinary fat hog. This has never been proved. Experiments we have conducted at Guelph indicate the facts to be to the contrary.

(Continued on page 12)



Prize Winning Berkshires at Toronto, 1908

Discussion on the bacon question points to the fact that hogs are still profitable, where improved stock is kept and properly managed. Read the adjoining report of the discussion on bacon at the Ottawa Winter Fair last week.

and it must be an expensive feed for them." Another person stated that a director of the Lake of the Woods Milling Company was authority for the statement that that company ships large quantities of feed from Canada to Denmark where it is fed to the Danish hogs.

What is the reason that the Danes have made such a success of hog raising? was asked.

"In Denmark," replied Professor Day, "their farmers co-operate a good deal better than we do over here. Their co-operative packing establishments are an important factor in the situation. Their government, in order that their product may be uniform, has selected the large Yorkshire hogs as the best type and encourages the breeding of these hogs. The government purchases Yorkshire boars and sells them to agricultural societies and co-operative associations at reduced prices. Men who try to breed Tamworths, Berkshires, or pigs of other breeds, are unable to meet this competition. These Yorkshire boars have been bred on the common sows of the country and have brought about a wonderful improvement.

CO-OPERATIVE FACTORIES

"Their co-operative factories are assisted. In Denmark, if a farmer sells his pigs to another factory than the one to which he sells regularly he is fined. Over there, they exact their fines too. The factories have power to collect these

Selecting a Draught Stallion*

Wm. Smith, Columbus, Ont.

"When selecting stallions for breeding purposes, most men have to consider their pocket books, the district in which he will travel and the class of mares he will be bred to as well as the price the farmers will be willing to pay for his use. The stallion should be well tempered and the feet, the pasterns, and the legs generally should be as good as possible. Above all things keep away from a meaty

*Outline of an address delivered last week at the Ottawa Winter Fair.

leg. It should be well muscled and clean cut.

The conformation of the stallion counts a good deal as a good looking stallion attracts as much attention almost as a good looking lady. He should have a strong constitution and be a good walker. The neck should be fairly long as a short neck looks badly. Most horse buyers are willing to pay more for a horse with a neck that is moderately long outside the collar.

A stallion is more likely to be a sure breeder when fed nutritious feed from one year's end to the other and given a moderate amount of exercise.

A good pedigree is important, but with it should go as many points as possible of the points that I have mentioned.

"Be careful when a stallion has any unsoundness, such as ringbone, bone spavin, thorough pin, or if he is a roarer. Do not select a stallion with a small foot. The spring half should be avoided. I am informed that no man knows what causes it. A curb is an abominable defect.

"Many seem to think that the later the stallion is bred, his observation has convinced me that overgrown animals are uncertain breeders. They leave a good colt one time and not the next. It generally is the stallion of moderate size that leaves the best stock."

Ploughing in autumn, at \$2.00 per acre.....	31 00
Cultivating in spring, 2 days	6 00
Harrowing in spring, 1 day	3 00
Ribbing 3 1/2 days, at \$3.00 per day.....	10 50
Rolling 1 day.....	3 00
Seed.....	13 60
Sowing 6 2-10 days, 15c per hour.....	9 30
Hand wheel hoeing, 12 days	18 00
Thinning, 62 days, at \$1.50 per day.....	93 00
Hoeing, 34 days, at \$1.50 per day.....	51 00
Pulling, loading, unloading, 112 days, at \$1.50 per day	168 00
Drawing team 14 days, \$3.00, horse and cart, 14 days, \$2.25 per day.....	73 50
Total cost.....	\$ 651 15

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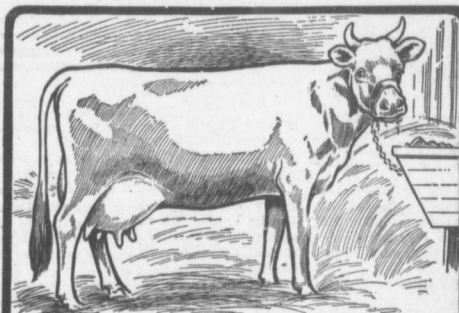
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All lists are to be sent in by the end of February

Names may be sent in at different times, and the persons sending in any name first gets the credit for it. So rush along at once the names of intending builders whom you know of now, and make enquiry so that you can send in more names later on.

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Profits In Corn and Root Growing

Below are given the results of the yield and the cost of growing 30 acres of corn and 15 1/2 acres of roots on the Macdonald College Farm. These figures are kindly furnished the readers of Farm and Dairy by Mr. John F. Fyler, superintendent of the college farm, in response to some adverse criticism of his methods of cultivation. Mr. Fyler promises to furnish us in the spring with full directions as to the land to select, plowing, harrowing, cultivation, etc., for both corn and roots so that others may have such excellent results as shown below, even in a very poor season. Read on another page Mr. Fyler's reply to those who have attacked him.

PROFITS IN CORN GROWING	
Yield and cost of growing 30 acres of corn:	
Rent of 30 acres, at \$3.00 per acre.....	\$ 90 00
Manure 1/2 of rotation.....	50 00
\$5.00 per acre.....	150 00
Ploughing, at \$2.00 per acre	60 00
Harrowing 4 times, at \$3.00 per day, 7 days.....	21 00
Seed—15 bushels, at \$1.45 per bushel.....	21 75
Sowing 3 days, at \$3.00 per day.....	9 00
Cultivation 4 times, 6 acres per day—20 days.....	60 00
Thinning and hoeing 40 days, at \$1.50 per day....	60 00
Cutting team 7 days, at \$3.00 per day.....	21 00
Drawing 7 days, 4 teams, 25, at \$3.00 per day.....	84 00
Men loading and unloading, cutting, tramping, 96 days, at \$1.50 per day.....	144 00
Use of engine and machinery 7 days, at \$7.00 per day.....	49 00
Total.....	\$ 769 75
Total weight of corn—480 tons, 1.44 lbs., cost.....	\$ 769 75
Value on farm for feeding, \$2.50 per ton.....	1,201 80
Profit in growing from 30 acres.....	\$ 432 05
Average yield—16 tons, 48 lbs. per acre.	

PROFITS IN ROOT GROWING	
Cost and yield of 15 1/2 acres of roots:	
Rent of land, 15 1/2 acres, at \$3.00 per acre.....	\$ 46 50
Manure 1/2 of rotation, at \$5.00 per acre.....	77 50
Ploughing previous summer, at \$1.50 per acre.....	23 25
Cultivating and harrowing previous summer.....	24 00

Total weight of roots—350 tons, 1,655 lbs.	
Average yield—23 tons, 1,431 lbs. per acre.	
Value on farm for feeding, at \$2.50 per ton.....	\$ 899 07
Profit in growing from 15 1/2 acres.....	\$ 247 92

Handling a Prize Winning Herd

"You will remember that for the last two years I have been a competitor in the Dairy Herd Competition," said Mr. W. E. Thompson, of Woodstock, who won the 3rd prize in the Dairy Herd Competition, in addressing the dairymen's convention in Brantford recently. "Last year I was fortunate enough to get a medal. As far as I was concerned I made up my mind that this year I would not try for it. I did not feel that my herd was in shape to start out another season and win a prize in this competition. I had a little bad luck with one of my cows which I could not avoid. However, I saw Mr. Herts in Toronto and later on at the dairy district meeting in Woodstock, and he urged upon me to try again and finally I decided to enter this year.

"Therefore you may see that I made no preparation whatever, and took no special care of my stock. Last year some thought that I had fed more grain or expensive feeds than I got returns for, and this year I thought I would just feed my cows in the shape that I thought would be profitable. Last year I fed considerable more grain than I did this year.

"This year I fed nothing until about the fore part of July, when I started to feed one pound of bran and two pounds of meal twice daily until the first of November, amounting in all to about \$75.00 in round figures. That is not a great amount of money to spend for milk feed. I was a little short of pasture and was handicapped in not having a silo, so I made a practice of growing lucerne or peas and oats or any crop of that kind. I am only a common man, starting honestly in business, and it takes time to get these things up and running on a silo and expect to have it for next year. Lucerne and silage are necessary things to produce milk economically for these making."

Evidence from Another Prize Winner

"In the first place we have quite a large herd," said Mr. Mason, of Turrell, speaking before the recent meeting of dairymen in Brantford. "We have been in the dairy herd competition for three years and had to extend the prize list to give us a show; they gave five prizes and we happened to get the fifth one. Still we are quite pleased at that because it means that an average herd in sufficient condition to win a prize at all. My brother and I work together; he is older than I am and I



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Everyone intending fence building should send for our folder on Erecting Fences. It's full of valuable information on fence building, tells how to erect fences with fencing quickly and substantially, describes the many different fence wire and has an article quoted from Bulletin of U. S. Dept. of Agriculture on concrete post-making, showing how these durable posts can be economically made at home. Don't fail to write for a copy. It's free.

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would have preferred that he should have been here to have spoken for us. He is a married man and has lost a lot of his hair, and you would expect him to be wiser.

"Our father should have the credit of having the good herd, but he is not with us now, and we have taken the same herd and followed on with them and every year they have improved somewhat. They are all Holstein and Holstein grades, and by careful selection from year to year we have improved them. They can be improved yet to a great extent. We are trying to work into pure-breds. We have some and they have proven very satisfactory. They have a far larger capacity than the grades; they are larger and stronger cows.

GROW ALL THEY FEED

"We have always grown everything on our farm that we feed the cows," continued Mr. Mason, "except a little bran, and nearly every year we have sold some grain. Everything that the cows have made for us has been clear profit, but to figure out how much the clear profit has been from year to year is a pretty hard thing to do, because the prices vary from one year to another. I always think that when we produce everything on our farm the most important point is the price we get for it when we sell it.

When asked how their principal summer food Mr. Mason replied: "As summer food in the first part of the season we fed a little mixed grain, oats and barley chop. This year we fed a little alfalfa. We hadn't anything in the way of green food until the corn was large enough to cut and then we commenced feeding green corn. As Mr. Paget said last year at the Farmer's Institute meeting he believed it would be far cheaper to have a silo and feed silage, but we have never had one until this year and that is something we are going to do. We are going to feed corn early in the season. Mr. Clemons, of St. George, was at our farm last summer when we first commenced feeding, and he rather wondered whether there was anything in it or not, but he was convinced that it helped to hold our cows at a steady rate. From the time we started feeding them I do not think they varied from five to ten pounds a day for the whole herd, and I am sure we could not have done that last fall when it was so very dry and the pasture didn't grow after the middle of August."

"What is your method of selecting your cows," was asked? Mr. Mason said: "In the first place we raise them from our best cows and keep pure-bred sires, of the best stock we can get. The last few years we haven't had a heifer that buty would be first class. Our cows are all good stock now."

"Do you weigh the milk," was questioned? "Yes," replied Mr. Mason, "we have been in the Cow Testing Association for two years."

"That is where you ascertain the good cows," continued the questioner. "Yes," concluded Mr. Mason, "and that, I think creates a surprise at the end of the season. When we are totaling up at the end of the season some of the cows that didn't give nearly so much in June and July would be giving a steady flow in the fall and they made me more money than the others because it is during September, October and November that the milk is always worth the most money."

Short Course at Truro, N.S.

Ed. Farm and Dairy.—The short course at the Agricultural College, Truro, was completed on Jan. 15th. We have had a regularly enrolled attendance of 203 in the men's course and 20 in the ladies' course, and there has been an intermittent attendance of over 300. Included among the number are 25 students from New Brunswick and 40 from Prince Edward Island; also some 100 from Great Brit-

tain, and the rest from the various counties of Nova Scotia. The course has been, in every way, the most successful yet held in the history of the college and the attendance points to a day, not very far distant, when the class rooms at the college must be increased. A number of the short course students are going in with the regular classes, the attendance at which will now stand at about 50.

Aside from the numbers in attendance at these short courses, it is most satisfactory to observe that they are constituted, for the most part, of the most progressive and intelligent farmers of the Maritime Provinces. It is, therefore, with every confidence that those interested in agriculture in these, the eastern provinces, are looking forward to a development of the agricultural resources, which will gradually bring this province up to the highest standing. When it is considered that four years ago the number in attendance at this course was 64, and the number in attendance at the regular course was 15, the readers will readily appreciate the progress which is being made.—M. Cumming, Principal.

Our Legal Adviser

SHARE OF MORTGAGE—A owns 200 acres, with a house valued at \$2,000 on it. B buys 100 acres and assumes half the mortgage. A gives B a deed but the mortgage is in A's name. B will pay off his share. Will the old deed and the receipts for payment of mortgage make it as good as a clear deed, or will B have to have a new deed made.—Anxious, Lovington, Ont.

B will not require any further conveyance from A, but it will be necessary for B to obtain from the person holding the mortgage, and to register, a discharge of the mortgage. If A is prepared to pay his part of the money, an absolute discharge will be obtained, but if not B should arrange with the holder of the mortgage to give him a discharge from the mortgage, of the 100 acres which he has purchased.

MAKING SPRUP ON SHARES—A has a good sugar bush of 50 or 600 trees with a sugar house and brick arch for boiling. B furnishes the equipment, including wood and runs the bush. What share of the product should A get?—Constant Reader, Wentworth Co., Ont.

The share to be had by each is largely a matter of adjustment between the contracting parties. The usual practice would be for A to get from 1/4 to 1/2 of the products, depending upon the season. Should it chance to be a "lean" year, B would fare but poorly, did he only get a half share, whereas in a good year, he would get more than a just share. The best method would be for A to take a straight third and a certain percentage of the proceeds in addition; the amount of such percentage to be agreed upon by the parties concerned.

BLACK WILLOW FOR FENCE POSTS—Will swamp or black willow last very long when sunk in the ground for fence posts?—W. H. L., Beatonville, Ont.

Swamp or black willow, or any other kind of willow is very short lived when placed in contact with the soil as fence posts or otherwise. I am not in a position to say the exact life of this kind of wood as a fence post, but I should not think it would exceed five or six years at the most. The life of such a post could be prolonged by painting with creosote and better still by immersing in heated creosote. If it were used, use very many willows, as the creosoting would certainly be worth the cost. J. Zavitz, Forester, O. A. C.

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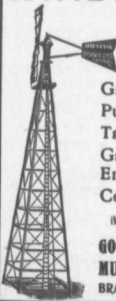
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HORTICULTURE

Trunk Splitting

W. T. Macoun, Central Experimental Farm, Ottawa.

Trunk splitting was long thought to be due to the expansion of trees which had been "hide-bound." We do not believe that there is such a thing as a "hide-bound" tree.

While so far as is known no experiments have been tried to determine the cause of trunk splitting, yet several theories have been advanced, the best one being that the splitting is due to a sudden lowering of temperature which cools the outside layers of wood in the trunk, making a considerable difference in temperature between the outer and inner layers, causing the former to contract. A clearer example is the cracking of ice when there is a sudden fall of temperature, due to the contraction caused by the upper layers of ice coming in contact with the cold air. It is trees which have made late growth and are well charged with sap that are usually affected, hence thorough ripening of the wood in fall is necessary for the prevention of this injury.

Home-Made Soluble Oils

"Home-made Soluble Oils for Use Against the San Jose Scale," is the title of Bulletin 179, issued by the Virginia Agricultural Experiment Station. From tests made at this station, the following conclusions are drawn.

Home-made soluble oils are recommended for trial in place of the lime-sulphur wash, under certain conditions. Further tests must be made before we can recommend them unreservedly. For general orchard

spraying the lime-sulphur is probably more satisfactory.

The various prepared or patented brands of soluble oils cost about three times as much as the home-made product containing the same per cent. of oil. Our tests indicate that the home-made oil is as effective as the prepared oil. The home-made oil is about the same as the cost of lime-sulphur.

The home-made soluble oil is more practical for the commercial orchardist than for the man who has only a few trees, unless one person will make the material for a neighborhood.

It is not quite as troublesome and disagreeable to make soluble oil at home as it is to make lime-sulphur. Apply the soluble spray only in the dormant season. The trees should not be pruned before they are sprayed, as the oil may injure the cut surfaces, unless they are painted.

The home-made soluble oil spray is recommended for trial against the San Jose scale and the maple scale. It is not recommended for use against the scurfy scale.

Apples Too Large

In a recent report of the Department of Trade and Commerce, Ottawa, Mr. J. S. Larke, Canadian Commissioner for Australasia states: "The first considerable shipment of apples from British Columbia landed in admirable condition. The only objection to them is that they average a little too much in size for the fruiterers to handle to the best advantage. Three pence each is charged for them."

There has been an unusually large importation of apples into Australia and New Zealand from California and Oregon. The Californian apples affected with the codling moth were refused admission into New Zealand, but were allowed into this market after being treated. The consequence was a very great congestion of apples

upon the arrival of the Canadian fruit.

Good Australian fruit does not come into the market until the beginning of the year, and apples from Canada or the United States arrive here when there is comparatively little dessert fruit to be had."

Strawberry Culture

Editor, Farm and Dairy.—The article in your December 9th issue, by Mr. Rittenhouse, has many valuable points, but there are a few things in which my experience has taught me are not applicable or advisable for all strawberry growers. His plan for preparation of the soil is excellent, also his advice about selection of plants. But my experience regarding time of planting does not correspond with his. My best successes have been with plants set just as soon as I can work the ground; in fact, two years ago I received some plants from the United States before the frost was all out of the ground and I had difficulty in getting the spade deep enough into the ground to admit the roots to proper depth, but without harrowing the ground which, of course, had been fall plowed, I got them in and never had a better stand of plants than these gave me. We had frost afterwards that froze the ground quite hard, yet did not seem to injure the plants.

In setting, I use two boys to take arms placing the plants in the hole made by the spade and can thus set about 4,000 in a day. In making the holes, I hold the front of the spade towards me, pressing the handle from me a little and back again, having the hole on the side of the spade opposite from me so that, when the plant is dropped in and the spade withdrawn, I can press the earth against the roots with my foot without any inconvenience, thus attaining speed as well as effectiveness.

We cannot put too much stress on the desirability of cultivating with a light cultivator as soon as the plants are set. It is also advisable to use the fingers around every plant, to stir the soil about them, leaving a little loose earth on top.

I, too, have had serious damage threatened by cut worms but have managed to exterminate them completely as soon as detected, by mixing a small quantity of Paris green in slightly moistened bran and scattering it lightly along the rows. The worms are very fond of bran and seem to eat it in preference to the foliage. On getting 'rue' poison, they crawl under the surface of the ground and die.

While I am aware that Williams is the great commercial berry at Jordan, I often wonder why it is. I do not know of any authentic comparison test that has ever placed Williams higher, or even as high in yield, as many better berries. While it is a good shipper, its green tip and poor color makes it a very unattractive market berry. In our market, when Williams were a drug at seven cents a box, I sold Busters at its cents and the latter is a much better yielder. True, Buster is not so good a shipper, but Lovett, Sample and Parson's Beauty, are as good shippers, as good yielders and decidedly better sellers. I now have eight acres under strawberries, including 62 varieties, but only planted 25 plants of Williams last spring.—W. J. Kerr, Ottawa.

Resolve to treat the orchard for what there is in it and not as a side line.

