

the new operator looked about him for "that fellow who told him it was so hard to run." The separators are growing steadily in public favor, and there is no doubt but that the old system of "creaming" will soon be forgotten. Most of the other appliances for the manufacture of cheese and butter were on exhibition in this department.

POULTRY.

Fall Poultry Notes.

BY M. MAW, WINNIPEG.

This has been a good season for raising poultry and numerous flocks of young chickens are crowded up in the coops and places where they were raised. They huddle up so close at night that many of them get overheated. The outside ones, feeling cold, keep pushing in; those from the center getting to the outside are chilled and contract a cold in the nostrils and head which soon develops into roup if not looked after. It is best to immediately remove all birds showing the least symptoms, and dust powdered sulphur down their throats and wind-pipe, rubbing the outside of their heads with coal oil and injecting a little into their nostrils and ears. If the cold is in an advanced stage and a disagreeable smell comes from the bird, it is best to kill and burn the carcass. If it is a valuable specimen you may probably cure it, but when this disease once gets a hold it debilitates the system, and the bird being delicate is liable to contract other diseases, and is quite unfit to use for breeding purposes. To prevent the young chicks from overcrowding, remove them to the place you intend them to occupy and see that they go to roost at night. The best plan is to put some temporary roosts near the ground. If they do not use them, go in after dusk and quietly place a few on the roost. They will soon take to going up themselves, and all danger from overcrowding will be over. Another trouble this time of year is that the young cockerels are apt to seriously annoy the pullets and moulting hens. If possible remove them to a quiet, moderately dark building, and feed all those you intend selling. There is a better market and better prices early in the season than towards Christmas, when so many are rushed on the market at the same time that dealers get them at prices far below their value. Moulting hens should be well fed with good clean nourishing feed and sheltered from cold winds or rain. Moulting is a great tax on the system. Birds that get through early in the fall will, if carefully fed and housed, lay during the winter. All hens that have not moulted should be fattened and killed; they will not lay till late in the spring. They run up the feed bill, and by overcrowding probably cause those that would lay to stop. At this season of the year it is best to get winter quarters in a good state of repair. If one has a ground bottom to the henhouse, remove the surface to a sufficient depth and fill in with fresh, clean, porous earth or sand and dig in plenty of lime or some disinfectant. See that all cracks are filled up and broken windows repaired. It is not necessary to keep a henhouse very warm. I prefer one or two degrees of frost to a temperature just above freezing point, as houses at that temperature are apt to be damp and uncomfortable.

In housing young turkeys always remember that they need a cold, dry temperature, and will not thrive in a warm, close house. I keep mine in a large loft; they can come in and out when they please, and they are out most days during winter. They will fatten better in a place of this description and thrive on less feed. Ducks and geese should not be allowed access to the chickens' quarters, they foul the ground and water vessels. They do not require warm quarters. Guinea fowls should be wintered in warm, dry quarters, as they are very sensitive to damp and drag their feathers, and if allowed to do this it soon causes cramp. Winter supplies of vegetables and roots should be saved this month. There are generally lots of cabbage that have not developed sufficiently for table use. Pull them up and store in some outbuilding or loft and let them freeze. They will then keep all winter and prove very valuable to the laying hens. Turnips, beets, small potatoes, are all worth saving. Gather up the chaff after threshing; it is good to put on the floor, and keeps the hens busy when without it they would be moping in some corner. Be sure and provide a good heap of sharp grit. You can't get it after the ground freezes up, and it is a necessity. Don't try to winter too many in a small building. Select the best, give comfortable quarters and proper attention; they will pay better than a large number overcrowded, and come out in good shape in the spring.

Poultry at the Western Fair.

The exhibitors of poultry at the Western Fair feel that they have an exceedingly suitable building in which to display their fowls. It is roomy, light, and well-ventilated, and was kept till the close of the exhibition in clean, neat condition. Many of the leading Ontario poultry breeders reside in Western Ontario, and at no great distance from London, which circumstance insures a high-class exhibit at the "Western." One has no right to expect the show here to be as large as at Toronto, but the facts are the prize winners at the Industrial were in very few classes better than at London. There were in all some 1,500 entries, against some 2,700 at the Industrial.