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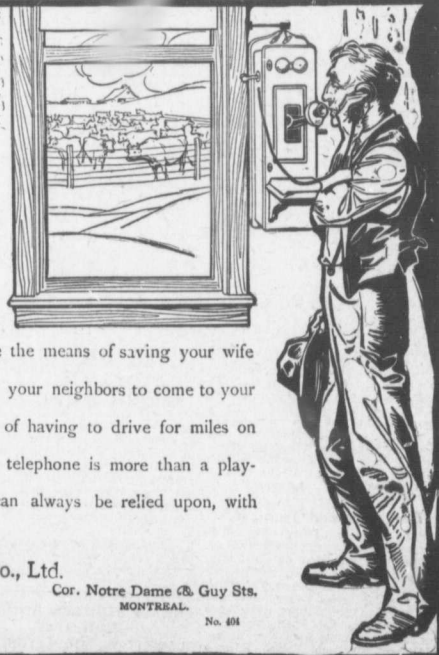
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POULTRY YARD

Don't Frighten The Hens

If any class of stock require careful unobtrusive handling it is the poultry. Don't speak cross in the hen-house, never scare or frighten in any way. A writer in "Farm Poultry" gives his experience regarding the subject. Very few who keep poultry are blameless.

In 1896 I came into possession of forty-two hens, which after a time I dressed for market, cleaning them for the cook. All but one were in perfect condition; that one having the entire bunch of eggs very hard, and all enclosed in a sort of sack. I have never seen anything like it since, but have had many cases of hardened yolks and yolks loose among the intestines.

For a few years I kept a few hens and found no hard yolks when the poultry was dressed for my customers. I increased my stock to such an extent that I was obliged to have help to care for it. In 1903 I took a thirteen-year-old boy to help. He did pretty well, but things began to get stirred up, and the hens were not as quiet as formerly. I do not remember the internal state of the poultry dressed while he was with me, because I had not at that time associated a boy and hard yolks together. Two years later I had a eighteen-year-old boy; he was quick motioned, and in a hurry to get through the poultry work to get at the farm work. The hens became nervous, and ran away rather than towards us, and did not lay very well, and I began to find hard yolks in dressing the poultry. My latest and last (I hope) helper was a fourteen-year-old boy, good in many ways, but quite irresponsible in some. The hens under his influence became so wild that when any one of the family walked by the hen runs the poultry would run and fly to the opposite side of the yard, often beating against the wire in their haste to get away from whoever was near. This boy, in feeding the hens, would sometimes get a lot of them together eating what he had put down for them, then he would throw the feed pail in their midst just to see them fly and flutter.

It was while he was with me that I came to the conclusion that these sudden frights and starts caused the trouble with the egg cluster, for the hen without hard yolks was the exception whenever I dressed any of those fowls. I talked to the boy and explained to him the effect of roughness and too much haste in moving among poultry, and I showed him the hardened yolks. I had one pen of nine Indian Game that became so wild they would break a window glass in trying to get out of the hen-house when I entered it, and they stopped laying. I decided to kill them. After I had dressed them the boy asked if I had found any hard eggs in them. I told him I had. I believe he had done something, perhaps many times, which had spoiled these hens as layers. Certainly I did not have hard yolks until after the hens had been well stirred up and scared. I do not blame the boys for all the trouble, for I more than suspect that I caused a share of it, at least in a pen of Plymouth Rocks. Some times a customer would come and insist on having a hen or two immediately. I could not induce such ones to wait until night and come when I could quickly pick the hens off the roosts. Rather than lose the trade, I would get a wire and catch them by the leg as they went past me. The hens very soon found out what I was doing, and kept away from me. Then I slowly followed them about and worked until I caught what I wanted. It scared them, how-

ever, and they rushed with more or less haste into the corners. In less than a week the hens stopped laying. I did not dress any of them from that pen at that time, but sold them alive, so I do not know the state of the egg cluster.

I have sent the boy away, and have sold every hen and chicken I had on the place, and next spring intend to begin all over again, keeping only as many fowls as I can care for myself. I will not catch any for a clamorous customer, and if then I find hard or dead yolks I shall believe I have not found the reason therefor.

Uric Acid Poisoning

Some time ago I purchased two hens. On killing and dressing I found between the skin and flesh a complete network of small whitish lumps about half the size of grains of wheat. I showed the meat to a neighbor, who said it was diseased. I have never seen anything like it before. Can you give me any idea as to what was wrong? Many fowls had been kept in one place.—G. S. B.

Prof. F. C. Harrison, bacteriologist at Macdonald College, states that the trouble is caused by a deposit of lime salts beneath the skin of the bird. The secretions from the kidneys of birds are much denser than from other animals, and should the kidneys be in any way affected that they are not eliminating quickly enough, urates are transferred and seen to be started up in various situations, giving rise to uric acid poisoning. Anything that will assist the action of the liver will benefit. Try Carter's little liver pills.—F. C. E.

Poultry Notes, Original and Otherwise

It costs no more to feed a flock of good hens than it does a flock of poor ones.

As a rule pullets lay better than old hens, but neither will lay without feed.

Though doctoring chicks is not profitable, it pays to know how to prevent sickness.

A change of food often helps layers to start laying again, hens like other animals like variety.

Except during the breeding season, keep males away from the flock, hens lay better if left alone.

Hens that lay soft-shelled eggs may be helped by little more vegetables or green food and oysters-shell.

If a hen will not lay for her keep in eggs she should be made into just what she is best fitted for—a pol-pie.

Alfalfa makes an excellent feed for poultry in winter. Cut it up fine and steam it or throw a forkful in for litter.

One cannot raise chickens and lice together, the lice will thrive at the expense of the chicken. There is no profit in lice.

"The hen doesn't lay because she is too fat" is not correct. That "she is too fat because she doesn't lay" is nearer the mark.

Dampness in the poultry-house should not be allowed. Give good ventilation without drafts, and don't over-crowd the hens.

Lazy hens, like lazy men, are not money-makers; they eat up the profits of the busy ones. You can kill the hens if not the men.

Milk is a good poultry food whether for making eggs or flesh. It is good for the chick at all ages from the day it is hatched to the laying hen.

Start with the breed you think you want and if it is the right one for your locality and market stick to it; nothing is gained by changing breeds.

It is just as well to have a well-bred chicken as well-bred horse or cow. Any amount of food will not make a mongrel as profitable as a pure-bred under the same conditions.

In building the house do not have the roosts too high; two feet is high enough. Have them level, not step ladder style. Many hens get hurt trying to get to the top and shoving each other off.

Good Layers.—Every flock will have a few good layers with those that are not profitable and the whole flock may be condemned, though some of the hens may be the best to be obtained. It would be an advantage to separate the layers, for the reason that the laying hens require more food, while the others may be or get too fat. Sometimes it will pay to sell all the hens but those that have been excellent producers at all seasons.—F. C. E.

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To Farm and Dairy, was received this morning and I am well pleased with it.—B. G. Fraser, Argenteuil Co., Que.

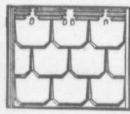
Farm and Dairy for many years has been a welcome visitor to our home. Its timely articles appeal to all members of our family and make its arrival more than appreciated.—Mrs. W. J. Stevenson, Ontario Co., Ont.

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Special Machines Designed for Dairies

WRITE FOR CATALOGUE

The Dairy Test at Ottawa

More interest than usual was taken last week in the results of the three day dairy test at the Ottawa Winter Fair owing to the fact that several Ayreshires were entered. The contest for first place was close there being only nine points difference between the first prize Holstein and first prize Ayshire. Last year no Ayreshires competed. The results of the test were as follows:

HOLSTEIN COWS	
Lbs.	P.e. Td. fat. points
Francy, 3rd. J. H. Caldwell, Fallowfield,	212.1 3.7 215.98
Idealine Pauline De-Kol, Geo. Rice, Tillsonburg,	216.8 3.25 210.42
Mauder Dekol, T. A. Spratt, Billings' Bridge,	227.3 3.1 207.00
Hasketon Belle 4th, J. H. Caldwell,	181.7 3.1 172.08
Bouncing Jess 4th,	

Martin McDowell, Norwich,	135.8 3.9 150.22
HOLSTEIN HEIFER UNDER 42 MONTHS	
Queen's Butter Girl, Geo. Rice,	150.7 3.12 135.52
Lady Colanthus De-Kol, Martin McDowell,	118. 3.7 126.02
AYSHIRE COW	
Jean Armour, Geo. Rice,	186.3 3.9 206.94
White Floss, H. & J. McKee, Norwich,	143.7 4.2 168.28
Sarah 2nd, H. & J. McKee,	155.8 3.49 167.82
Maggie Brown of H. H. N. Dymont, Clapton,	146.6 3.74 159.94
Spottie, H. & J. McKee,	137.3 3.85 154.20
Rosalie of H. H. N. Dymont,	136.4 3.6 146.50
AYSHIRE HEIFER	
Forget-me-not of H. H. N. Dymont,	106. 4.1 126.23
Star's Sarah, H. & J. McKee,	98.1 3.86 118.

SHORTHORN COW

Morning Glory 5th, Sam. Bray, Enfield,	136.2 3.46 143.38
Carleton Beauty, J. J. Hodgins, Hazel-dean,	100.1 3.76 110.88
Blossom, R. R. Reed & Co., Ottawa,	95.5 3.83 106.16
Pansy 4th, R. R. Reed & Co., Ottawa,	76.6 4.08 87.88
GRADE COW	
Jane T. A. Spratt, Billings' Bridge,	187. 3.09 175.28
Rosalie, R. A. Heron, Billings' Bridge,	169.7 3.53 171.50
Granny, Martin McDowell, Norwich,	151.8 3.32 160.18
Rose of Robin Hill, Wm. Ormiston & Sons, Columbus,	121.2 3.8 131.24
Spot, R. Reid & Co.,	108.7 3.74 116.04
GRADE HEIFER	
Lady, R. A. Heron,	149.9 3.02 132.66
Dina, Martin McDowell,	122.2 3.28 110.56
Tiny, R. A. Heron,	113.1 2.78 98.94
Molly, R. Reid & Co.,	76.5 3.7 81.60

Dynes, seventh by P. O. Collins, and eighth by Reed & Co. In the grade classes, the winners were Jos. Featherstone & Sons, Alex. Dynes, A. H. Foster, and Samuel Bray, of Enfield.

NOTES

Much of the success of the exhibition was due to the hard work of Pres. Peter White, of Pembroke, and of S. D. T. Elderkin, of the Department of Agriculture, Toronto.

There was some complaint by the exhibitors of dairy cattle over the fact that the roof leaked badly where some of the cattle were shown. The ventilation was so poor, the exhibitors had to break some of the windows to give the stock air. It was felt also, that the results of the dairy test should have been posted earlier, as full details were not made known until Friday.

The attendance was larger than in previous years. This was probably due to the addition of the horse exhibition and to the liberal advertising of the agricultural press. On the whole the attendance was not nearly as large as it should have been and as it is expected that it will be next year, owing to the success of this year's exhibition.

Good Reading for Farmers

At this time of year nearly every one is planning their reading material for the coming season. It is a good idea to read the very best material that we can obtain, which pertains to the business we have in hand. To this end we are always looking to find the best publication that will serve our purpose.

It is very gratifying to know that thousands of our readers have found Farm and Dairy so valuable and interesting during the past year, that they are renewing their subscriptions for 1909. We appreciate this fact and are assured by the way renewal and new subscriptions are coming in to us such a large number of Dairy is appreciated by the best class of farmers in Canada.

The new lists we are receiving from day to day are proving this fact conclusively and we shall do our best to merit the continued confidence of all Canadian farmers during the coming months. We have many valuable and interesting features to give our readers during 1909 and all of our present subscribers will make no mistake in renewing their subscriptions to the only weekly agricultural publication in Canada which is published at the ridiculously low price of only \$1 a year. Think of it. Fifty-two issues for \$1—less than two cents each.

The best evidence we can give our readers of how our paper is becoming appreciated and valued is to give a few extracts from recent letters received at this office. It is always best to let some one else "blow the horn" instead of blowing it yourself. The following good words will show in a measure the stand that Farm and Dairy is taking among its subscribers.

If you are going to say anything about our paper, let us have it. Tell your neighbors and tell us. You will then be killing two birds with one stone, for the more subscribers we get, the better paper we can give you.

We have some good subscription offers for clubs of new subscribers and our live stock offers are becoming more popular than ever. Sample copies will be cheerfully sent on application to any name you may send us or any list of names.

WHAT OUR FRIENDS THINK OF US

"I could not do without Farm and Dairy. I am pleased that you have started a feeding column in the paper as it is a profitable way for dairymen to study. The legal advisers' column alone is worth the price of the subscription."—Jas. E. Hopkin, Manulife District, Ont.

"I am greatly pleased with the new

The Ottawa Winter Fair

(Continued from page 2)

There were 14 entries in the class for hunters, including two from Earl Grey, one from Hon. Clifford Sifton, five from Dr. R. E. Webster of Ontario, and two from Mr. J. B. Duford, of Ottawa. The three first places were captured by Dr. Webster, Mr. Duford's Wyoming King fourth and Earl Grey's Rex, fifth.

BEEF CLASSES

In the Shorthorns, the principal winners were W. C. Edwards & Co., of Rockland; Peter White, Pembroke; Jas. Lesak, Greenbank; and Jos. W. Barnett and W. A. Wallace at Kars. In Galloways, D. McCrae, of Guelph had things his own way. Prominent winners in the grade classes were B. Slatery, of Ottawa; Jas. Lesak; A. A. Armstrong; and R. Reed & Co., of Hintonburg.

THE SWINE CLASSES

Prominent among the winners in the Yorkshire classes were Jos. Featherstone & Sons, of Streetsville; P. O. Collins, of Bovesville; A. H. Foster, of Twin Elm; and Alex. Dynes, of Ottawa. The exhibitors and winners in the Berkshire classes were W. A. Wallace, of Kars, and A. Dynes. The prizes for Tamworths were pretty evenly divided between R. Reed & Co., of Ottawa, and A. Dynes. The winners in the grade classes were Jos. Featherstone & Sons, Samuel Bray, Alex. Dynes, and R. Reed & Co. The three best pure-bred export bacon hogs were shown by P. O. Collins, the second, third and fourth prizes going to Jos. Featherstone & Sons. The sweepstakes for three best export bacon hogs of any breed were captured by P. O. Collins, with Jos. Featherstone & Sons second.

SHEEP

The prizes in the Cotswold section were divided between J. W. Lee & Son, and John Sackett, of Lincoln, by L. Parkinson; in Leicester, by G. W. Parkinson; and in Oxford, by J. W. Lee & Son. The prizes for Shropshires were divided between A. M. Stewart & Son, of Dalmeny, John Campbell, of Woodville, and W. A. Wallace of Kars. Telfer Bros. and George Baker divided the prizes for Southdowns. The only exhibitor of Dorset Horns was R. H. Harding, of Thorold, and of Hampshires and Suffolks, Telfer Bros.

DRESSED CARCASSES

In the dressed carcass competition, the winners in the beef classes were A. A. Armstrong, of Fergus, Alex. Dynes, of Ottawa, and W. C. Edwards & Co., of Rockland. The first, third and sixth prizes for best carcasses of three pure-bred bacon hogs were taken by Jos. Featherstone & Sons, of Streetsville, the second by A. H. Foster, of Twin Elm, fourth and fifth, by Alex.

FENCE TALK No. 2

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Let us send you a booklet that proves why Page Fences wear best and tells how you can prove fence-quality before you buy it. Get the booklet from the nearest place of the Page Wire Fence Co., Ltd., Walkerville, Toronto, Montreal, St. John, Vancouver, Victoria.

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Sample, Circulation Manager,

name of your paper Farm and Dairy as the old name was far too long. I like Farm and Dairy very much and would not like to do without it."

M. G. Gould, Renfrew Co., Ont.
"I am in receipt of the past cards, 'A Trip Around the World,' which I received as a premium for securing a new subscription to Farm and Dairy. I wish to thank you for these cards as they are the nicest set I have ever seen."—Orpha MacCoubrey, Brant Co., Ont.

"As I am giving up farming and moving to the city I will not renew my subscription to Farm and Dairy this year. If I was to be on the farm however, I would not do without Farm and Dairy as I consider it a paper that any farmer needs for information on dairying."—Alex. McKay, Alpena, Mich.

"We received the fountain pen which you so kindly sent us for securing one new subscription to Farm and Dairy, and are much pleased with it."—T. Paton, Pitt Meadows, B. C.

"Accept my thanks for your excellent premium of picture post cards. They are the best value I have ever seen for securing only one new subscriber. Farm and Dairy is much appreciated."—Homer J. Maybee, Hastings Co., Ont.

"Every farmer should take Farm and Dairy. There is an immense amount of useful information contained within its pages."—P. C. Buchner, Norfolk Co., Ont.

"I received my watch all-right which you sent me for getting one new subscription to Farm and Dairy. It keeps good time and I am very much pleased with it."—Thos. Purkis, Langley, B. C.

"I received your picture post cards as a premium for sending in one new subscription to Farm and Dairy and must say that they are worth the subscription price alone."—W. J. Hopkin, Algoma, Ont.

"I am well pleased with Farm and Dairy and would like to get some new subscribers in my vicinity in my spare time."—D. D. Bowman, Oxford County, Ont.

"I do enjoy the weekly visit of Farm and Dairy. It tells me something I like to hear and it is getting better each issue."—R. R. Jones, Elgin Co., Ont.

"I am an old subscriber to Farm and Dairy, having taken it for a number of years. It is getting better every year. Every issue is the best yet."—M. Michael, Welland Co., Ont.
"You are publishing a very good paper in Farm and Dairy."—David Wilson, Cardwell Co., Ont.

"Farm and Dairy has a bright future before it."—Leslie Tennant, Brant Co., Ont.

"I like Farm and Dairy very much and would not like to be without it." H. Lawrence, Huron County, Ont.

Annual Live Stock Meetings

The annual meeting of the Canadian Jersey Cattle Club will be held on Thursday, Feb. 4th, at 10:30 a.m., at the Walker House, Toronto. All those attending should secure standard certificates from the railway agent, which will entitle them to reduction on the return journey.

Dominion Cattle Breeders' Association—Temple Building, Toronto, Monday, February 1st, 2 p.m.

Ontario Large Yorkshire Swine Breeders' Association—Palmer House, Toronto, Tuesday, February 2nd, 7 p.m.

Dominion Swine Breeders' Association—Temple Building, Toronto, Wednesday, February 3rd, 9:30 p.m.

Ontario Berkshire Society—Palmer House, Toronto, Wednesday, February 3rd, 1:30 p.m.

Ontario Sheep Breeders' Association—Temple Building, Toronto, Friday, February 5th, 9:30 a.m.

Dominion Sheep Breeders' Association—Temple Building, Friday, February 5th, 1:30 p.m.

The Feeders' Corner

The Feeders' Corner is for the use of our subscribers. Any inquiries are invited to ask questions, or send items of interest, or questions will receive prompt attention.

Oil Cake vs. Ground Flax Seed

I read with much interest and profit the able article on this subject of Dec. 25th entitled "Oil Cake as a Stock Food," by Mr. F. B. Warren, B. S. A., to all of which I F. B. Warren, B. S. A., to all of which I heartily agree. The only criticism that I have to offer is that these commercial feed stuffs are rather expensive and I believe are sometimes adulterated. Would it not in your opinion be preferable to use the pure flax seed meal from which the oil has not been extracted, feeding of course in much smaller quantities? If home grown, has the advantage of being much cheaper and we are certain that it is unadulterated.—M. E. Ponduit, Ont.

Flaxseed meal, that is ground flax seed from which the oil has not been expressed is a very valuable feeding material. It is, however, for many purposes not so valuable as oil-cake meal, or ground flaxseed from which the oil has been extracted. The flaxseed meal is very valuable in small quantities for all classes of live stock. It is, however, not safe to feed it very generously. Oil-cake meal is a valuable feed for all classes of live stock, and may be fed quite freely, although it too may not be fed with a free hand. Flaxseed meal is particularly valuable in small quantities for calves and young breeding stock. Oil-cake meal is unequalled as a feed for beef and milk production. It is likewise of very great value for horses, either working or breeding.