The most largely represented classes were those

of Leghorns and Plymouth Rocks. It is not surprising that these varieties keep well to the front at an agricultural poultry show, as they no doubt represent a large proportion of the farm fowls of Ontario. Of Leghorns browns and whites were most numerous, while buffs and blacks were well represented. Among the barred Plymouth Rocks were many very fine heavy birds with beautiful markings. White Plymouth Rocks seem to be gaining in popularity, as the exhibit this year was especially fine. There were also some half-dozen entries of buffs. Dorkings too may be classed as favorably recognized farm fowls. The exhibits of both colored and Silver-gray were of a high order and numerous. Hamburgs of the various sorts do not occupy a prominent place as farm fowls, but still they shell out a large number of eggs, and seldom sit. The entries were not many, but exceedingly well brought out by Messrs. Bogue, of Lambeth, and McNeil, of London. Javas are a monster breed, but they do not increase at this show. Black Minorcas promised to take a prominent place a few years ago, but the exhibit at the "Western" was considerably below the ordinary in point of numbers. There was a good showing of Wyandottes, and also of Black Spanish. Cochins, both buff and white, were well shown, especially the white variety, by Mr. McNeil, who thoroughly understands the plumage question. A few of the blacks and partridge varieties were also well shown. At the Toronto Industrial the Brahma sections were sadly below par, but not so at London. Not only was there a good entry, but both in old birds and chicks the quality was such as would have scored well. Polands are a small but beautiful sort of fowl. The various varieties were represented not numerous but very good. Games and Bantams of various sizes and colors filled considerable space, and were indeed interesting to a large class of visitors.

Both Mammoth Bronze and White Holland turkeys were well shown. Some of the former breed may well be termed "mammoth" so large were some of the toms. They were brought out in beautiful plumage by Messrs. W. H. Beattie, Wilton Grove; Andrew Elliot, Pond Mills; W. E. Wright, Glanworth; and others. The same exhibitors had forward some real beauties in White Hollands.

Bremen and Toulouse geese were represented, and much admired for their great size and beautiful plumage. The chief exhibitors were: Wm. McNeil, London; David Bogue, Lambeth; and W. H. Beattie, Wilton Grove.

There was a great array of ducks, chiefly of the white varieties, Pekin and Aylesbury, but many beautiful plumaged Rouens were also in evidence.

Pigeons and pet stock occupied their accustomed large space, and were probably as much admired as any other branch in the building. Dr. Niven's handsome pheasants afforded a rare treat to many a visitor, as did also in a less degree the several cages of ferrets and rabbits. The show may be pronounced a grand success.

THE HELPING HAND.

Homemade Furrow Cleaner.

FIG 1.

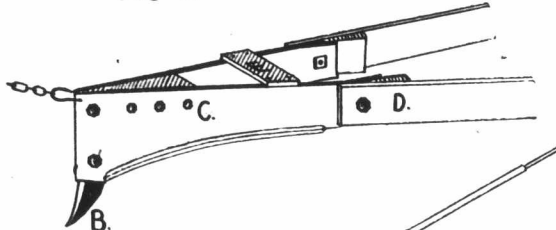
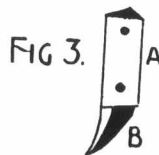
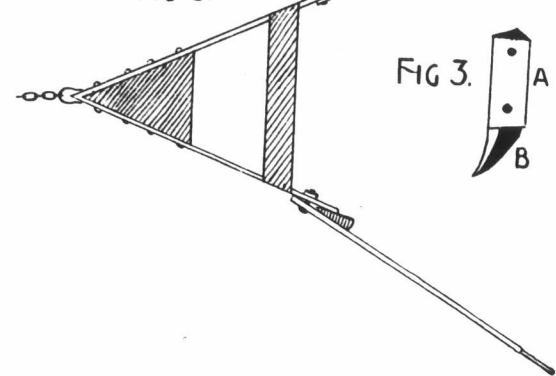


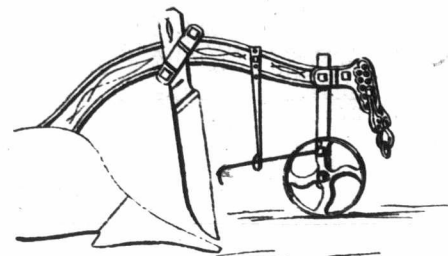
FIG 2.



MR. WM. MOUNTAIN, Perth Co., Ont.:—"The above illustration represents a furrow cleaner. It is intended to replace hand shoveling in the making of surface ditches for either fall plowed or fall wheat land, where this is required. The moldboards (C) are made of hardwood plank 12 inches wide and 3 feet long, cut away as in figure 1 and beveled on the outside. They are bolted to a block of wood 15 inches long and 4x6 inches square, cut down to three sides to form a snout at the point of this block. Below the moldboard at B is an iron point shaped like the tooth of a scuffler (shown in figure 3). This is bolted to the block, and goes in the bottom of the furrow. The piece D, 8 inches wide and 3 feet long, is attached loosely by one bolt (as in figure 2), having a wedge behind to make

it flange. E is the crosspiece used to keep moldboard in place, or it may be boarded all over the top, and when not in the furrow can be turned over and run as a boat. The driver should sit or stand on snout when working.

Plow Cleaner.



The above illustration of a plow cleaner sent us by Mr. F. W. Crealy, Middlesex Co., Ont., is a rod attached to the wheel of the plow. The hook on the end of rod is intended to clean off grass, etc., from the coulter each time the wheel revolves.

GARDEN AND ORCHARD.

The Apple Crop.

PICKING, PACKING, AND MARKETING.

The greatest difficulty that apple shippers have met with in past years has been caused by the rough handling of the fruit in picking. Many dealers say that the loss when shaken off the tree has been one-third greater than with hand-picked apples. As the crop is very light this season, and the price high, the growers are likely to be more careful of the fruit. It will, however, tempt both growers and shippers to pack fruit of inferior quality in order to increase the output. This system is just as detrimental to the trade as that of shaking the fruit off the trees. If we hope to retain the trade that has been established in the English market, it is necessary to supply "that nation of shopkeepers" with fruit that will bear close inspection and prove palatable to their consumers.

Where it is necessary to employ help to pick the fruit it is more satisfactory to engage the pickers by the day. They have then no motive to slight their duty, and with a responsible overseer good work can be accomplished. It is not advisable to take every man that is seeking employment for this purpose. The overseer can tell in a very short time who are the objectionable pickers, and other employment should be found for them at once. One rough picker may spoil a whole batch of apples in a few hours. It is only necessary to have a small quantity of bruised apples mixed through each barrel to have the entire lot unfit for sale, or at least reduced in value, when they arrive in the English market. If farmers could realize the amount lost by rough handling in picking there would be more distinction made in the pickers engaged. Though the shippers may be the direct losers, the producers are bound to suffer in the end. Handle apples as you would eggs is good advice. It is important that the fruit be nearly matured before beginning to pick. Although apples picked before they are ripe will keep longer than ripe fruit, they are inferior in flavor, and become withered and tough after a time. Sound apples do not decay until they are overripe.

Packing the fruit for shipment is no less important than the picking. Men who have experience in the business are not likely to damage the fruit in handling, nor is it probable that they will put any damaged fruit in the barrels. In fact, they are sometimes credited with leaving too many good apples in the pile when sorting the fruit. This, of course, is more likely to be the case when apples are very plentiful. It may not be out of place to suggest for their benefit, as well as the benefit of the producers, that they use precaution in packing this season's crop. The tendency will be to go to the other extreme.

It is absolutely necessary that a responsible man accompany every gang of packers. He should be fully acquainted with the manner of grading required by the markets. The same system should be practiced as much as possible throughout the whole country, and packers held responsible for carrying it out. It is in the interest of fruit growers to observe this matter closely. After the fruit is packed, the part which is not shipped immediately should be placed under shelter until the weather becomes colder, when they should be removed to a place where the apples will not freeze. It is also essential to keep the apples cool in order to prevent decay. A dry, well-ventilated cellar is a suitable place, provided the temperature can be kept at about 40 degrees Fah. A simple plan is to place a tank of water near the apples, and regulate the temperature by it. The water will freeze before the apples.

The growers should use judgment in selecting the fruit for market. Although it is very unwise to export a poor product, it is not advisable to send all the good apples to foreign markets and keep the refuse for home consumption. Small, scrubby apples should be consumed on the farm, not by any means by the family, though they may be profitably fed to stock. There should always be a good article kept for the home market, and the first market to be supplied should be the farmer's own table. The story is told of a man who when