Flaxseed sells on the open market for about double the price that oil cake meal will command. It is not so valuable for beef cattle, young cattle, horses or sheep as the oil cake meal. It is, however, worth more for calves, or small pigs, or as an occasional feed for the other classes named.

Flax is a very exhausting crop on the soil. If grown in small quantities along with other grains, this feature might possibly be of very minor consideration, but is worthy of notice. Oil-cake meal is no doubt adulterated more or less, but even so, at prices now ruling it, it is still cheap feed. If bought outside it is more likely to be adulterated.—J. H. Grisdale, Agriculturist, C. E. F., Ottawa.

Corn Fodder for Horses

I have a large quantity of well cured corn fodder and am rather short of hay, and the straw is not much good on account of the heavy rains after being cut; it was also cut in a very dry season, you think it advisable to feed much fodder corn to idle horses and colts?—F. McP., Glanford Stn., Ont.

Fodder corn free from mould or other fungous growths is very suitable for feeding to horses. The best plan to follow would be to run the corn fodder through the cut box and along with it a small proportion of straw and hay. Not more than enough to last a week or ten days should be run through at a time, unless there is a large floor space on which it can be spread so loosely as to insure its not heating. In cutting the corn fodder for horses be careful to keep out any dirt, dusty or partly decayed stalks. Such stalks or bundles may be advantageously and safely fed to cattle. They are apt to induce digestive troubles which might lead to heaves in horses. To feed along a meal mixture of whole oats and bran, equal parts by weight for idle horses, three parts of oats and one of bran for working horses. A 1,600 lbs. horse should get about 20 lbs. a day of the mixture or say 10 lbs. corn fodder, two lbs. straw, and 10 lbs. hay. If working add ten to 15 pounds of the three oats, one bran

mixture. If idle add three or four pounds of the one oats, one bran mixture.—J. H. Grisdale.

Better Express Service Wanted

A deputation of prominent fruit growers met the Board of Railway Commissioners in Toronto recently and laid complaints against the express companies. They asked that the companies be compelled to give lower and more uniform rates and to handle fruit with greater care than has been the custom in the past. Mr. W. H. Bunting, of St. Catharines, stated that many growers have stopped shipping by express and have taken to freight on account of the unsatisfactory express conditions. He referred to losses during transportation and to the difficulty in securing settlement of claims. It was pointed out that the growers take the fruit to the cars themselves and that same is unloaded, in the case of Toronto, by the commission men, the express companies thereby having less trouble with it than with ordinary merchandise and therefore should give lower rates.

Mr. James E. Johnson, of Simcoe, showed that express rates from Simcoe to Hamilton and Toronto are much higher than from St. Catharines to these cities although the distances are about the same. He claimed that while shipping fruit out of Chicago he had found the express companies in

the United States willing to pay losses from damage to the fruit caused by delays in transit for which the railways were responsible.

Mr. E. D. Smith, of Winona, pointed out that if Ontario growers are to compete in the western Canada markets against the fruit from California and Oregon which, owing to its dry texture is shipped there by freight, it must be forwarded by express. The express companies' charges are so excessive it makes it difficult for Ontario growers to do so. He protested against the claim in the agreement that the express companies compel the shippers to sign, relieving the former of any liability for damage to the fruit caused by delays to the cars while in transit. Mr. Smith thought that the express companies should be liable for such loss.

A number of other growers addressed the commission. A deputation from Grimsby asked for a general reduction in express rates, a graded rate on size of shipment, the stopping of

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Thirty Yorkshires of breeding age. Both sexes. From imported and homebred stock.

By R. E. GUNN, Beaverton, Ont., Dunrobin Farm. A selection of his choicest young Boars.

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Wellington, Ont.
Auctioneer, GEO. JACKSON, Port Perry, Ont.

pliffing and the rough handling of fruit, the placing of responsibility for delay in handling fruit, proper accommodation and suitably ventilated cars. After hearing the evidence, the chairman of the commission, Judge Maybee, ordered the express companies to confer with the fruit men with a view to meeting their wishes.

Danish and Canadian Bacon

(Continued from Page 1.)

"We should, however, be sure that we know what a bacon hog is. It is not necessarily a long legged, unthrifty animal, A good bacon hog weighs more than most people expect. They have good bones and are well fleshed and weigh better than fat animals.

"The English bacon consumer is very particular about what he eats. If he does not get what he wants he does without. If we, therefore, do not give him the article he demands we are forced to sell in another market. The poorer classes in Great Britain consume the cheaper class of bacon which is made largely by the cheap American fat hog. If, therefore, we cannot supply the Wiltshire sides, which sell at the highest prices, we must compete against the cheap United States product. It is because we put many hogs with thick fat necks and similar defects on the market that much of our pork sells at a disadvantage.

Fairs Meeting

The annual meeting of the Eastern Ontario Fairs' Association was held in Ottawa last week.

The officers elected for 1909 are: Pres., R. J. Jelly, Brockville; 1st vice-pres., James Irvine, Winchester; 2nd vice-pres., W. K. Farlinger; secretaries, R. B. Faith, Ottawa.

Interesting addresses were given pertaining to suitable exhibits at fall fairs, by Mr. A. G. Gilbert, in charge of the poultry department, and by Mr. W. T. Macoun of the fruit department at the Experimental Farm, Ottawa. Mr. H. B. Cowan, of Peterboro, Ont., Editor-in-chief of Farm and Dairy and former provincial superintendent of agricultural societies, and Supt. J. Lockie Wilson of Toronto, gave addresses. Mr. Cowan claimed that Ontario would be better off if it had 250 instead of over 350 agricultural societies as the societies then would be larger and could offer better prizes.

Mr. Wilson, who is provincial superintendent of fairs, advocated having spring and fall stock shows and also crop competitions.

Items of Interest

The Canadian Seed Growers' Association will hold their annual meeting at Ottawa, February 4th and 5th.

The Ottawa City Dairy Co. have added a bacteriological department to their plant. Mr. T. H. Rimmie, B.S.A., of Durham, Ont., is in charge of the department.

A case of infraction of the Act respecting the inspection and sale of food was recently tried in Orangeville in which the defendant, Mr. Sam Duck, of Grand Valley, was convicted and fined, his fine and costs amounting to over \$40. He had purchased a quantity of ordinary butter which he branded as creamery. He also secured a number of wrappers so marked which he supplied to farmers' wives. The butter for the most part found its way to Toronto, where it was confiscated.

A Corn Growers' convention and exhibition will be held in the Town Hall of Essex, Ont., February 9th to 12th

inclusive. It is being arranged for by the Essex Branch of the Ontario Department of Agriculture under Mr. A. McKenney, and the Essex and Kent Farmers' Institutes, Prof. J. S. Klunk, of MacDonald College, Que., will place the awards. Mr. Bigger, manager of the Walker Farm, J. O. Duke and other practical men will be present and take part in the discussion and assist in the work.

Mr. T. C. Martin, editor of the Dundee "Advertiser," who was a member of the commission that visited Canada in 1908, in addressing the Farmers' Club at Dundee, Scotland, recently,

said he thought the Scotch farmers on the commission brought from Canada the idea that they had not much to learn from Canadian farmers. Cultivation in Canada, he said, was by no means perfect. There was a good deal of slovenly work done, and the weeds were abundant. Another impression he formed was that Canada was going to be a sober nation. He did not remember one banquet of the many held at which alcohol beverages appeared. The Toronto municipal banquet was on a large scale, but they had nothing to drink but mineral waters and some concoction of ginger.

The Canadian Bank of Commerce

ANNUAL MEETING OF SHAREHOLDERS

The forty-second Annual Meeting of the Shareholders of The Canadian Bank of Commerce was held in Toronto on 12th January.

After submitting to the meeting the Directors' report for the past year and the balance sheet, the General Manager addressed the meeting. He spoke in part as follows:

GENERAL MANAGER'S ADDRESS
The net profits of the past year show a decrease of \$125,016.89 as compared with the figures of the previous year, but they are slightly in excess of 16 1/2 per cent. on the paid-up capital. Under the circumstances we feel that this result is a very satisfactory one. Had it not been that the volume of our loans was well maintained during the early part of the year, the decrease would have been much greater.

We have paid the usual dividends at the rate of 8 per cent. per annum, and after providing for customary payment to the Pension Fund and for some special subscriptions, and adding \$1,000,000 to the rest, we have been able to set aside \$300,000 for Bank Premises Account, and to carry forward undistributed profits of \$161,248.83. This emphasizes the position this Bank is in as regards the maintenance of its present rate of dividend, and, while some of the shareholders may feel that they are entitled to a larger distribution of the profits of the Bank, we believe that the majority will agree with us that the present moment, when we are facing a period of diminished demand and consequently lower rates for money, is hardly opportune for the consideration of this question, and that policy your Executive has followed of strengthening the foundations of the Bank is that which will tend most surely, in the not distant future, to the realization of the hopes of those who look for increased returns. It is possible that some may think our expenditures on bank premises might now be lessened to some extent, and in this connection we may say that the principal buildings which we feel at the present time are necessary should, in the course of the next two years or thereabouts, be completed. But the rapid extension of the Bank in the newer parts of this country, and the remarkable growth exhibited by many of the cities and towns of these new districts, are constantly making demands upon us for accommodation which we find it difficult—indeed, well nigh impossible—to obtain in any other way than by erecting our own buildings.

During the year our deposits have increased by \$7,896,738, or almost eight million dollars, of which about six million dollars is in deposits bearing interest. It may be interesting to note that, starting last year with deposits of 187,041,067, some of which were of a temporary character, being balances of large accounts in process

of adjustment, there was a decrease until April, when we reached the lowest point, \$82,257,018. The past six months showed a steady increase, culminating in our record of \$185,037,786. On the other side of the balance sheet our loans stand at \$37,692,785, as compared with \$38,765,829 in our last report. The decrease being mainly under the heading of "Current Loans and Discounts" which represent almost entirely our share of the commercial loans of the country. In this item the decrease is \$7,375,622; while, on the other hand, our Call and Short Loans have increased \$5,241,327.

We have not had a recurrence of the difficulties attending the marketing of our crops, and perhaps a word on this question will be out of place. There was little or no apprehension of stringency during the crop season. Our easier financial position, the wise provision for an emergency circulation, and the fact that a large portion of the crop was moved with exceptional rapidity before the close of navigation, all tended to obviate these difficulties; still there is much need to consider seriously permanent measures for financing a crop movement of such large proportions. It is manifestly necessary that there should be a larger amount of bank capital available as a basis for our circulation, but, even with a considerable augmentation of bank circulation and the thoughtful interposition of Government measures of relief, we shall still be brought face to face with the difficult problem of taking care of immense stores of grain after the close of navigation, when the interior movement is over and the grain is warehoused for long periods.

In November, 1907, when the foreign loans of Canadian banks were at their low point—\$64,774,000—the Canadian banks held deposits elsewhere than in Canada amounting to \$54,319,000, so that not more than \$10,000,000 of Canadian funds were being lent outside Canada. Moreover, the larger portion of these loans is carried in New York at 24 hours call—practically as readily available as cash. Except at rare intervals, New York call

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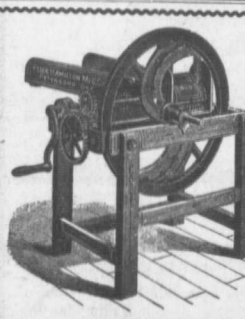
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On payment of a small premium our Company will insure your Stallion, as well as your Horses, Mares, Colts, Fillies, Bulls, Cows, Calves, Hogs and Sheep against death by accident or disease.

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Peterborough, Ontario

loans bear a much lower rate for interest than Canadian mercantile loans; consequently the banks aim to carry only such amount at call in New York as, with the cash carried here, will constitute a reasonable reserve of cash and immediately realizable funds. Notwithstanding all that financial critics have written

about the Canadian banks sending to New York moneys needed in Canada in order to take advantage of the high rates occasionally prevailing there, such a thing as a bank curtailing its commercial loans in Canada for a purpose of this kind is absurdly improbable. Only occasionally during the past fourteen years have excessive

rates for call money in New York prevailed for more than a few days in a year, and no sane banker would think of sacrificing permanent business connections in Canada, of even the smallest kind, for such a temporary advantage. Self interest will at all times be a sufficiently weighty force to prevent the banks from lending Canadian

funds outside of Canada, except to the extent that is necessary for the purposes of their cash reserves.

From the figures quoted before it will be seen that, so far from the business interests of Canada being prejudiced by the policy of the Canadian banks in this matter, they are

(Continued on page 22)

Every Safe Lock Shingle is made to meet the rigid requirements of the British Government for Admiralty and other Public Service



to proper size for Safe Lock Shingles. —The only shingle with galvanized edges.

—The only shingle sold with a positive protective guaranty against lightning, backed up by a free insurance policy signed and sealed by the manufacturers, the Metal Shingle & Siding Company, a \$200,000.00 Canadian corporation.

Every Canadian farmer who expects to put up a new barn or house or to re-roof old buildings is directly interested in this extraordinary free offer.

Think of it! A straight-out lightning insurance policy free from conditions of any kind. It is the most liberal roofing offer ever made to Canadian farmers.

Insurance records show that one-half the fire losses on barns in Canada result from lightning. The property loss in these cases amounts to many thousands of dollars every year.

Safe Lock Shingles have been on the market for more than ten years, and in all that time no building covered with them has ever been harmed by lightning.

This proves to us that Safe Lock roofing is a positive guaranty against lightning.

Anyway, we are willing to show our faith in Safe Lock Shingles and will protect you from lightning without one cent additional cost to you, directly or indirectly.

Safe Lock Shingles are sold at the same price as shingles known to be inferior in quality of steel, galvanizing and construction.

Safe Lock Shingles lock positively and securely on all four sides. They cannot be blown off, nor can they be pulled apart through the warping of the sheeting, or in any other way.

And remember this—No other shingle is a Safe Lock Shingle.

Safe Lock Shingles can be found in every part of the Dominion of Canada where they have been subject to storms of all degrees of severity.

No building covered with Safe Lock Shingles has ever been unroofed.

We want you to know what some of the users of Safe Lock Shingles say of them.

R. T. McLAUGHLIN, Fair View Farm, Alba, Ont.—“The ‘Safe Lock’ makes your shingles absolutely wind and water proof. They are the best shingles on the market to-day.”

F. B. DOUD, Branchton, Ont.—“The Galvanized Steel roof is apparently as good as when put on in 1898. The ‘Safe Lock’ Shingles make a lasting, storm-tight roof, and give clean eistern water. “I am satisfied that I put on a good roof.”

W. J. McPHERSON, Berryton, Ont.—“The ‘Safe Lock’ Shingles that I purchased from you ten years ago have given splendid satisfaction. The roof has never leaked a drop, and they seem to be just as good as the day they were put on.”

J. C. PAYNE, Cayuga, Ont.—“It must be ten years now since I bought the metal ‘Safe Lock’ Shingles, and up to this time I have no reason to regret their purchase. We have had wooden roofs put on since which are open in spots from the splitting and shrinkage of shingles. No difficulty, so far as I have noticed at least, has arisen with your Metal Shingles, and the roof seems compact and durable. So far as I have been able to see, I have seen no wear or injury to the shingles during the ten years’ use, and cannot see but that the roof is just as good as when it went on.”

MURDOCK McKENZIE, Bear Lias, Ont.—“The ‘Safe Lock’ Shingles have never given me any trouble, and they appear to be as good to-day as the day I put them on. I am well satisfied with them, as I believe them to be the best roofing that can be used on barn buildings.”

GEO. HARDY, Ashgrove, Ont.—“It will be eight years in June since the barn was shingled. I never had any trouble with it in any way, and it appears to be as good as when put on. I have been recommending your shingles as the best that can be got.”

MRS. JAMES STEWART, Pendleton, Ont.—“In reply to your letter asking about shingles I bought from you over five years ago, I looked the roof all over to-day, and they seem to be in as good condition as when they were put on the roof. The shingles don’t seem to be any the worse for wear, and they will last for years.”

Send to-day for our book, “The Truth about Roofing” and full details of our Fire Insurance Policy payable in cash if your Safe Lock Roof is damaged by lightning.

The Metal Shingle and Siding Co. Ltd.

“Roofers to the Farmers of Canada”
Dover Street Factory, Preston, Ontario

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CUT OFF THIS COUPON AND MAIL TO US

My roof measures.....ft.....in. long.

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Please send me your booklet “Truth about Roofing”, with full particulars of your Free Safe Lock Lightning Insurance Policy.

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If interested in any other Metal Building Goods please state such fact here.....
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THE British Government requires all galvanized steel roofing for Admiralty or other public work to be of specific grade and to be capable of withstanding a certain acid test.

The acids used for this purpose are strong enough to burn the skin off a man’s hand, and yet the galvanizing must be heavy enough to withstand their action for a definite period.

Exposure to wind, rain and snow for a quarter of a century is much less destructive than this acid test.

Yet every Safe Lock shingle is guaranteed to meet the Government requirement in this and all other respects.

No wonder that those who have used Safe Lock Shingles declare that they will last as long as the buildings they protect.

Safe Lock Shingles are the only shingles that actually lock on all four sides so that they cannot pull apart.

Shingles which do not lock on four sides are not Safe Lock Shingles.

Again: Safe Lock Shingles are the only shingles that completely protect the roofing nails from weather.

—The only shingles that have three thicknesses of steel along the upper edge of lock, thereby doubling the strength along the line of greatest strain.

—The only shingle galvanized after the sheets have been accurately cut

FARM AND DAIRY

AND RURAL HOME

Published by The Rural Publishing Company, Limited.



FARM AND DAIRY is published every Thursday. It is the official organ of the British Columbia, Manitoba, Eastern and Western Ontario, and Bedford District Quebec Dairymen's Associations, and of the Canadian Holstein, Ayrshire, and Jersey Cattle Breeders' Associations.

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FARM AND DAIRY

PETERBORO, ONT.

TORONTO OFFICE:

Room 306 Manning Chambers, 72 Queen St., West, Toronto.

FOREST PROBLEMS OF ONTARIO

Forest problems in Ontario are weighty ones. They should receive proper attention. As has been pointed out by Farm and Dairy in past issues there are many acres in various counties wholly unsuitable for agricultural purposes. In some parts, these non-agricultural lands have been abandoned; in others, people are still endeavoring to eke out an existence upon them.

The poorness of this existence has been ably pointed out by Prof. E. J. Zavitz, of the Ontario Agricultural College, when he showed that some lands in Norfolk County after a century of tillage only produce \$3.75 an acre. These lands at one time were covered with most valuable timber. It would have been an immense saving to the country both in money and

in men to have allowed these lands to remain producing continuous crops of valuable pine and oak, rather than to allow generation after generation to wear its heart out forcing these non-agricultural soils for the pitance that they return. Much of the land in question is light and sandy soil which washes to the lower levels and is drifted before the wind.

The extent of these lands is in no wise inconsiderable. The County of Lambton is said to have 40,000 acres of such land; South Norfolk, 10,000; Simcoe, 60,000; Durham, 6,000; and Northumberland, 8,000 acres. These lands in their present state are practically "no-tax" lands and thus return nothing to the community. They were once heavily timbered. All experience goes to show that these lands can be reforested and made to produce profitable forest crops.

The Government have wisely made a start in re-foresting these areas by setting aside 100 acres of non-agricultural land in Norfolk County, where they have established a forest plantation and nursery. While this beginning is commendable it is not extensive enough. Re-foresting should be started on these other areas as soon as possible.

As pointed out previously by Farm and Dairy, the waste lands in Durham and Northumberland counties offer the best prospects for establishing a forest reserve and nursery as they are readily accessible to the railroad on the C. P. R. We would suggest to the Hon. J. S. Duff, the Minister of Agriculture and to the Ontario Legislature that the necessary funds for carrying on this work, be provided for at the coming session.

SELECT YOUR SEED

So much has been said about seed selection in recent years that one might deem it unnecessary to deal further with this question. Results from such efforts, however, are by no means what they should have been. In spite of a better knowledge, we continue year after year to take our seed in the spring from what is left in the granary after the sales have been made and the stock fed throughout the winter. Frequently too little is left for seed purposes and it is necessary at the last to be careful not to clean it too thoroughly, lest there be not enough to seed the acreage planned.

Again, the work of cleaning, that should be done in slack times throughout the winter, is left until the land is ready to seed when an urgent call is made upon the supply at hand and little thought is given to cleaning. That it pays to clean seed thoroughly, and even to make a wise selection before threshing, doing this work at harvesting time when the individual plants can be seen in the field, is demonstrated by the results obtained by the members of the Canadian Seed Growers' Association. Seed not unlike animals is susceptible to improvement through judicious selection. Greater returns can readily be obtained by thus breeding up seed grain.

It is not enough that farm seed

should be graded, germination tests besides are also advisable, especially with the more important grains such as corn. These precautions should be taken by all who grow their own seed, and seedsmen should test them for the benefit of their patrons. Seed of prime quality and uniform size is one of the most important factors in crop production.

LOWER EXPRESS RATES NEEDED

Speaking, on behalf of the Dominion Grange before the Railway Commission in Toronto recently, of the express service, when the carriage of fruit, vegetables, butter and poultry products was under consideration, Mr. W. L. Smith touched upon a vital point when he said that the very best butter made in Ontario was produced by the skilled housewife, but, after this butter reaches the consumer through the country store, the commission house and the city retail grocer, it was almost certain to be injured by contamination.

To overcome and avoid this injury, direct shipment of butter is necessary. The minimum express charge of 25 cents for the smallest package has been very much in the way of making such shipments. Customers do not care to get more than a few pounds of butter at one time, and the charge of 25 cents on such quantities is practically prohibitive. If for short distances a charge of 15 cents were to be given by express companies for small parcels of butter, it would greatly facilitate the marketing of dairy butter in its original first-class condition. Such a rate should be given. In Great Britain, the post office service handles packages of this size, carrying them direct to the house of the customer for 15 cents.

BE UP AND DOING

The responsibility resting upon each one of us as farmers was clearly pointed out by Mr. C. C. James, Deputy Minister of Agriculture, at the recent convention of the Western Ontario Dairymen's Association at Brantford. He stated that if we could only get farmers to drain and clean up their farms and use good seed, so that the quality and quantity of crops would be better, then weed out the old, useless cows, and give the good ones a chance, then handle the milk properly and equip their factories as they ought, farmers would be wealthy men.

The burden of responsibility rests upon each of us individually. The government, through its various branches of the agricultural department, have done much for us. The agricultural press and other mediums of disseminating the knowledge and information gained through experiment station work and the experience of successful farmers have done their part towards informing the people. It is for us to say what we will do and what success we shall make of farming in the years to come. These other agencies have done their part. It is up to us to make the application. Let us do it to the best of our ability this coming season and in doing so make our calling the business that it ought to be.

VENTILATION NEGLECTED

Fine barns that fill the eye of the traveller dot the landscape in all of our more progressive farming districts. It is a great disappointment, however, to enter the stabling of most of these fine farms. In a great majority of them, no pretence whatever is made at ventilation other than the little secured by the necessary opening of the door to let the stock in or out. In addition to the failure to provide ventilation, many of the barns have little light as well. This is especially true of the older barns.

While in the central portion of Ontario recently, a representative of Farm and Dairy was impressed by the magnificent outward appearance of the barns there. On entering them, however, he was shocked to find the poorly laid out condition of the stables, the total absence of ventilation, the wholly inadequate supply of light and in nearly every instance the ceilings festooned with cobwebs. Should disease get a hold in these stables their owners would have small chance of exterminating it under existing conditions. Those who are planning a re-arrangement of their stables or building new ones this coming season should not fail to make provision for ventilation and the admittance of light.

SHEEP HUSBANDRY IN CANADA

Complete in every detail is the bulletin, "Sheep Husbandry in Canada," prepared and edited by J. B. Spencer, B. S. A., and published by authority of the Hon. Sydney Fisher, Minister of Agriculture, Ottawa. The treatise is presented to the public with the object of encouraging a revival of the sheep industry, which, for some years, has not been progressing as rapidly as might be wished, especially in view of the fact that many districts in Canada are eminently suitable for the profitable pursuit of this branch of animal husbandry. The work is especially valuable as a means of supplying information regarding the breeding and care of sheep, as it deals with sheep raising in all its phases.

Feeds for sheep, the housing of sheep, and their animal enemies, are dealt with fully. A review of the sheep industry in the different provinces of the Dominion forms a most interesting feature; while the diseases of sheep by J. G. Rutherford, Veterinary Director-General and Live Stock Commissioner, is a most valuable part of the bulletin. Illustrations of the various breeds of sheep, pastoral scenes, and cuts showing good and indifferent types and right and wrong methods of handling illuminate the pages. The work throughout is printed on a fine grade of paper which makes it very attractive. Much credit is due Mr. Spencer for his work, and the Department of Agriculture for publishing this bulletin, which should prove invaluable to our farmers and to the sheep industry of Canada.

When writing advertisers take advantage of our Protective Policy, as printed in another column of this page, by simply mentioning "I saw your ad. in the Farm and Dairy."

Creamery Department

Butter makers are invited to send contributions to this department, to ask questions on matters relating to butter making and to suggest subjects for discussion. Address your letters to the Creamery Department.

The Creamery Outlook*

Prof. H. H. Dean O. A. C. Guelph.
Because of the fact that in these modern times people say, "give us the luxuries of life and we will do without the necessities," and because of this other fact that the cheese factories now have rivals in the milk condenseries and in the large and growing demand for milk in towns and cities which will keep them pretty busy to meet the competition offered—in these facts lie the hopes of creamerymen. The demand for first-class butter seems difficult to fill. Tons and tons of butter from cold-storage are used during winter, though we have never seen any first-class butter come out of a cold-storage after holding it for two months or over. It seems to me that if the creamery would cater to the winter trade with fine, fresh butter which commands from 32 to 35 cents a pound, it would be a paying business.

About the only element of discord in the creamery outlook at present is the bad state of trade in Great Britain. At one time we might have been alarmed on reading: "We in England are able to get plenty of butter from all parts of the world, and do not at any rate just now need to consider Canadian for any time." Happily for Canadian creameries our home markets can easily consume all our butter under normal conditions.

The outlook for creameries then is very satisfactory from the market end of the business and we need not worry ourselves in Canada that out of nearly 400,000 packages of butter received in Montreal last year, only a little over 90,000 were exported. It is estimated that the total make of Canadian butter is about 1,000,000 packages of 56 lbs. each. The fact that we are able to consume this amount of butter yearly speaks well for the gastronomic butter capacity of our people, but when we reduce this to a basis of per head of population, it is less than 20 lbs. of each person in a year. When we consider that butter is the great oil for the brain, and that brain workers who have more in demand, we need have no fear for the future demand of what is admitted to be a luxury, but a luxury that is becoming more and more a necessity.

THE OTHER SIDE OF THE PICTURE

He who looks on the rosy side of life is usually welcomed everywhere. The world is looking for optimists and usually has little use for a pessimist, who has been defined as one who, when given the choice of two evils selects the better. However, we should be unwise did we not consider some of the defects of the creamery business, and thereby pave the way for improvement. Some men pride themselves on being "constructionists" and not "destructionists." But we are admonished, "not to put new wine into old bottles." Some of the creameries (bottles) are scarcely able to contain the new wine of improvement which is demanded in order to make their butter of first-class quality. Carlyle said of England that it had a population of about 30,000,000, then added this significant comment—"mostly fools." We should not care to be guilty of a similar charge against farmers, butter-makers and creamerymen, but these certainly do some things which appear to be foolish. One of the old English poets has this verse:

*Counter & Clubb were men in trade whose pains,

*An address before the Western Ontario Dairyman's Convention held at Brandon.

Credit and Prudence brought them constant gains.

Partners and punctual every friend agreed
Counter and Clubb were men to succeed.

We have here the very essence of commercial success—"gains," "credit," "prudence," "partners," "punctual"—who would not succeed under these conditions?
Confucius said: "It is only the supremely wise or the deeply ignorant who never alter." Some men are so "set" in their ways, that the very idea of change is repulsive to them. These men are likely to get left in the race of life, then how lonely they will be. Stevenson said: "It is better to be the slave of the worst tyrant that ever lived than to be nobody's dog."

There are a number of things in connection with the creamery business, that to us, looks as if they could be improved.

PRACTICAL SUGGESTIONS

The Farmer's Side of the Question.
—There is great need of more milk and cream and cheaper production. College or university courses are not running to full capacity for more than three months of the year—most of them for not more than one month. This is a loss to the farmer, and to the creameryman. As usual, the burden of the loss is borne by the farmer. The other classes have a facility for shifting burdens onto the back of the patient farmer. Better cows, cheaper and more feed, better handling, greater skill and care in feeding cows, and in handling milk and cream are important points which should receive attention of every creamery patron.

Tainted cream, thin cream, not sufficient to make it a paying proposition—these are points which must be considered by every dairy farmer who patronizes a creamery and these are defects for which the farmer is responsible. During the months of October and November each year the O. A. College our creamery reputation is in great danger of being lost and certainly receives some very severe jolts through carelessness on the part of patrons who allow cows to eat turnip tops and who send cream that is impossible to make into fine butter.

Cost of Hauling Cream.—Closely associated with the foregoing is the question of hauling cream. In our own creamery where cream collectors are paid from \$3.50 to \$4 per day we find that the cost of hauling cream during the season of 1908 (April to November inclusive) varied by months from 1.56 cents per lb. fat (June) to 3.3 in November and 3.44 cents in April on one route; from 1.39 cents to 3.67 on another route; and from 1.35 cents to 2.85 cents on the other. The average cost of hauling per lb. fat for the season was 2.1 cents, 1.9 and 1.5 cents respectively on the three routes.

The total monthly delivery in pounds of fat varied from 817 (April) to 2,307 (June) lbs. on the first route, making a total of 12,000 lbs. fat in round numbers for the eight months; on the second route the total pounds fat delivered monthly ranged from 762 to 2,582 and totalled 11,500 for the month. On the third route the monthly deliveries ranged from 1,698 lbs. to 3,772 lbs. fat, totalling 31,711 lbs. fat for the season.

The point I wish to emphasize is that the cost of hauling is very much increased with a small supply of cream. In our case in the months of April and November the amount of cream delivered cost practically all that we received for manufacturing (4c a lb. fat) in the months of June and July the cost per pound of fat was about one-third the cost for hauling. For the whole season the cost of hauling was practically 2c a lb. fat (1.927).

How to get the cream to the creamery more frequently and not increase



To Prudence

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the cost of hauling is a problem which ought to receive very careful consideration by both farmers and creamerymen. We have wondered if electric railways and some form of automobile cream wagon where roads are fair might not help to solve the problem.

CHEESE VS. BUTTER AS PROFIT PRODUCERS

While the creamery patrons may have been dissatisfied to some extent and thought they ought to have received better prices; and while some creamerymen may have been anxious because of this dissatisfaction on the part of their patrons they may have

this consolation that patrons of creameries during 1908 probably received greater returns than did those who patronized cheeseries, if the results at the O. A. College may be taken as a criterion.

By way of explanation we may say that milk was hauled and cheese made at a charge of 1 1/2 cents a pound. Those who delivered their own milk were charged one cent a pound of cheese for making.

In the creamery branch, cream was collected and made into butter at a charge of four cents a pound of fat. Those who delivered their own cream were charged three cents a pound fat.

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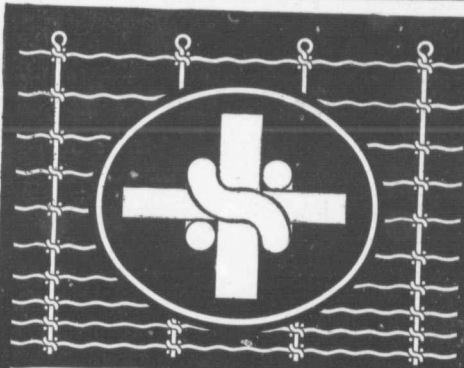
TIMOTHY

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As we practically must have a certain amount of milk during the year for educational and experimental purposes, when we lost in the spring some cheese patrons and saw that we were likely to lose others owing to the relatively lower price received for cheese compared with butter we said to them—If you will continue to send milk to the cheese room for the entire season we will make up to you any difference there may be, between the price paid to our butter patrons and that which you receive, and in addition we will pay you 15 cents a cwt. whole milk, in lieu of the skim-milk.

The average price received per lb. fat by the cheese patrons was 26.6 cents a lb., while the butter patrons received an average of 26.53 cents—or practically the same as the cheese patrons were paid, while the latter had in addition the skim-milk. What we had to make up to the cheese patrons was practically the value of the skim-milk. This amounted to \$133.75 on about 103,000 lbs. whole milk. The amount of money per cheese patron which we had to pay as a bonus varied from \$7.80 to \$55.73. The latter patron delivered 40,650 lbs. milk, so in his case it was quite an item.

CONCLUSIONS

In order to make the creamery outlook even more promising we need among other things:

1. More Education.—An American creameryman dealing recently with the question of butter-making for the butter-maker, said: "The genius of democracy is always the cultivated mind." It is the only dictator that free men acknowledge and the security that freedom desires. Our farmers, cream-haulers, butter-makers, creamerymen—yes, we all need more education.

2. We Need Better Dairy Legislation.—While I trust that you cannot make a man honest, or a good farmer, or a capable cream hauler, or a first-class butter-maker by Act of Parliament, yet a good deal can be done by our legislators to assist in these things.

As an example of what seems to us lack of knowledge in dairy legislation we may cite a couple of clauses from a recent dairy Act: "All milk containing less than thirteen per cent. of total solids, of which three and three-quarters per cent. must be chemically dry butter-fat, shall be deemed below the standard required in creameries for butter manufacture." With all due respect to the framer of the Act we trust that the man who drafted this clause does not know the A B C of Butter-making. What have the "total solids" of milk other than the fat, to do with milk butter-making? Would not milk containing 3 to 2 1/2 per cent. fat make good butter? Why chemically dry butter-fat? Would not fat determined with the Babcock Tester be all right for butter-making? The funny part of it all is that the same Legislature refused to consider a "milk standard" for milk sold in towns and cities. Oh, consistency thou art a jewel! We take it as a sign of improvement along this line that the local member consulted with the Agricultural High School Principal regarding certain legislation, which is likely to come up at the next session. Why need legislators be ashamed to consult men who have given a life-time of study to certain questions?

DEFINITION OF CREAMERY

The second citation is with reference to the legal definition of a creamery. "We read 'Creamery' means a place where the milk or cream of not less than 50 cows is manufactured into butter." Now if we understand the meaning of creamery, the fundamental idea contained in it is co-operation. Where two or more persons join together for the purpose of making butter such a place

is a "creamery." The number of cows has little or nothing to do with it. (In the foregoing I speak as a citizen of Ontario, not as a public officer.)

3. The last need we shall mention is: Pasteurization.—This we consider to be one of the greatest practical needs for a steady improvement in the quality of butter. It will not do everything but it will go a long way towards lessening the output of poor butter.

Education, Legislation, Pasteurization—these three, but the greatest of these is Education.

Cheese Department

Makers are invited to send contributions to this department, to ask questions on matters relating to cheesemaking and to suggest subjects for discussion. Address your letters to The Cheese Maker's Department.

To Change Method of Selling Cheese

The first annual meeting of the Farmers' Produce Association was held in Ottawa, January 21st, with about 100 people in attendance, representing about 75 cheese factories. This association was formed a year ago, at a largely attended meeting of dairymen, held in Ottawa for the purpose of bringing about a change in the present system of selling cheese. During the past year, efforts were made to replace the cheese boards in Ontario, east of Kingston with Farmers' Exchanges but the attempt proved unsuccessful. Some of the factories then suggested sending a salesman to Montreal with their cheese, where it was inspected, weighed and paid for on the day of sale. Other factories made experimental shipments of their cheese direct to Great Britain. The agitation was conducted largely through the Ottawa Valley Journal.

At the meeting last week, the Secretary-Treasurer, R. B. Faith, reported that last year 125 factories had paid out in 1907 \$250,750. The outlay had been \$253,600. During the year, about 60 meetings had been held in the district east of Kingston and in parts of Quebec by officers of the association. Mr. Faith stated that correspondence had had with some 50 British produce firms showed them to be willing to deal direct with Canadian factory-men.

A paper was read by Mr. Wm. J. Webster, of Lansdowne, giving the results of shipments of cheese to Great Britain that had been made by some of the factories in his section. A report of Mr. Webster's remarks is given elsewhere in this issue.

OFFICERS ELECTED

The following officers were elected: Pres., C. F. Rath, Lansdowne; vice-pres., W. A. Mullen, Inkerman; secretary, W. A. Fisher, Ottawa. Messrs. John Stewart, East Templeton; L. A. Landry, Cryslar, and the executive were appointed to wait on Hon. S. Fisher, Minister of Agriculture; a press for the appointment of an official to inspect and weigh cheese at Montreal.

RESOLUTIONS PASSED

Moved by J. A. Van Allen, of Aultsville, seconded by W. A. Mullen, of Inkerman, "(1) We the delegates representing these factories in annual convention of the Farmers' Produce Association assembled believe that in the best interests of the dairy industry cheese should be sold on its merits, and paid for on delivery to the merchant. Therefore, it is resolved, that we unite our efforts in bringing into effect as speedily as possible the policy laid down at our organization meeting a year ago, which asks for inspection, weights and payment, or some guarantee of delivery, either at factory or point of delivery.

"(2) We favor the complete abol-

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tion of the credit system of selling cheese.

(3) We are in favor of having a system of requiring inspection of cheese before goods leave the hands of the producers.

(4) We favor the formation of associations subordinate to this Farmers' Produce Association, and located at shipping points throughout our jurisdiction. These associations shall be formed by its members and a Board of Management and a Board of Inspectors.

(5) All patrons of factories represented on Boards shall be members of the association.

(6) The members shall meet annually, discuss reports, elect officers, and transact the necessary business; and also elect a representative to the central association.

(7) The Board shall be formed of the president and secretary and one representative of each factory in the association.

(8) The representatives shall meet at similar representatives from each association in the jurisdiction meet annually in a central association for the purpose of forming rules and measures to regulate the marketing of cheese according to the wishes of the farmers so organized.

(9) Believing it is in the interests of all dairymen that the work of the association shall be carried on, we would recommend that each and every cheese factory contribute a fee of \$2 to assist the association in defraying its expenses.

Shipping Cheese to Great Britain

Several factories in the Lansdowne, Ont. section of Eastern Ontario, shipped cheese direct to Great Britain last year in an effort to save the charges of the middlemen in Canada including the local buyers and the controlled exporters. The results of these shipments were reported last week at a meeting of the Farmers' Produce Association, held in Ottawa, by Wm. J. Webster, of Tilley.

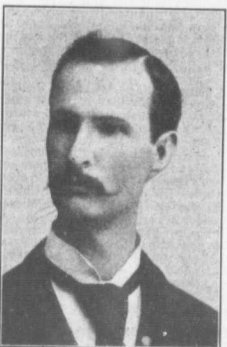
HAS CAUSED COMMENT

Mr. Webster's paper was as follows: Possibly no scheme connected with the sale of cheese has created more general interest, approving and contrary, than that in proposing direct shipments to Great Britain. The phases of the question has been commented upon by cheese men, both in Canada and in England, and particularly by the Canadian trade commission in Manchester, Mr. P. B. MacNamara, who expresses most hearty approval of the plan and anticipates in connection with such a trade increased prices for good cheese furnished regularly in this way.

A Lansdowne branch of the Farmers' Produce Association, during the past season, has been evading Canadian buyers and been placing the output of its factories directly on the English market. While the results of this undertaking have not been as satisfactory as might have been wished, still much information, if not gained in other ways, has been acquired which perhaps may be turned to advantage and which, it is expected, will be a guide to the future selling operations of the Lansdowne Association.

One feature of direct shipments which recommends it is the elimination of details (they may be called) associated with the sale of Canadian cheese and adding to the expense of placing it where it ultimately goes upon the English market. The buyers have pointed out in connection with the agitation for factory inspection weigh and pay at car doors, that costs of this sort would be a charge on the cheese and would be deducted from the price at the factory. If this is so, and we may reasonably assume that it is, and we can reduce the amount of that expense, thus increasing the price at the factory, why it behoves us to do so and to see that

our cheese are transferred from the curing room to the counter in Great Britain with the least possible accumulation of cost. Why is it necessary to have all the complicated system and machinery that has distinguished our Canadian cheese trade in the past? It is at any rate not at all essential to the safe transit of the goods. They will arrive just as safely in England where they are bound for and where they ultimately will go, if shipped for export from factory, as to be transferred in the roundabout way at present practised, and practised for no very evident purpose except to facilitate advantageous opportunities in the interests of the middleman. Our present system, gives us the cheese board, the board salesmen, the board buyers, the Montreal agent, and cartage, storage, inspection and dock



Mr. J. J. Parsons, Jarvis, Ont.

The newly elected President of the Dairymen's Association of Western Ontario was first appointed to the board of directors at the time the convention of the Association was held at Stratford four years ago. He has served continually on the board since, until his election as president at the recent convention held at Brantford. Mr. Parsons has been connected with the dairy industry for many years and is at present engaged in making both cheese and creamery butter in modern factories at Jarvis and Marburg.

does at Montreal. Cannot any or all of these be eliminated without any disadvantage to the producer?

SOME ADVANTAGES

One decided advantage to through shipment is that cheese placed aboard cars on Tuesday at Lansdowne go into cold storage aboard ship at Montreal on Wednesday or Thursday, thus avoiding a menace to the quality of our cheese and at the same time avoiding a certain charge of three-eighths of a cent a pound on the cost of our cheese, which, at the rate of three-eighths of a cent on the output of the eight counties, Leeds, Grenville, Dundas, Stormont, Glengarry, Prescott, Russell and Carleton, would mean a yearly saving of over \$160,000. His would pay nicely the expenses of several such meetings as we are holding here to-day and seems well worth our while looking after. Still the middleman argues we must have him and without this outlay his services will be denied us.

Even though, as the adverse critics of this idea contend, the services of the middlemen are essential to an intelligent distribution of our cheese, as we were advised by buyers in connection with factory inspection, it does not follow that we should demand for distributing purposes too extravagant a number of employees, agents and agencies.

The English firms are practically the only ones we are interested in in connection with our cheese trade.



We have refused to send our cheese to them, so they are obliged to send their agents to us or employ already established firms here to act as agents for them. This is a question not of eliminating the middleman but of co-operating with him in the marketing of our cheese, thus permitting him to dispense with superfluous accessories and reduce expense, to our ultimate advantage, we trust.

AN OBJECTIONABLE FEATURE

In our season's ventures in cheese shipping, we depended entirely upon the reliability and business capacity of Willer & Riley, Ltd., for satisfactory returns for our cheese. This is an objectionable feature to the system as carried on by us. The cheese were shipped to Willer & Riley, Ltd., and left in their hands to be sold. They rendered account sales showing the price our cheese had brought from the retailer and we received proceeds, less charges of transportation and commission. Willer & Riley's account sales kept fairly up with current market reports (as taken from the Manchester Grocers' Review) until the middle of September, at which time our first August cheese came upon the market just following their unfortunate financial collapse. These cheeses were sold for 80 shillings of one shilling less than at the sale of a week previous and that on a market report, one shilling higher, continuing equally unprofitable until the balance of our cheese in their hands were disposed of. Had we been able to secure

prices continuing the season through as close to the highest ruling prices as were realized for May, June and July, we should have come out at the end of the season with a very fair balance to the credit of through shipments. As it was, the three-eighths of a cent which we were saving in our mode of transit was either appropriated by the English middleman or deducted from the price charged to the retailer.

(Continued on page 25)

To Butter-makers—and all who buy salt in large quantities, its cost is no inconsiderable item.

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FOR a woman to be wise and at the same time womanly, is to wield a tremendous influence which may be felt for good in the lives of generations to come.

David Jordan.

The Domestic Adventures

By Joshua Daskam Bacon

(Continued from last week)

HE meant by this that he was sitting on the side porch watching Chloe do up branded peaches. She had on a long blue pinafore that made her look like a tall school girl, her cheeks were scarlet from the stove, and her white arms bare above the elbows. Her hair was most becomingly untidy—she is one of those fortunate people who look attractive with wispy hair—and I did not wonder that Mr. Van Ness could not bear to leave her. If Sabina had seen the amused yet deeply attentive air with which his deep-set gray eyes followed each of her long steps and sweeps of arm as she ladled the sirup over the sticky jars, she would have realized, I think, that this self-contained gentleman is making up his mind very rapidly. But Sabina was not there she had been detained in town unexpectedly, and would just be able to get out to dinner, she telephoned. It was the first time she had not been there to chaperon "her elderly charmer," and I was a little worried at the responsibility: he is so very critical.

That is why he is on the porch. I simply could not feel able to entertain him alone, and Chloe had to superintend the peaches. I had never attempted any, and she had seen her Kentucky aunt do them so many times that she was sure she could. Mary, of course, was useless in this connection: she had not reached the subject of preserving in her cooking course, and she could do only what she had been taught.

"Preserving," I believe, is very difficult, as well as expensive," she told me. "I will do whatever you tell me, of course, but I could not think of undertaking any responsibility."

"It may require a little experience," I said, "but it is much cheaper to do them at home than to buy them, certainly."

"It would be cheaper still to do without them," she replied doggedly. "This I could do no more readily than I could deny her statements about nitrogenous elements of food and carbohydrates (or hydrocarbons—I have never studied Domestic Science). But as I told Mary, the fact that she had subsisted satisfactorily to herself for two years on two threaded-grain biscuits for breakfast did not weigh with me for a moment against Sabina's deep-seated preference for boiled eggs, Graham toast and bacon; and the carbohydrates (or hydrocarbons) must look out for themselves.

Another reason for my staying on the porch was that Chloe positively refused to work with Mary alone, which I regretted as I wanted to leave Mr. Van Ness with her, and I

was sure that for once he wanted to be left. As he said, it was quite an intimate situation, and Chloe was so demure and picturesque and he was so handsome and courtly, his eyes are very kind when you get over your first awe of him—that I really shouldn't have been surprised.

But of course, after what happened in the evening there was no hope of anything of the sort. It is extraordinary that Mr. Van Ness should

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inevitably assist at our most idiotic crises, but such is the fact. I am quite certain that he intended speaking that night; all during dinner his eyes travelled from me to Sabina and from her back to me again, and I understood why; he was wondering to which of us he ought to address himself on the subject. My nerves have grown so tense during this period of uncertain cross-purposes that I seem to feel too closely what every one is thinking and hoping.

But after what occurred in the hall no one could have been serious.

Not that anything was wrong with the dinner, though Sabina thought it was rather audacious in me to allow it; all during dinner his eyes travelled from me to Sabina and from her back to me again, and I understood why; he was wondering to which of us he ought to address himself on the subject. My nerves have grown so tense during this period of uncertain cross-purposes that I seem to feel too closely what every one is thinking and hoping.

Not that anything was wrong with the dinner, though Sabina thought it was rather audacious in me to allow him to stay. Mary had been taught to broil a steak very nicely, and she garnished everything with mathematical perfection. We can always get good clam at short notice, and Marie's aunt sent me a delicious cantaloup. It was after Mary had served the coffee on the piazza that it happened.

You see, it was the night for her tutor. Tuesdays and Fridays he came—to save her eyes—and we never invited any one for those nights, and I used to hurry dinner along, if I could, without Sabina's suspecting. Of course they used the dining room in the evening, at Miss Evans' suggestion—but as we would spend the evening matter, I didn't think it would matter, and he always left at half past-nine.

I cannot believe that Mary was responsible for it, though I know that our being longer than usual at dinner irritated her, but at about a quarter of nine a loud rap on the French

window behind me made me start from my seat.

"Can I speak to—to somebody?" said a hollow solemn voice.

Chloe was at the piano, singing some foolish dinky music-hall song, and Mr. Van Ness was leaning back, blowing rings from his cigar and watching her. I was planning to get Sabina off the piazza on some pretext or other, and then I knew—I absolutely knew—the climax would come: I felt it in the air.

But at the sound of this voice I got up and went into the living room, Mary's tutor stood there. He was a lank young man, with pale, high cheek bones and a most self-conscious air and he wore goggles that extinguished Mary's.

I should like to speak to you in private, if you please, he said. "I will not detain you long."

Perfectly dumb with surprise, and judging from his intentional glance at Chloe's innocent back that she was the bar to his privacy, I led the way into the hall, the front door of course, was wide open.

"You are aware, I have no doubt," he announced, "that my pupil here has an extremely nervous organization. You could not fail to observe it."

I stared at him in the dim hall light, and he went on in a nervous, hissing sort of whisper that carried with dreadful distinctness over Chloe's soft singing, to the amazed silence outside.

"We are working over a very delicate problem in Quadratics this evening," he said, "and it is utterly impossible for Miss Bostwick to concentrate her mind upon it while this—this noise at the piano is going on. She is meeting her misfortunes

so nobly that you would not wish, I am sure, to add a straw to them, and it is but for two evenings a week."

I murmured something more or less senseless, and he went on: "It is not music, per se, that Miss Bostwick finds so confusing to her efforts at concentration," he said, "but the character of the—selections you are acquainted with—classical music at all, but there is a difference—a great difference."

"I gain I murmured vaguely.

"I have expected the responsibility of this step entirely upon myself, he concluded, "because I admire Miss Bostwick's character deeply—it is a privilege to live with a mind like hers—and I felt sure that my right-thinking person would appreciate—evening!"

He backed out of the hall, followed by what I knew must be, though I had never heard it before, the deep, irrepressible laughter of Mr. Van Ness. Chloe was such a confusion of mirth an resentment that nobody, even if he had been serious himself, could have made love to her, and Sabina's mixture of emotions made her alternately satiric and speechless.

I don't know whether I should have been able to indicate to Sabina the strain of living in her rarefied intellectual atmosphere was too much for us. Sabina would have retreated promptly to her "immunity" clause, and Chloe, of course, was out of the question.

But she took the matter out of our hands by informing me that she was going to marry the tutor next week,

and go out with him to India, to share his labors as a missionary there.

(Continued next week)

The Upward Look

And whatever we ask we receive of Him, because we keep His commandments, and do those things that are pleasing in His sight.—1 John 3, 22.

Just as there is no limit to God's power so there is no limit to the blessings that we may obtain through prayer. God has promised, again and again, to answer our petitions. He has told us, "If ye shall ask anything in My name I will do it." (John 14, 14) and also, "And all things, whatsoever ye shall ask in prayer, believing, ye shall receive," Matt. 22: 22: How glorious are these promises. God has told us that He will give us anything that we ask for.

There are some people who say that they have no faith in the power of prayer. They tell us that they have prayed for things and that their prayers have not been answered. Sometimes, people have given up praying because they have not received what they desired. Those people do not believe the word of God.

While God has promised to answer our prayers He has also told us that there are times when we cannot answer them. There are occasions when we, ourselves, prevent Him from doing so. In James 4:3 we read, "Ye ask and receive not because ye ask amiss, that ye may spend in your pleasures." Thus if we go to God with a purely selfish petition God will not grant our request. It is in our own best interests that He should not.

Another explanation of why our prayer is contained in Isaiah, 65: 2; "Behold the Lord's hand is not shortened, that it cannot save; neither His ear heavy, that He cannot hear. But your iniquities have separated between you and your God, and your sins have hid His face from you, that He will not hear." When we pray we must ask ourselves if there is anything that is coming between us and God. If we are in the habit of doing anything that we know is not pleasing in His sight, or if we are neglecting to do things that we should do, we need not be surprised if our prayers are not answered.

We know of a woman who is praying, and praying earnestly, that her husband, who is a sinner, may be saved. And yet this woman seldom goes to church, because her husband does not go. How can that woman expect her husband to desire to become a Christian when she herself, that she, herself, is not a consistent Christian. We must live consistent lives ourselves before we can expect that our lives, or our prayers will have much effect with God or with others. If we so love that others can see that in everything we do and say we are striving to please our Heavenly Father in all things, then others seeing our good works may be led to glorify our Father who is in Heaven. Our text this week shows us that the condition upon which we receive that which we ask for is that we keep His commandments and do those things that are pleasing in His sight.

There is one prayer that is answered for all. It is the prayer of the sinner who confesses his sins and asks for forgiveness. There is joy in Heaven over one such sinner that repents.

If then, we are not receiving answer to our petitions we should search our lives and the Scriptures to find the reason. God will answer our prayers if we will ask him in the right way.—I. H. N.

Renew your subscription now. Today is the time.

A Girl's Duties in the Home

Mrs. Nixon Orest.

(Continued from last week.)

Books are a fine help to intellectual culture, and a few moments intercourse will usually suffice to distinguish an habitual reader of books from a person who never reads at all. But the finest instrument of mental culture is the pen. This clinches the nail and fosters originality. It is a girl's duty to answer letters; and she is the better for every good letter she writes.

It is amusing how much good stuff one can write once the pen gets going on a subject which the writer at first sight thought impossible to say anything. Most people never discover how much is in their heads.

It is not the duty of a girl in the home or out of it to ape manliness or aspire to displace in life the stronger sex. She is to tread her lines in her weakness, her chief charms in that, and her plain duty is not to aim at detroning him, but at fitting herself to be his helpmate. This is ambition enough, and she is to cherish it. The hearthstone is the very cornerstone of society and the hearthstone is woman's throne. Most of the great men of history, the men whose thoughts or deeds live on forever, had great mothers, so true is it that "the hand that rocks the cradle is the hand that moves the world." Let woman once abdicate this, her true place, and the power of that world-moving hand is gone.

No! The aim of a girl should be to become simply a good wife and mother. It is a high calling, a holy calling.

The bounden duty of every girl, while still in the old home is to fit and prepare herself betimes for so high a dignity, so solemn and so blessed a service. Were this duty faithfully performed by all girls we should see fewer homes sent to the bad from homes rendered miserable by nagging, wasteful, abominable wives.

But how is a girl to acquire all charms, graces and qualifications to which I have here referred. Well, she must begin at the beginning, on her knees, the best time and place being as a child at her mother's knee. Amid all her duties the supreme one is to get God's Spirit into her heart, making it more and more a pure fountain of goodness. This is the place to begin. Here is the power that prevails. This left out, all struggles towards perfection, all efforts to reach the ideal character, must prove a partial, if not a total, failure. To human endeavor and divine help combined, the model character, the saintly life, are within the reach of all.

In a word, it is the duty of the "Girl in the Home" to be the very

light of that home, never frowning, fretting, murmuring, or impatient, using no, cross words, giving no curt answers, but always cheery, thoughtful and kind. Above all else, she will speak no slander, nor listen to it. She will make it her duty to defend the absent, shut her ears to tales of wrong-doing till proven true, say a good word for even the worst; or keep silent when no such word would fit.

What a treasure in the home is such a girl, as this! With her in the humblest cottage is a royal palace. Many a lordly mansion is very bleak and dismal place, not for lack of spacious parlors, and costly furnishings and dazzling splendors, but because there is no daughter of the house to brighten it with her smiles, and warm it with the radiations of a loving heart.

* Read at meeting of North Gower Women's Institute.

Personal Appearances

Mrs. J. A. Wolfe, Treasurer, Omenae Institute

This seems to be a very large subject to write on in this, the 20th, century, when one sees so much and such a variety of clothing. It is really hard at times to choose and dress, as our grandmothers would say, to cut our garment according to our cloth, and to dress well according to our purses. But personal appearance does not only mean our clothes. How badly we would look if we had a beautifully fitting dress or suit, nice hat to match, nicely fitting gloves, and dirty, dusty shoes, and our hair untidy. And how often we see people neglecting their hair, their hands, and nails. In my mind, these details go a long way and add a great deal to one's personal appearance.

Just here, perhaps, some of us would like to know that a little care, say, five minutes each day spent on one's hands and nails, would amply repay one in a few treatments. Nails well kept are never in the way.

How many people we meet glance first at our head, and then at our feet and then at our hands. I think a person's character can be read at a glance by the appearance of the hands and nails. Nails should never

be cut with scissors or a knife, but should be filed with a small manure file for that purpose. The nail should be the same shape at the filed ends as at the root. After filing nail into proper shape, put the fingers into a basin of warm soapy water until the cuticle or skin surrounding the nail is soft; then take an orange stick (these can be purchased at about five cents each and with proper care will last a life time). Slip the end of this soft stick under the cuticle, and loosen it all around. When a woman once uses an orange wood stick she would not be without it. Never use a steel instrument to clean the nails as it has a tendency to bruise and cause small white spots.

The hair should be brushed every day, and washed regularly once a month. Of course, a person with very oily hair may wash it oftener, but the average hair should be washed once a week. If the ends are trimmed once every three or four months the hair grows more evenly.

Personal appearance goes a long way towards gaining esteem and confidence. How often a person gets a position or situation through no other recommendation than their personal appearance.

REGARDING DRESSING

If you are having clothes made, and the dressmaker was of a slovenly or dowdy appearance, would she be the woman who would go to if it were possible to have a neat, stylish, well-dressed girl to do your sewing?

Again, how often we see people start out on an excursion for a day with light fancy dresses that are really hardly fit for anything but house wear, and very elaborate hats, with ostrich plumes, etc. Supposing a shower or thunderstorm comes up, and they are caught in the rain, how much better a shirt waist suit and a plain, ready-to-wear hat would look

Household Linen

Mrs. A. Nichols, Waterloo Co., Ont.

In selecting tablecloths, it is more satisfactory to get the seventy-two inch width, which gives the generous fall of sixteen inches or so at the sides; which dresses a table better than the narrower widths. Two and

one-half yards is a very good measure for general use, a very convenient size for a small company requiring six or extra loads. Three and one-half yards are required for extended table, to drape over the ends and correspond with the sides.

Hamming tablecloths, a double-hemmed hem, an inch-and-a-half hemstitch is very fine. A double hem makes a very fine finish. The ends must be cut by the thread to make the hem true. With napkins in the hemstitch is not too elaborate, the so-called French hem at the ends does very nicely; turning a half-inch hem neatly and folding back, sew a fine over and over stitch.

The care of table linen is of great importance, if one would have the table arrayed at its best. There must be a pure white cloth without blemish or wrinkle, with satiny finish and with as few folds as possible. A very good way to wash napkins and tablecloths for this effect is to, first, pour slowly a stream of boiling water over stains, and then let them soak in a good suds made of laundry soap for an hour; then lightly rub out and just seal in clear soft water; rinse in a light bluing water, and string the whole process writing by the hand, instead of by wringer, to avoid the wrinkles that are so hard to press out. Do not starch; stretch evenly and hang straight on the line to dry. In ironing, the linen must be evenly and very well dampened. Fold the tablecloth from side to side just once, and press dry from end to end, on both sides. This will give the satin finish. Fold together sidewise once more, and press both sides carefully, then fold lengthwise as little as possible, to lay in your sideboard drawer for lining. To avoid the last folds, some get boards such as are used for dress goods, and wind their long tablecloths smoothly over them, giving them the appearance of new linen.

SHIRTS DOING DOUBLE DUTY

My everyday shirts are made to last a long time. They are made from unbleached cotton because of its durability, the ease with which it is laundered—after the first few washings—and because it never discolors with age. Two breadths of the mater-

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Feeds the Hair

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ial are basted together, just lapping the selvage edges in a flat seam, and stitched on the machine. This seam is not as objectionable as many women, who insist upon sewing their sheets by hand, appear to think. When the sheet has worn thin in the center the seam is ripped and the outer edges are placed together, giving it a new lease of life. This is much less work than making new sheets, not to mention the added cost, and I find by experience that these sheets wear much longer than those made from the double width bleached sheeting.—Alice M. Ashton, York Co., Ont.

Looking for Hired Men

By Hilda Richmond

Last summer a lady was getting dinner in her hot kitchen for harvesters, with not a bit of help, yet she seemed

to take the hardest way for everything. Three young chickens were frying in a large, old-fashioned iron heater such as our grandmothers used for irons, and had to be watched constantly to keep them from scorching, and in the oven were lemon pies covered with frosting that needed constant attention. The poor woman was hurried and warm and worried, but with a little planning a great deal of the trouble might have been avoided.

At the last minute she hurriedly made gravy, mashed potatoes, turned the pies, gave the early peas a final stir, took the butter from the pail of cold water and dished up the dinner. Everything was good, but scarcely satisfying for hot days, but is a good dessert for hot days, but when it is the final course of a dinner in which the meat is very young chicken it is not exactly "filling."

ANOTHER WOMAN'S WAY

Just across the fields in another farm house another country lady was getting dinner for her hired men at the same time. She usually sold her young chickens to town people for "broilers," and invested in beef or veal if someone was going to town, but if not she had a supply of ham, sausage put down in larid, fried lean pork and bacon for summer use. Sometimes she used chickens, too, but they were plump fat hens. Everybody knows it is a dozen times easier to pick and dress a hen than to struggle with the pin feathers and tender skin of a two-pound young chicken.

On this occasion she had ham potato made after a simple recipe. The pot of ham was cleaned and boiled till tender—the broth being carefully skimmed to free it from fat. On the back porch she peeled enough potatoes for dinner and also made her simple dumplings. The potatoes were almost done when the dumplings went into the large kettle to cook in twenty minutes and come out flaky and good. Early in the morning she had baked apple pies and cooked a lot of string beans in salted water. The beans were re-heated and dressed with a sauce made of a little milk, flour, butter and seasoning blended together. Enough ham was cooked to furnish thin cold slices for supper and in the evening she served cold ham, apple pie, warm gingerbread and fried potatoes, so that both meals were easy. The price of the chickens more than paid for all the meat for two meals and the ham was much easier prepared, besides being more satisfying to the men.

come substitute for the pies the hired men must eat every where else.

It is also well to buy store cookies occasionally when work is pressing. They are not as good as the homemade by any means, but they answer the purpose at times when the mistress of the house has her hands full. A large box may be bought at considerably less than ten cents per dozen and in a cool place they will keep longer than the home cookies. Ginger snaps, fruit bars and the common frosted cakes are all good for a change. While one would not care to substitute factory goods for home products indefinitely, yet they save much time and work in busy seasons.


EGGS AS A SUBSTITUTE

Eggs are usually easy to obtain and they may then be freely used to help out on busy days. By buttering a dripping pan and breaking into it the required number of eggs, salting and placing in a hot oven, it is easy to cook them just right without the careful watching required by fried or poached eggs. Omelets are easy to prepare and require no special eggs. Hard-boiled eggs sliced and served with lettuce or beets are much relished. Nothing in the way of hot breads should be attempted for breakfast unless it might be small biscuits. Toasts, cakes and waffles are tedious for the busy housekeeper to attempt when several hungry men are to be fed and in addition to her family. Think out the easily prepared dishes beforehand and save yourself all the work and worry possible, for it pays.

For Winter Underwear

If your winter underclothes have shrunk until they are too small, open the seams and make them from an old suit wherever needed. If the vest is too tight open the seam under the arm and set in a piece from the arm hole down. All worn out underclothes should be carefully saved. The knit underwear, especially, makes excellent floor-cloths. While parts of them can be saved for rubbing windows, furniture or the stove. Every scrap of flannel should be carefully saved since it is excellent for use in sickness, and for many other purposes.—Jessie Burns, Frontenac Co., Ont.

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THE Edison Phonograph differs from all other sound-reproducing instruments because it was invented and perfected by Thomas A. Edison, and because it is constructed on a principle which is more nearly perfect than that of any other instrument made for the purpose.

The first Phonograph ever made was made by Mr. Edison, and from that invention was perfected the Edison Phonograph which today is considered the most perfect instrument for reproducing music, voice and other sounds.

For you the Edison Phonograph means constant and varied entertainment of the kind for which you would pay theatre and concert prices to enjoy otherwise, but which, with the Edison Phonograph, you can enjoy in your own home.

No method of spending an evening can be pleasanter, whether you use it for the enjoyment of yourself and family, whether you invite friends to hear it, or whether you use it for informal entertaining, either for a program or dance. It is always there, always ready to be turned on; it is easily operated, and the cost is slight.

Edison Amberol Records

Mr. Edison did not consider his Phonograph good enough with Records that played only two minutes, so he experimented until he produced a Record which will play more than four minutes. It is no larger than the other Record. It is played on the same Phonograph by means of an attachment which your dealer has. It more than doubles the enjoyment of the Phonograph.

Music formerly unavailable for the two-minute Record, on account of its length, can now be heard in full and to better advantage.

There is an Edison dealer near you. Go and hear the Edison Phonograph, and especially ask to hear the new Edison Amberol Records.

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We Desire Good Live Dealers to sell Edison Phonographs in every town where there are not now well represented. Dealers having established stores should write at once to



National Phonograph Company, 111 Lakeside Ave., Orange, N.J., U.S.A.

BE PREPARED AHEAD

It is well to have a list of things easily prepared if one cannot keep them in mind. Baked potatoes or potatoes bursting their jackets when they are new and which should be used instead of mashed ones on busy days. Vegetables may be prepared early in the day ready to be reheated in a few minutes and used with sauce. Tomatoes and apples can be placed in stone jars on the back of the stove, or in the oven to slowly cook without watching, and there are many other things easy to prepare for the hot days when hired men must be fed.

If the farm is not well supplied with fruit, do not buy canned goods to manufacture into pies. Apricots, peaches, prunes and raisins are better than the best canned goods. Soak the dried fruits over night and simmer them gently next day in plenty of water till soft and tender. Raisins used in rice and soft bread puddings make them acceptable desserts. Where there is plenty of good milk it is easy to make good desserts with little trouble. Your good prunes will be a wel-

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This set consists of the following pieces: 12 tea plates, 12 dinner plates, 12 soup plates, 12 fruit dishes, 12 butter pats, 12 cups, 12 saucers, 12 glass tumblers, 1 gravy boat, 1 pickle dish, 2 covered vegetable dishes, 1 baker, 1 slop bowl, and 1 cream can. This set is genuine English semi-porcelain decorated in a dainty green floral border, with embossed and scalloped edges.

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FARM AND DAIRY, PETERSBORO, ONT.

THE COOK'S CORNER

Send in your favorite recipes, for publication in this column. Inquiries pertaining to cooking are solicited, and will be replied to, as soon as possible after receipt of writing. One check sent free for two new yearly subscriptions at \$1.00 each. Address, Subscription Editor, this paper.

MACARONI SOUP

Take 1 cup stock, 5/8 stick macaroni, 1 teaspoon salt, speck of pepper. Cook the macaroni in salted boiling water about 30 minutes or until tender. Drain and cut macaroni into thin slices or rings. Put them into the soup tureen with the salt and pepper and pour over them the boiling stock.

Take 1 cup rice, 1 qt white stock, 1 qt milk or cream, 1 tablespoon butter, 1/2 small onion, 1 stalk celery, salt and pepper to taste. Wash the rice carefully, add it to the cold stock with the onion and celery. Simmer slowly 2 hours. Press it through a sieve, return to the soup kettle, add the butter, cream or milk, salt and pepper and stir constantly until it just comes to a boil, when it is ready to serve.

SQUASH SOUP

Take 3 cups cooked squash, 1 qt milk, 1 slice onion, 2 tablespoons butter, 3 tablespoons flour, 1 teaspoon salt, few grains pepper, 1/4 teaspoon celery salt. Rub squash through a sieve before measuring. Scald milk with onion, remove onion and add milk to the squash, season to bind.

WHITE SAUCE

Put 2 tablespoon butter in a granite saucepan over the fire and stir until melted and bubbling. Then add 2 tablespoon flour mixed with a little salt and pepper and stir until well blended. Next, pour in gradually, while stirring constantly, 1 cup scalded milk. Bring to the boiling point and stir until smooth and thick. This is nice with baked or boiled salmon, or such vegetable as cabbage, cauliflower, carrots, string beans, onions, etc.

BROWN GRAVIES

Brown gravies are made after frying or roasting any kind of fresh meat, by removing the meat from the pan and adding to the fat and sediment in the pan about 1 tablespoon flour. Mix all thoroughly, and when well browned, add hot water or hot milk until the gravy is of the proper consistency. Season with salt and pepper.

BOILED ONION SAUCE

Boil 1 cup milk with a piece of butter size of an egg, 1 tablespoon flour, and a little salt and pepper. When thick pour this over three boiled

onions, chopped fine. Excellent to serve with fish or meat.

Time for Cooking

Being a young housekeeper I am at a loss to know oftentimes how long I should cook my meats and vegetables. Can you kindly give me a few hints for the proper time to use.—Mrs. C. B. Allen, York Co., Ont.

The following table may be of use to you and some others in a similar position:

FOR BAKING

MEATS

	Time in oven
Mutton, leg, per pound	10 to 15 min.
Beef ribs, per pound	8 to 15 "
Round of beef, per pound	12 to 15 "
Lamb, well done, per pound	15 "
Pork, well done, per pound	20 "
Veal, well done, per pound	18 to 20 "
Mutton, shoulder, stuffed, per pound	15 "
Venison, rare, per pound	10 "
Goose, per pound	18 "
Chicken, per pound	15 "
Birds, small (hot oven)	15 to 20 min.
Ducks, wild (very hot oven)	15 "
Ducks, tame	45 "
Partridge	35 to 40 "
Bread	1 hour
Custard (very slow oven)	1 "
Biscuits	20 min.
Cakes	20 to 45 "

FOR BROILING

MEATS

Mutton chops	8 to 10 min.
Steak, 1 1/2 inches thick	10 to 15 "
Steak, 1 inch thick	8 to 10 "
Spring chicken	20 "
Squab	10 to 15 "

FOR BAKING

FISH

	Time in oven
Shad	15 to 25 min.
Trout	15 to 25 "
Bluefish	15 to 25 "
Small fish	5 to 10 "

FOR BOILING

VEGETABLES

Pears	15 to 20 min.
Spinach	15 to 20 "
Lima beans	30 to 40 "
String beans	20 to 30 "
Potatoes	20 to 30 "
Asparagus	20 to 25 "
Brussels sprouts	10 to 15 "
Green corn	20 to 25 "
Onions	30 to 40 "
Parsnips	30 to 40 "
Rice	15 to 20 "
Turnips	30 "
Beets	30 min. or more

Cauliflower	20 min
Cabbage	20 "
Macaroni	20 "

MEATS

Mutton, per pound	15 min.
Ham, per pound	20 "
Chicken, per pound	15 "
Turkey, per pound	15 "
Corned beef per pound	30 "
Fowl, per pound	20 to 30 "
Tripe, per pound	3 to 5 hours

FISH

Halibut, per pound	15 min.
Bass, per pound	10 "
Codfish, per pound	6 "
Haddock, per pound	6 "
Salmon, per pound	10 to 15 "
Small fish, per pound	6 "

System in Dish Washing

(Country Girl)

My method of washing dishes is a splendid one as the hands do not get in poor condition and the work is quickly and easily done. First, while we are eating, I put all the pots and pans to soak in the sink, with a little soda in each one. After commencing to wash the dishes I wash these first. I have two dish-mops, one for washing and one for drying. I put each pan away as it goes along. Next, I clean the steel knives, using a potato cut in half, with a knife powder, after which they are rinsed and wiped dry. I then clean the sink, using a whisk broom.

By doing the pots and pans first it leaves the hands in better condition, and a clean sink for the final dish-washing. I scrape clean all the greasy dishes and put them to soak in a pan of hot, soapy water. I wash these first and then change the water for clean to wash the cleaner dishes, such as cups, saucers, and so forth. I use a large tray in clearing off the dining-room table. Use system in placing dishes on the tray, placing silver on one end by itself to avoid accidents. By this method the table is cleared off sooner, saving unnecessary steps. I scald the mops. Last, I wash my hands in clean water with castile soap. A handy thing to have in the kitchen is a packet of toilet paper, for wiping off greasy pans and so forth, hung near the sink.

Raising Bread in Cold Weather

I make my sponge in a 2-qt. pan over night and set it on a table. Over this I turn a large pan, on the pan I set a warm flannel, and over all spread a folded thick blanket. In the morning it is just right and after kneading it is returned to the pan and covered the same way. In just two hours it is ready to put into the pans.—Mrs. Dallas, Frontenac Co.

The Sewing Room

Patterns 10 each. Order by number and size. If for children, give size for adults, give bust measure for waists, and waist measure for dresses. Address all orders to the Pattern Department.

TUCKED AND PLAIN BLOUSES



The simple blouse that is without fullness and which is made of fine material tucked, is a pronounced favorite. Here are two models, one adapted to plain material to be tucked as indicated, the other designed for the ready-made material, all over lace and waitings of a similar sort. Both models include the new long close fitting sleeves.

Materials required for medium size is 21 or 24, 3 yds 32 or 2 1/2 yds 44 in wide; the plain blouse, 4 yds 18, 2 1/2 yds 21 or 24, 1 1/2 yds 32, or 1 1/2 yds 44 in wide. The pattern is cut for a 32, 34, 36, 38, 40 and 42 in bust, and will be mailed on receipt of 10 cents.

MISSIE'S SHIRT WAIST 6215



The plain shirt waist with tucks over the bust is an extremely becoming one. This one includes tucks that are arranged most becomingly and conceal the arm hole seam.

Material required for the 16 year year is 3 1/2 yds 21 or 24, 2 1/2 yds 32, or 1 1/2 yds 44 in wide.

The pattern is cut for girls of 14 and 16 yrs, and will be mailed on receipt of 10 cents.

CHILD'S COAT 8212



Such a simple little coat as this is very easy to make. The cape is arranged over it, and the neck is finished with a rolled over collar.

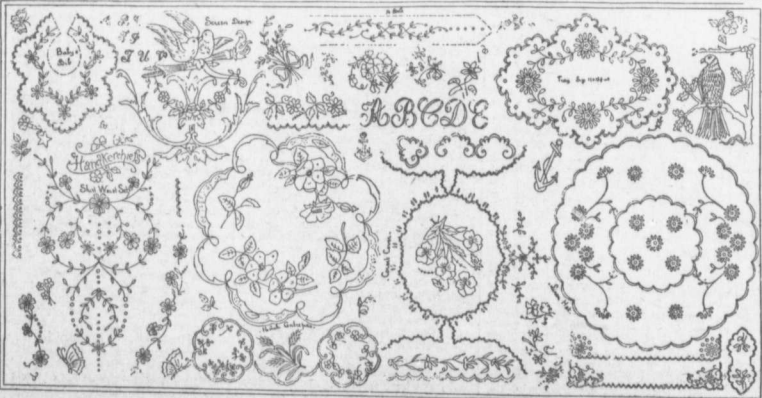
Material required for medium size (2 years) is 3 1/2 yds 21 or 24, 3 yds 27, 2 yds 44 or 1 1/2 yds 52 in wide with 3 1/2 yds of fur banding.

The pattern is cut for children of 6 mos., 1, 2 and 4 yrs, and will be mailed on receipt of ten cents.

Art Embroidery

No. 571. Special Perforated Stamping Outfit. This splendid outfit consists of about fifty up-to-date and many other full-size designs, including a Shirt Waist, Corset Cover, Lingerie Hat, two Complete Alphabets (one 3 1/2 inch and one 1 inch), Center-piece (size 16 inches), two Dollies (6 1/2 inch), two Turn-overs, Borders, Belt, Book Cover, Sofa Pillow, and many other useful designs, in all the modern styles of embroidery. The above designs are perforated in a good quality of paper. We also include a cake each of the blue and white of the "Ideal" two Poncelets, and full directions for using the stamping preparation, at the special price of 70c for all.

These Perforated Patterns can be used an unlimited number of times.



The Canadian Bank of Commerce

(Continued from page 13)

actually benefited, and in no small measure, since the deposits gathered abroad supply a large part of their cash reserves. Had the banks at the date mentioned had no deposits and no loans outside of Canada, only \$10,000,000 would have been added to their resources at home, and this would not have been lent for commercial purposes. On the contrary, in order to bring the total reserves up to the normal level, not only would it have been necessary to add this sum to the cash reserves carried here, but also to withdraw a further large sum from mercantile loans.

During the panic in the United States some of our newspapers published sensational and misleading articles to the effect that the funds lent by Canadian banks in New York were tied up and could not be got back to Canadian banks. Notwithstanding the severity of the panic, however, there was not a day during which moneys lent to New York brokers on call could not have been got in, and while it is true that had it not been for the fact that we have not resorted to ship money to Canada direct from New York, a premium of 3 to 5 per cent. would have fallen to be paid, on the other hand, New York funds could at any time have been obtained for drafts on London, and the gold brought from there—indeed, this procedure was followed to a considerable extent by the New York agencies of some Canadian banks. No more convincing evidence could be had of the availability of call loans in New York than is afforded by the experience of last year.

On the general subject of the moneys lent in the United States, it may properly be argued that reserves are for use in a time of emergency, but on this score it can be shown that the course of the Canadian banks last autumn was not open to criticism. In the month of September, 1907, the total loans of Canadian banks outside Canada amounted to \$38,353,000, while at the end of November, when the stringency was most severe, they had been reduced to \$64,774,000—from which it will be seen that the banks had drawn upon their outside reserves to the large amount of \$24,000,000 to meet the necessities of the mercantile community in Canada.

The President then moved the adoption of the report and said in part:

President's Address

It is hardly necessary to say that the condition of the business are very different from those of a year ago. We were then required to meet the serious lessening of our purchasing power because of poor crops in Canada, and our main result was the culmination of a world-wide expansion in general expenditure, and particularly in the fixing of capital in public and private improvements. We have had a year of a more moderate expenditure throughout the world has been sufficiently checked to ease the money markets, and in Canada we have gathered an excellent harvest. Better class of goods are being sold where have recovered in price to such an extent as almost to wipe out the apparent losses which seemed so serious a year ago, and which were, of course, real to those who were forced to sell. The lessening of our power and disposition to purchase goods has naturally lessened the profits of many manufacturers and merchants; but all this was inevitable, and I think those who consider sufficiently must conclude, as a year ago we suggested would be the case that we have suffered far less than most other countries. Whether we have suffered

enough for our own good is another matter.

Ontario and Quebec.

While the results of the year's farming operations have been a fair average in Ontario, they have been below the average in Quebec. Spring conditions were favorable in most parts of Ontario but the season was late in Quebec and in western Ontario. In both provinces the unusually dry period during the summer affected the yield in the case of many crops, and the farmers and others from the decline in prices. Still the year was a year of prosperity, although the farmer's purchasing power is for the moment lessened by the effect of the poor crops in 1907. The acreage of fall wheat sown in all Canada for the crop of 1908 is five per cent. less than normal, although there have been recent increases in the three prairie provinces and in Quebec. The reduction in the general average is caused by the Ontario acreage falling to 86 per cent. of the normal amount owing to the farmers and consequently bad condition of the ground for sowing. Any loss due to this will doubtless be made up in other directions. Hay and pastures generally were of course unaffected by the drought. The value of the hay and other fodder crops, potatoes and roots, including sugar beets, in Ontario and Quebec, is very great, and yet in discussing crops there is no apt to forget the importance of these relatively to the cereals. The Government report for November shows the value for all Canada of these root, seed, and fodder crops to be \$189,000,000, which 48 per cent. was grown in Ontario and 28 per cent. in Quebec, the money value for 1908 in the two provinces being \$142,500,000.

For a second time dairy exports are much less than for the record year of 1906, and while this is partly due to the lack of rain and a lessened number of milch cows, we have apparently come to a point where the rate of growth cannot be judged by the exports alone as it has been possible to do heretofore with a fair degree of accuracy. Fortunately the statistics now published by the Dominion Government make a study of the subject quite easy. There has been another marked decline in the total value of these exports, the quantity shipped from Montreal being valued at only \$17,142,000, against \$30,941,000 in 1906, although the average price was the highest on record. In butter there is an improvement of about 50 per cent. over the extraordinarily low figure of 1907, but even then we show exports valued at only \$1,266,000, as against \$7,490,000 in 1905. If we compare 1908 with 1905 the quantity of dairy products exported is about \$8,000,000. If, however, we take into account the requirements of our greater population, an increased supply worth about \$9,000,000 is required for home and foreign consumption. But this is not a sufficient explanation, because the decline in exports has been as great since 1906 as since 1905. There is no doubt that it is also due, in a large measure, to the more lavish expenditure at home for all dairy products owing to our increased prosperity. The total value of the entire dairy product of Canada for 1908 is estimated at \$34,000,000. There are in Quebec 2,806 factories for the making of cheese or butter, or both, and in Ontario 1,284, while in all the rest of Canada there are but 265. This comparison gives some idea of the opportunity for expansion in this most valuable branch of farming. No matter how great is the home consumption the requirements of our dairy business should be great enough to provide for it, and barring lean pastures, to increase annually the quantity available for export. It is most unfortunate, therefore, that there has been drought in Australia and New Zealand the same thing has occurred in Canada. As a consequence

the falling off in the supply of colonial butter in Great Britain has been so great that prices have been the highest in twenty years, and, foreign butter makers being unable to supply the delicacy to any considerable extent, it has been supplied by various cheap substitutes for butter, and this is the disadvantage of our future trade in the real article.

Exports of apples have also been smaller owing to the prolonged dry weather. As against 630,000 barrels in 1907 we exported only 351,000 in 1908, the average for nine years being 430,600.

The market for horses has been satisfactory. Owing to the reduction in the herds on account of the lack of food supplies in 1907, and the dry season of 1908, there is not the same improvement in the cattle of Ontario and Quebec as has taken place in the West, and a season of two or three usually plentiful food supplies will be necessary before we have entirely recovered. It is also regrettable that the Ontario farmers, for the last two or three years paid less attention to horse raising than formerly, partly, of course, because of the scarcity of food; the effect has been to lessen the steadiness of our supply of mares, and to give our chief competitor, the Dane, a renewed hold on the market in Great Britain.

The stringency in money has affected the market for wool in Ontario and Quebec as elsewhere. Large wool actions for a time practically ceased, but the manufacturers are as a rule able to hold their stocks, and are endeavoring to make the most of the price. There are now signs, both in Great Britain and the United States, of some renewed interest, and this particular trade will doubtless recover its strong position as soon as any other. There is naturally some lowering of the cost of manufacture, although this will not have its full effect upon boards sawn this year.

In almost all branches of manufacturing there has been a large falling off in output, causing a considerable number of people to be out of employment, and all shop-keepers and distributors of goods have experienced a corresponding diminution in the volume of sales and in profits. This inevitable result of the necessary check which has come to the world's expansion is now gradually passing away, and we can look hopefully to the future, especially in view of the unusual growth of this country. In many branches of manufacturing orders are now coming in quite satisfactorily, and many stocks which had become low are being replenished.

Much the most interesting feature of the year in Ontario has been the Cobalt mining and the prospect of new areas of similar character. The actual silver shipments of 1907 have advanced us to the fourth position among the producers, as compared with the fifth position a year ago. We have passed Germany and we may pass Australia in the near future. Up to the close of 1907 the total value of silver produced in Cobalt was \$11,300,000; and of this about \$6,000,000 was shipped in 1907, the average value being about 65 cents per ounce. The quantity of ore shipped in 1908 was about double that of 1907, but the average value having fallen to approximately 52 cents per ounce the money result is only about \$9,500,000. Had the price of silver remained as in 1907 the value of the product of 1908 would have been about \$12,000,000. The result is in any event very gratifying and is still due largely to development work. The most notable new area is that of the Montreal River district about 75 miles northwest of Cobalt, where the general conditions seem to be practically similar to those of Cobalt. It is too early as yet to guess whether Cobalt is to be repeated. The shipments from Cobalt have been made by about 40 com-

panies; 24 of these are regular shippers, and 15 are paying dividends. Unfortunately these 15 dividend payers are the companies which are the most numerous companies are being created, most of which will not reach the dividend-paying stage. The total capital of the companies listed on the Exchange is about \$10,000,000 and their shares are quoted as worth about \$58,000,000. In addition to these there are many companies whose shares are not listed, but it is of course possible that this rich camp, and the work it justifies these figures, but, if so, it will almost surely mean that a few have made large sums while a very large number of exceedingly foolish people have lost all that they had invested. While Cobalt can produce silver cheaper than any mining area in the world except those where it is a by-product, the silver world's price for silver is disappointing. If the low price continues many mines in other countries must close down, and this would tend to a movement upward.

The total value of minerals produced in Canada in 1907 was \$1,000,000, against \$65,000,000, five years ago and \$100,000,000 twenty years ago.

While the smaller number of immigrants and other travelers, and the lessened number of available favorable factors, Montreal as a port has done well during the past year. It now occupies the fifth place in North America in handling goods, surpassed by New York, Galveston, and San Francisco, and Orleans. The value of incoming and outgoing merchandise for 1907 was \$152,000,000, and to meet the requirements of this trade the Harbor Commissioners have made a number of improvements of the most modern character. The Marine and Fisheries Department have also for some years past been actively improving the lighting of the St. Lawrence, and it is claimed that during the last eight years the decline in insurance rates has been such as to make a saving to freight and insurance combined of about \$6,000,000.

Manitoba, Saskatchewan, and Alberta

There is little to say this year about the prairie provinces that is not pleasant to hear. So far as agriculture is concerned the work of seeding was done under very good conditions, and with ideal weather in June, the sowing hopes of early July, which went as high as 120,000 bushels of wheat, were not without justification. But July was too hot, and in August there was some frost. The total yield did not come up to the calculations of the most optimistic, but it is the largest ever secured in all kinds of produce. Both yield and grade, when the grain was not frosted, were good, and with proper care the present year's return is of course larger than in any previous year. Our estimate of the total quantity of cereals is as follows: 106,040,000 bushels; oats, 103,200,000; barley, 23,850,000 bushels; or in all, 232,620,000 bushels, against 160,000,000 in 1907, and 32,000,000 in 1906. The West has seldom had a season more favorable for the threshing of grain than this year, and also for the preparation of the land for the following year. As a consequence it is estimated that the acreage for 1908 will exceed that of 1908 by 15 to 20 per cent. making a total acreage of 11,500,000, of which about 7,250,000 will be in wheat. With this bountiful crop for 1908 and the handsome returns for 1907 it is well not to forget such years as 1907. There are many avenues of economy and profit open to the Western farmer which because of the ease with which he acquires the land is apt to neglect. This is unfortunate for the country as a whole, and some day it may be unfortunate for him. Apparently he does not always prepare in the fall as large a quantity of seed as is early seeding in the spring, nor is he always careful to use good seed; he

does not use fertilizers to any considerable extent, and the soil is not so rich as weeds with sufficient vigor, nor does he prepare for a proper rotation of crops; and it is regrettable that the higher branches of farming, such as dairying, the raising of good cattle, horses, hogs, and sheep, and the raising of poultry, are not being more rapidly developed. However, the Manitoba Government is doing good educational work of the kind in its Agricultural College, and the Governments of Alberta and Saskatchewan have shown in many ways that they are alive to the most important questions. The example also of the well trained farmers who are to be found in many districts must tell in time; indeed, there are many parts of the three provinces in which great progress in mixed farming is already noticeable.

From the best information we can get the year just closed is regarded as an exceptional one in the history of the cattle trade. Prices have been satisfactory and the European markets have been steadier than at any time since 1912. The prospects for a continuance of good prices are particularly bright owing to the general shortage of cattle in all exporting countries, and especially in the United States. Canadian herds from the Atlantic to the Pacific have now reported by Government experts to be entirely free from disease, and a most careful quarantine against foreign countries as to cattle, swine, horses, and sheep, is being maintained. On the Western ranges the grass is excellent and well cured, and animals intended for next year's market should come through the winter in good condition. While it is difficult to obtain reliable records of the number of total movement of cattle in the West, the following figures will be of interest. The total number of exports for the last four years has been as follows:

1905	64,287
1906	86,575
1907	100,594
1908 to 30th Dec. 1919	100,594

These figures indicate clearly the severity of the winter of 1906-7, and also the recovery from its effects. The total number of cattle, horses, and sheep in the three provinces is estimated as follows:

Cattle.	Horses.	Sheep.
1901	942,625	340,329
1906	1,184,598	623,919
1908	2,975,840	737,639

Now that the slight check to the growth of the West, caused by the world-wide stringency in money, the poor crops of cereals, and the bad winter for cattle, is passing, it may be well, if you are a ready-witted man, to give some of the evidence afforded by statistics of the rapid growth of the prairie provinces. We have already dealt with grain and cattle. In lumber the cut for the country between Lake Superior and the Rocky Mountains—a district not very important in timber areas compared with other parts of Canada—has grown from 15,000,000 feet in 1899 to 296,000,000 feet in 1917. In coal from mines in Alberta and Saskatchewan, the growth in the same period has been from 334,000 tons to 757,000 tons. The grain storage capacity, including terminal elevators, has grown from a little under 20,000,000 bushels in 1899 to 61,000,000 bushels in 1908. The milling capacity of which we have no records for 1899, has grown from under 20,000 barrels per day in 1903 to over 40,000 barrels per day in 1908.

The railway mileage in the three provinces has grown from 2,000 miles in 1900 to 8,560 miles in 1908, and the demand for branch lines is still as pressing as ever. The Premier of Alberta has stated his views as to the necessity for the construction of transportation facilities in his province so urgently, that we cannot doubt but that his people and those of Saskatchewan are keenly alive to the advantage and ne-

cessity of being able to get their crops speedily to the seaboard. The movement of cars will illustrate the poorness of the crop of 1907 and the excellence of the crops of 1906 and 1908, and also the improved capacity of the railroads. For the twelve months ending 31st August, 1907, the number of cars carrying grain was 28,947; for the corresponding period in 1908 63,978, while for only three months of 1908, from September to November inclusive, the number was 48,888. In southern Alberta and at scattered points elsewhere there have been strong complaints of car shortage, but in the service of the railroads as a whole there has been no such complaint.

The number of homesteads and pre-emptions exceeds all previous records, partly because of the new Land Act, which came into force only on 1st September, since which time a great rush has occurred. The number of entries during the first nine months of the past three years has been as follows:

1906	1907	1908
37,690	23,125	41,963

It seems safe to assert that the new policy of the Dominion Government regarding the desirability or otherwise of those who propose to settle in Canada is bearing good fruit, as those who have taken up land during 1908 have been as a rule of a better class than in previous years. The number of settlers coming into the three provinces during the past year is estimated at 105,000 of whom about 40 per cent. were from the United States. The population of the three provinces has grown from 414,000 in 1901 to 975,000 in 1908; the value of goods entered at the Customs Department from \$6,200,000 in 1899 to \$26,000,000 in 1907; the number of branch banks from 25 in 1859 to 507 in 1908; the bank clearings from \$107,786,000 in 1899 to \$717,423,000 in 1908.

These figures abundantly illustrate the prosperity of the West, and we may fairly expect that Eastern business dependent on the West will now improve. Still it must be remembered that, owing to the poor crop and the cattle losses of 1907, the West, so far as its immediate buying power is concerned, is not very much ahead of where it was at the end of 1906. It is sincerely to be hoped that the desire to spend freely and to incur debt will not immediately return, and that

some of the lessons in economy may remain permanently impressed upon the people.

In view of the rapid destruction of timber going on throughout the world, a correspondent of the London Times, in a recent article, draws attention to the quantities estimated as still standing in the Pacific Coast areas of North America, as follows—Oregon, 225 billion feet; Washington, 195 billion; California, 180 billion; British Columbia, 150 billion; Idaho and Montana, 100 billion; a total of 850 billion in Canada, as a whole, is credited with 500 to 600 billion feet. The deep interest of the European world in these vast stands of timber in North America should not be forgotten when we consider our own national wealth. We may see the forests on which we have placed so much reliance disappear with a rapidity which we have not supposed possible. The quantity and value of the lumber produced from the Douglas fir of Oregon and Washington, the sugar pine, the white pine, and the redwood of California, all combined, will illustrate in a startling manner the depletion which is going on, and the enormous money value of these staples:

	Feet	Value
Total production 1905-4,900,000,000		\$73,450,000
Total production 1906-5,000,000,000		104,250,000
Total production 1907-3,900,000,000		83,500,000

Taking all the varieties of lumber into account, Washington exceeds all other states in output, the product in 1907 being nearly 4,000,000,000 feet. The total product of the whole United States in 1907 was about 40,000,000,000 feet with an estimated value of \$666,000,000.

Shipping Cheese to Great Britain

(Continued from Page 17)

The firm handling those cheese must have realized a better profit than they could have done had they paid the same price to our factory, sold to the retailer at the same price as they did, and besides have paid a Brockville buyer one-eighth of a cent a pound commission, a Montreal agent another one-eighth cent for his trouble of unloading, storing, inspecting and reshipping, besides paying for cartage and dock dues at Montreal.

The results of our commission sales bring us to the question, whether the cheese cannot be sold right at home

on a through shipping basis. The importers will co-operate with us in eliminating this encumbrance of trade, (the Montreal inspection) and buy our cheese right on their reputation, and at home. In this way we should gain security, we should gain at least the major portion of the saving in transit, we would obviate the most hurtful injurious speculation and sell our cheese to a certain extent on their merits. All these advantages are aimed at by this association.

CONCLUSIONS

Cheese can be exported from any railway station, direct without in any way hazarding the value of the cheese, making reasonable charges for boxing and handling prior to shipment.

English firms will meet us as agents as purchasers at home or as either to sell on commission.

Upon shipments for sale on commission there is no certainty of receiving either market prices ruling in England or better prices than are ruling at home. Like Montreal inspection, there is an uncertainty about it, as carried on the present basis, it is not paying. This, however, might be overcome; in the first place as to security, no doubt the firms would be willing to make a larger advance than a guarantee of fair returns of proceeds, could be obtained we would suppose in this way: Visit our customers in England (should we anticipate sufficient business in this to make such a proceeding profitable) through a representative from ourselves, with a view of getting a special insight into the business, such as locating as far as possible the customer of each particular factory, and arranging with that grocer to furnish direct to each factory secretary the season's account of all that factory's cheese purchased by him, thus auditing the account sales as rendered to us by the firm selling the cheese. In this way we would be placed right in touch with the retailer himself, as has already been pointed out, to the undoubted advantage of good factories. The sudden collapse of the wealthy firm of Miller & Riley, Limited, capitalized at 350,000 pounds, with unlimited credit, points again to the lack of stability of the most apparently substantial and prosperous firms, and furnishes us a very apt and opportune lesson on the insecurity of a credit system.

Think Only of Permanency

When buying fencing FORGET about the NOW cost. Do as the railways. Think only of PERMANENCY. Select the fence with the quality, weight, stiffness and strength to give longest service. And three or four years from now you will shake hands with yourself because you were shrewd enough to see eye to eye with the railways and buy IDEAL woven Wire Fence.

This Lock makes "IDEAL" FENCE

Strongest in Existence

No fence has a simpler lock than the IDEAL. Yet the railways have proven to us that the IDEAL has the gripping-tensile. Other things being equal, the impossible-rip strip of this simple lock makes IDEAL fence strongest in existence. But other things are not equal. IDEAL Woven Wire Fence has the best quality of hard drawn wire, the smoothest and stiffest uprights. The Limited reason you need prompt investment is that other IDEAL fence will cost you no more than other fences that you will not buy. You think only of permanency. Get the fence booklet shows different styles for horses, cattle, hogs, etc. Write for your copy.

JOIN OUR STAFF OF AGENTS and increase your income. The weight, quality and tensile strength of IDEAL fence is well known.

THE MCGREGOR-BANWELL FENCE CO. LIMITED, WALKERVILLE, ONT.

It is desirable to mention the name of this publication when writing to advertisers

MARKET REVIEW AND FORECAST

RAW MILKS and MILKS Write for Weekly Price Lists. JOHN HALLAM - TORONTO, ONT.

Toronto, Monday, January 25th, 1909... The improvement in general trade conditions...

at 75c a bag in car lots. Ontario potatoes are quoted here at 65c to 65c a bag in car lots...

EGGS AND POULTRY It looks as if we had reached the highest prices for eggs this season...

WHEAT The general wheat situation rules steady. Large shipments from Argentine and Australia are a feature of the situation...

DAIRY PRODUCTS The cheese market is advancing and English buyers are buying more freely...

There was a fairly brisk trade in feed-lots last week, receipts of unbranded butchers' cattle being large...

There was a fair delivery of milkers and springers, and the demand was fairly good. Had it not been for the presence of some outside buyers on Thursday...

and lambs are weaker, lambs sold at \$5.75 to \$6.00, ewes at \$3.75 to \$4 and rams at \$3 to \$3.25 a ewt...

THE Wm. DAVIES Co., Toronto, will pay \$6.40 f.o.b. for hogs at country points this week. Although the bacon market shows considerable improvement...

COARSE GRAINS The oat market, though quiet, owing to light deliveries, is strong. There is said to be plenty of country oats...

There is little change in the butter market. Finest creamery is quoted at Montreal at 27c to 27 1/2c...

Choice creamery and dairy rules steady. Dry cows are quoted at 28c to 29c; choice dairy primies, 25c to 26c...

UNION STOCK YARDS HORSE EXCHANGE Trade in horses during the week was on the quiet side. While there seems to be considerable country business...

LAMBS are quoted on the market here at \$5.50 for select, and \$6.25 a cwt. for lights, fed and watered. Prices are reported higher than at many country points...

UNION STOCK YARDS PRICES WEST TORONTO, Monday, Jan. 25th.-There were 52 cars at the Union Stock Yards this morning...

FEEDS Mill feeds continue strong at about last week's quotations. Manitoba bran is quoted at Montreal at \$21 and shorts at \$24...

SEEDS There is no change in the seed situation. Dealers quote prices at country points at \$5.50 to \$7.50 a bush...

HAY AND STRAW At Montreal a break in prices of 50c a ton has taken place, owing to large receipts and the light export demand...

POTATOES AND BEANS The potato market rules steady and firm. Quebec potatoes are quoted in Montreal

at \$5.50, bulls at \$7.50 to \$8.75 a cwt. Prime picking stock, culls, steers and heifers, which are ready for sale, are quoted at \$4.50 to \$5.00...

BE ELECTRIC RAILWAY You Want to Fit Yourself to Earn \$25 to \$185 a Month? THE WENTWELL BROS. CORP. 205, FREEMONT ST.

ure. They have still considerable quantities of unsold cheese on hand, however, and are anxious to see them cleared. The shipments have been small this week, not more than ten or 12 cars having cleared from this city, representing about 5,000 or 6,000 boxes of cheese.

There is a firmer feeling in butter. The receipts of fresh goods are very small, and there is a steady movement in held stocks at prices ranging from 36c to 37½c according to quality.

HOLSTEIN FRIESIAN NEWS

The Canadian Dairyman and Farming World is the official organ of The Canadian Holstein-Friesian Association, all of whose members are readers of the paper. Members of the Association are invited to send items of interest to Holstein breeders for publication in this column.

Keep in mind the 26th annual meeting of the Holstein-Friesian Association of Canada, which will be held in Association Hall, corner Yonge and McGill streets, Toronto, on Thursday, Feb. 4, 1909, at 10 o'clock a.m. The executive committee will meet on Wednesday, Feb. 3rd, at 10 o'clock a.m. in the Ingham Hotel. To secure reduced rates purchase a single ticket to Toronto and procure a standard certificate from the agent. The annual fee for 1909 is due on Feb. 1st.

HOLSTEIN-FRIESIAN OFFICIAL TEST, FOR DECEMBER

Lady Aggie DeKok (4127) at 6y. 6m. 23d. of age, seven days' production 25.1 lbs. fat equivalent to 10.7 lbs. butter, milk 296.13 lbs. Owned by M. L. Haley, Springfield, Ont.

Fourteen-day Test—42.7 lbs. fat equivalent to 49.2 lbs. butter, milk 1,168.67 lbs. Inka Mercedes DeKok 2nd's Johanna (4662) at 5y. 3m. 5d. of age, seven days' production 15.14 lbs. fat equivalent to 17.9 lbs. butter, milk 401.0 lbs. Owned by Andrew Dunn, Ingersoll, Ont.

Clara W. (1271) at 14y. 10m. 19d. of age, seven days' production 14.56 lbs. fat equivalent to 17.0 lbs. butter, milk 470.3 lbs. Owned by George Wm. Pallett, Summerville, Ont.

Pride of Lincolnport 2nd (10128) at 6y. 4m. 29d. of age, seven days' production 13.86 lbs. fat equivalent to 16.17 lbs. butter, milk 325.1 lbs. Owned by Andrew Dunn, Ingersoll, Ont.

Princess Calamity Wayne (6142) at 4y. 15d. of age, seven days' production 15.14 lbs. fat equivalent to 17.70 lbs. butter, milk 444.1 lbs. Owned by Andrew Dunn, Ingersoll, Ont.

Hilda Wayne Johanna (5425) at 4y. 7m. 26d. of age, seven days' production 14.16 lbs. fat equivalent to 16.45 lbs. butter, milk 401.6 lbs. Owned by Andrew Dunn, Ingersoll, Ont.

Inka Mercedes Posch (7206) at 3y. 3m. 15d. of age, seven days' production 14.10 lbs. fat equivalent to 16.45 lbs. butter, milk 399.3 lbs. Owned by Andrew Dunn, Ingersoll, Ont.

Pietertje Floss (9471) at 3y. 6m. 28d. of age, seven days' production 13.70 lbs. fat equivalent to 15.58 lbs. butter, milk 361.7 lbs. Owned by Andrew Dunn, Ingersoll, Ont.

Queen Abbecker Wayne (7176) at 3y. 1m. 4d. of age, seven days' production 12.73 lbs. fat equivalent to 14.65 lbs. butter, milk 376.4 lbs. Owned by Walburn Rivers, Falden's, Ont.

Judy Pietertje Maid (5211) at 3y. 2m. 17d. of age, seven days' production 11.21 lbs. fat equivalent to 13.30 lbs. butter, milk 322.9 lbs. Owned by George Wm. Pallett, Summerville, Ont.

Duchess Christmas Gift (7278) at 2y. 10m. 22d. of age, seven days' production 10.94 lbs. fat equivalent to 12.45 lbs. butter, milk 378.8 lbs. Owned by Walburn Rivers, Falden's, Ont.

Queen Bunter Barones (7625) at 2y. 3d. of age, seven days' production 10.73 lbs. fat equivalent to 13.10 lbs. butter, milk 322.9 lbs. Owned by M. H. Haley, Springfield, Ont.

Samantha's Faforis Keos (8472) at 2y. 6m. 23d. of age, seven days' production 10.37 lbs. fat equivalent to 12.31 lbs. butter, milk 321.3 lbs. Owned by Andrew Dunn, Ingersoll, Ont.

Miss Sadie Pietertje (7700) at 2y. 8m. 20d. of age, seven days' production 9.72 lbs. fat equivalent to 11.34 lbs. butter, milk 311.2 lbs. Owned by Geo. Wm. Pallett, Summerville, Ont.

Hazel Maiden Mercedes DeKok (10115) at 3y. 2m. 24d. of age, seven days' production 9.23 lbs. fat equivalent to 10.73 lbs. butter, milk 327.5 lbs. Owned by P. J. Bailey, Lachine Rapids, Que.

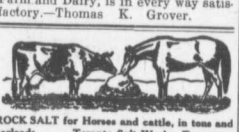
Johanna Keyes (8425) at 2y. 7m. 21d. of age, seven days' production 9.06 lbs. fat equivalent to 10.57 lbs. butter, milk 296.9 lbs. Owned by Andrew Dunn, Ingersoll, Ont.

Daisy DeKok Wayne (7277) at 2y. 6m. 17d. of age, seven days' production 8.07 lbs. fat equivalent to 9.41 lbs. butter, milk 244.1 lbs. Owned by Walburn Rivers, Falden's, Ont.

Queen Josephine Keyes (8424) at 2y. 7m. 3d. of age, seven days' production 8.01 lbs. fat equivalent to 9.34 lbs. butter, milk 251.1 lbs. Owned by Andrew Dunn, Ingersoll, Ont.—G. W. Clemons, Secretary.

The cash prizes given by The Metal Shingle Co. for names of farms of persons intending to build this year is well worth the small effort it calls for on the part of our readers. Read their advt. on page 13 of this issue.

The fountain pen I received from you, for obtaining a new subscriber to Farm and Dairy, is in every way satisfactory.—Thomas K. Grover



ROCK SALT for Horses and cattle, in tons and carloads. Toronto Salt Works.

JERSEYS

DON JERSEY HERD Can furnish you with young bulls bred by Golden Lad of Thorncliffe, who was one of the 1st prize imports to the Toronto Exhibition, 1907. If you want practical money making Jerseys, secure one of these well bred bulls.

D. O'NEILL, Don, Ont. Duncan Station, O. N. O. Ry. 6-4-09

HOLSTEINS

HOLSTEIN FOR SALE.—Thirty females from one to seven years. Six young bulls from advanced registered stock. Justice H. McLean, Inkerman, Ont., O. P. S.—6-1-27-09

FOR SALE—30 HEAD OF HOLSTEINS If you are wanting a choice young cow or yourself, call on me to see the stock. If you will let me write to you before making your selection, you can pick them out.

GORDON H. MANHARD 2-5-50 Manhard P. O., Leeds Co., Ont. 7 miles south of Brockville on C.P.R. (Clark's Crossing)

SPRINGBROOK HOLSTEINS AND TAMWORTHS

32 Choice Young Tamworths from imported sires and sire-bred imports, the now King David. A few rich bred Holstein bulls and several females. Bargain to suit buyers.

A. C. HALLMAN, Bressau, Ont. E-5-11-09

HOMEBRED AND IMPORTED HOLSTEINS

We must call at least as cows and heifers at all to make room for the natural increase of our herd. This is a chance of a lifetime to get a good Jersey and sire-bred import. This is a chance of a lifetime to get a good Jersey, Pontiac, Hermes, Imp. son of sire, head of herd. Come and see them.

H. M. CRAMPTON, Ont. Putnam Stn., 1½ miles—C. P. R. E-4-4-09

MISCELLANEOUS

JOS. FEATHERSTONE & SON, Streetville, Ont. Large Yorkshire Hogs for sale. E-11-09

R. H. BARDING, Manville Farm, Thordale, Ont. Dorset Sheep a specialty. Telephone. E-7-17-09

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PONIES FOR SALE

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BERKSHIRES AND TAMWORTHS

Choice Berkshire Boars fit for service and sows ready to breed, by imported sire, Choice Tamworths, all ages by a Toronto and London prize winning boar. Price low, coming quick. J. W. TODD, E-3-17-09 Maple Leaf Stock Farm Corinth, Ont.

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AYRSHIRES

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LAKESIDE STOCK FARM Ayrshires, Clydesdales and Verkhaires. Write for prices on Bull Calves. GEO. H. MONTGOMERY, 0-3-19-09 Philipburg, Que.

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AYRSHIRES

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Will you please mail me POSTAGE PAID on the BEAUTIFUL, SIX COLOR PICTURE of DAN PATCH 1:55, the World's Champion Harness Horse, described above and also full particulars of my plan of GIVING AWAY a \$5,000.00 DAN PATCH STALLION. I have filled out the coupon as requested, giving the number of hair stock I own and my name and address

Name.....
Address.....
City.....
State.....
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WONDERFUL WORLD FAMOUS MILES BY DAN.

1 Mile in	1:55	30 Miles averaging	1:57 1/2
2 Miles in	1:55 1/2	45 Miles averaging	1:58
3 Miles in	1:56	60 Miles averaging	1:58 1/2
12 Miles averaging	1:56 1/2	120 Miles averaging	2:02 1/2

Dan drew 180,000 people at 20 exhibitions and over ONE MILLION PEOPLE have attended his marvellous and thrilling speed exhibitions. The tremendous crowds drawn by Dan Patch have never been equalled.

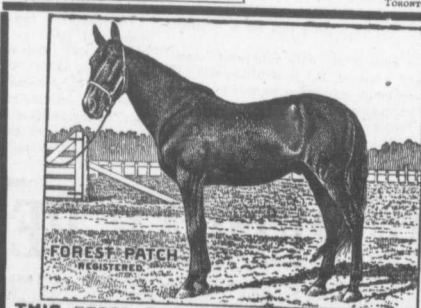
DAN HAS BROKEN WORLD RECORDS 14 TIMES.

The marvellous Dan Patch was faster than ever in 1908, although 12 years of age. His first fast mile in 1908 was in 2.00—his second in 1:58 1/2—his third in 1:58—his fourth in 1:56 1/2—his fifth in 1:56 1/4—Unequaled Other Years.

ACCIDENT ONLY PREVENTED 1.54 ON OCT. 11, 1908.
On Oct. 11, 1908, at Lexington, Ky., Dan Patch paced the greatest mile of his life and Only an Accident Prevented his having a record of 1:54. He paced the first quarter in 29 seconds—the second quarter in a record of 1:34. He paced a 1:30 clip—was at the half in 56 1/2 seconds, a 1:53 clip—the third quarter at the seven-eighths pole when the pacemaker broke a blood vessel in his nose, tripped and slackened up at once which crowded Dan in toward the fence and forced him to slacken his tremendous stride of 22 feet, and yet Dan Patch finished the mile in 1:56 1/4, which the Horse Papers and all Horsemen admit was the Fastest and Greatest Performance in the life of the World Famous Harness Horse King. This accident is all that prevented Dan from pacing this mile in 1:54. **Look Out For Dan in 1909.**

After eating "International Stock Food," the Greatest Animal Tonic, for over Six Years Dan Patch 1:55, has paced more Extremely Fast Miles than lived. Dan's splendid physical condition after six years of continuous miles under two minutes is no wonder of the entire horse world. This preparation gives Dan purer blood, more strength, better appetite and digestion, more nerve force and speed. We Originated "International Stock Food" over twenty years ago and have constantly used it for our own Horses, and other stock. It gives such results for Dan Patch 1:55, it will give paying results for your stock. It is sold by Two Hundred and Fully Thousand Dealers on a "Spot Cash Guarantee" to refund your money if not satisfactory. We also own "International Stock Food Farm" of 700 acres, 10 miles from Minneapolis, on the farm we have over 200 head of Stallions, Brood Mares, Colts, Trotters and Pacers. Our leading Stallions are Dan Patch 1:55, Director 2:05 1/2, Arion 2:07 1/2 and Roy Wilkes 2:06 1/2. We will be pleased to have you visit our stables at any time and see the actual, every day results of using "International Stock Food" for horses of all ages and conditions. We hereby agree and speed horses every day. "International Stock Food" has stood the great test of over twenty years constant use by over Two Million Farmers and stock Owners. Its sale has reached around the world until the stock owners of Japan, China, Australia, South Africa, etc., join with the stock owners of European Countries and the United States in pronouncing "International Stock Food" the Greatest Blood Purifying Tonic and aid to digestion that prove that our world famous "3 FEEDS FOR ONE CENT" is a "Trade Mark," [No. 52791,] for Highest Quality, combined with remarkable cheapness to use. It Purifies the Blood, Strengthens the System and Greatly Aids Digestion and Assimilation so that each animal obtains More Nutrition from all grains eaten. It is guaranteed equally as good for all kinds of stock and perfectly harmless even if taken into the human system. One Tablespoonful of OATS for each horse Every Day and the same proportion in feeding all other kinds of stock. We are simply asking you to use "International Stock Food" on our positive guarantee that it will save you money, over its cost, and keep your stock healthy and vigorous. "International Stock Food" has been the Standard of The World for Over Twenty Years as a purely vegetable, cheap, medicinal tonic to use in small amounts mixed with the regular grain feed. Do you realize that a mere modesty of the Leading Live Stock Breeders of Canada and opinions in preparing these formulas for the future and live stock shows? Do you realize what a tremendous and indispensable endorsement for this Food? Do you realize that over two million of the best farmers and breeders have been constant, day after day for over twenty years? Would they continue to use for twenty years if it were making quakes for Farmers, Breeders and Stock Owners in order to stand such a practical test for over twenty years? Do you realize that you are saving money by not using Actual test on your own stock will prove superior, paying merits. We offer to let you test it entirely at our own risk. Is our offer fair? If you desire any special information in regard to our Farm, Paper, 250,000 Dealers and 2,000,000 Stockmen throughout the world, Merit Above All Other Stock Food. Write for Free Literature from All the Different Countries of The World.

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FIFTY DOLLARS SPENT FOR MY SHINGLES ADDS \$500.00 TO THE VALUE OF ANY HOUSE OR BARN

ANY building good enough to be roofed right is too good by far to be roofed with wooden shingles. No building worth carrying fire insurance on deserves any roof less good than "Oshawa" Galvanized Steel Shingles. Simply because—

"Oshawa" Shingles, of 28-gauge semi-hardened sheet steel, make the only roof that absolutely and actually will be a good roof for a hundred years. If any "Oshawa"-shingled roof shows the least sign of leaking in twenty-five years, this company will replace that roof with a new roof, free. That's the kind of a written guarantee you get when you buy "Oshawa" Shingles—and there's \$250,000 back of the guarantee.

Thousands of "Oshawa"-shingled roofs cover farm buildings, residences, public edifices, churches, all over Canada. They make a roof

handsome enough for any building whatever—and it is the most practical of roofs—for the simple reason that an "Oshawa"-shingled roof can NOT leak.

It can't leak because, to start with, it is made of extra-heavy, extra-tough steel, special galvanized. The galvanizing makes these shingles wholly proof against rust—and rust is the only enemy steel has when it's used for roofing. That Pedlar process galvanizing makes it needless to paint



an "Oshawa"-shingled roof. Long years of weather-wear won't show on these shingles. That one item of paint saved—of the need for painting entirely done away with—saves you the cost of an "Oshawa"-shingled roof in the first few years it's on any of your buildings. And just remember—it will be a good roof for a hundred years.

Such a roof is not only rain-proof, snow-proof, and fire-proof, but it is wind-proof. It makes any building it covers warmer in winter and cooler in summer—because—

The Pedlar four-way-lock—every shingle locked to adjoining shingles underneath, on all four sides—makes an "Oshawa"-shingled roof



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practically one solid sheet of steel, without a crevice or a crack.

**"OSHAWA"
GALVANIZED STEEL
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A new roof for nothing if they leak by 1934

That keeps out the slightest suspicion of moisture—it keeps out the winter winds and keeps in the warmth—and in summer it wards off the sun's rays—won't let them get through.

And "Oshawa"-shingled roofs are fire-proof—as a matter of course. How could you set fire to a roof of solid sheet steel? The fire-insurance people will make lower rates on a building protected by "Oshawa" Galvanized Steel Shingles. That saving alone will pay for the roof within ten years.

Some think a corrugated iron roof is fire-proof and about as good as an "Oshawa"-shingled roof. That isn't so. We make corrugated iron roofing—and it's all right, for its kind. Nobody makes any better. But corrugated iron isn't the roof for a farm building—nor for any building that is meant to stand a long while. It is a good enough roof for structures that are meant to last only a few years—

but only "Oshawa" Shingles are sure to last a hundred years and are good for a century.

Another thing about these shingles—They make a building lightning-proof—insulate it far better than any lightning-rod system ever could. Last year lightning destroyed over half a million dollars' worth of farm property. Not a cent of that loss could have happened if the buildings that were struck had been roofed right, which means roofed with "Oshawa" Galvanized Steel Shingles.

Maybe you think the first cost of these shingles is so high as to outweigh all the savings they make and all the merits they have? Would it surprise you to know that you can "Oshawa"-shingle any roof for \$4.50 a square. (A "square" means 100 square feet—an area 10 by 10 feet.



Just about the price of Al cedar or cypress shingles—and they'll be rotted to dust before even the first ten years of the Pedlar guarantee have passed. An "Oshawa"-shingled roof will outlast ten wood-shingled roofs—and be a better roof every minute of the time, in every way a roof ought to be good.

Anybody can put on these shingles—a hammer and a tinner's shears are all the tools necessary. It is impossible to

get them on wrong—you'll see why when you send for a sample shingle and a book about "Roofing Right." Suppose you send for the book and the sample to-day—now. It will pay you to get at the real facts about the right roof.



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