

pass them on to posterity better for having served their needs.

It requires pluck and intelligence to undertake the redemption of a farm overrun with weeds. It is a task that cannot be accomplished by legislation, nor by the mere devising of a scheme, nor by one supreme effort, but to successfully clean a farm one must first be able to stand the expense, must know the nature of the weeds to be fought, must lay plans so as to be at the weeds when they can least stand attention, must study what crops will give the weeds the least chance to make growth and seed, and must be prepared to keep at the work for years, just as years of neglect were responsible for the introduction and spread of weeds.

Last week it was our pleasure to visit two farms where just a resolute stand is being made to not only check weed growth, but to clean land that through neglect, lack of knowledge of the nature of weeds, and faith in weed laws had become almost worthless. The land is of the rich, alluvial, black nature that extends over all Eastern Manitoba and follows the river valleys into the interior farther west. One of the chief reasons it has weeds is the fact that practically every kind of seed that finds a lodgment in its rich warmth grows and multiplies. Weeds and grasses that spread from their roots find it particularly hospitable, while their seeds lose no time in germinating. These lands are also



SHEAVES SHOWING THE RESULT OF FALL CULTIVATION AND NEGLECT OF IT.
On the farm of G. P. Wastle, Oak Bluff, Man.

peculiarly hard to clean owing to the fact that the part of the country in which they are located gets more rain than the average of the west, and when rain falls nothing more can be done in the fields until the soil is dry again. This often makes it impossible to work on the land for a week at a time, and possibly that is the week in which cultivation would do particular good. On the other hand when the rainfall is plentiful it gives the advantage of starting weed growth after harvest, and keeps the surface soil mellow. Following this clue Mr. G. P. Wastle, and the Emmet Land Co., of Oak Bluff, began cultivating stubble last year after the crop was off, and kept it up as frequently as time would permit until the frost came. Mr. Wastle undertook an intensive experiment, the result of which clearly points the direction in which efforts to destroy weeds should be made. He selected a field overrun with the perennial sow thistle, Canadian thistle, French weed and some wild oats. In this field he marked out a strip of land about three rods wide and disced it about ten times between harvest and freeze up. The result of this cultivation is to be seen in the illustration of the wheat sheaves on this page, and also in the stubble, but the camera could not show the difference in the latter. The stubble on the soil that had been cultivated, and that alongside, which had received the ordinary treatment of spring plowing could be distinguished five hundred yards away.

Of course one cannot give stubble ten discings in the fall, there is too much to do at that time, but the lesson is plain. The Emmet Land Co.

under Mr. Schrieber as foreman, are following the hint on a large scale. The accompanying illustration shows two discs and a drag harrow following the binder. One hundred and sixty acres have been worked this way this season by four men and fourteen horses. After the crop is off, more cultivation will be given, as the Emmet Land Co. is a man who has an instinct for good farming and a horror of dirty crops.

Lack of power is the great handicap in the fight against weeds at Oak Bluff. The fields are level, and large and the farms are exactly suited for cultivation by steam or gasoline power, the latter preferably, since the building of a large ditch has cut off much of the water supply. With power cultivation Mr. Wastle estimates fifty acres a day could be disced and harrowed. By this means from two hundred and fifty to three hundred acres could be thoroughly treated each fall by one outfit. Mr. Schrieber, however, is plugging away with horse power, and will win out as well as make the land pay as he goes along, although he spent about five dollars an acre cultivating fallow this year.

As yet spraying to kill weeds in the growing grain crops has not been tried at Oak Bluff, but as was noted in our July issue, considerable of it is done at the next station west, Sanford, and on the east the tests of the agricultural college are being watched. With some weeds the spraying would assist the cultivation in effecting a distinction, but it is questionable if the Canadian and sow thistle, which are the most troublesome would be destroyed.

It must not be supposed, however, that cultivation is the whole remedy for these lands. They must have a different system of management in order to return a revenue for the work expended. Cleaning the farms by extensive cultivation should be considered as only preliminary to a system in which stock feeding plays an important part. Clover, cows and hogs should be found on these high priced, rich lands that are convenient to market. Clover chokes weeds and opens up the subsoil, an urgent necessity on these old lands, cows make good use of clover, and whenever there are cows and clover half the work of raising hogs is done.

High Winds Injure Barley Crop

The advantage in growing barley by farmers as a cleaning crop and for pig feed is largely discounted by the ease with which the crop may be destroyed. Several persons have complained that the high winds of late July and the first week of August practically destroyed the crop and cut the yield down two-thirds, in some places rendering the crop not worth cutting. Barley it is known is very easily threshed out if about ripe, but the standing grain referred to was said to be quite green. Is there not a possibility that our stocks of barley need regenerating so that farmers may be reasonably sure that the stalks will carry the berries to maturity?

DAIRY

During the month of October the dairy department of the Montana Experiment Station will run a dairy special through the states. Montana is having quite a revival in the dairy industry. A lot of new settlers from the middle west are settling up the old ranges, and taking their dairy habits with them. The state dairy department is in charge of a Canadian, W. J. Elliott, who is arousing enthusiasm.

Keep Track of Your Own Affairs

It is one of the easiest things in the world for a dishonest creamery man to bamboozle his patrons, if the patrons are willing to allow themselves to be "done." Every little while in dairy districts a report gets into circulation that this creamery or that one is paying a higher price per pound butter fat than another. Or it may be the other way around and patrons are getting better tests in one creamery than another. Dissatisfaction instantly results. If an agent of the creamery that is purported to be paying higher prices, goes through the district covered by the creamery that is supposed to be paying its patrons less, he gets cream right and left, everybody is anxious to patronize such a concern, and without any thought as to whether or not prices in the one are

better than the other, at least with no more thought about it than is required to handle the report going around, the patrons hustle over to do business with the outfit that is giving the better price or maybe higher test. As a general rule they don't make anything by the change.

The trouble is that farmers usually listen too much to what somebody else says in the matter and do too little thinking for themselves. Every patron ought to know about what the cream tests which he is delivering to the creamery. He could purchase a small Babcock tester for five dollars or so, learn to operate it, add know definitely whether or not the creamery was giving him a square deal. He would have something definite then to go by. The man rarely succeeds who depends on somebody else to look after his affairs.

There are a lot of things in the dairy business, especially matters in connection with selling cream to the creameries, that farmers know little or nothing about. They are depending on somebody else to keep them informed in such matters. "Somebody else," as a general rule, will keep patrons informed all right, but his advice is not always to be relied upon, especially when he happens to be looking after his own interests, as is mostly the case.

Cream testing isn't half as difficult a task as the average farmer has been scared into thinking it is. Creamery operators seem to pick the business up pretty quickly, and what some of them can learn, any farmer of ordinary intelligence ought to master in the same time. We wonder sometimes if farmers really want to know as much as they can about questions such as these.

POULTRY

Notes on Poultry Fattening

Oats, finely ground and the coarse hulls sifted out have proven the best grain for fattening chickens. Oats should form the basis of any mixture used.

Crate feeding, if any number are to be fattened, is to be recommended. Make the crates of slats, have them 6 feet long, 16 inches wide and 20 inches high, each crate divided by light partitions into three parts, and four birds placed in each compartment. A small trough, V shaped, resting on supports in front is provided to feed the slop foods in. Mashed or slop feed only is fed during the fattening period. The birds should be fat enough to kill in 24 days.

* * *

For a small number of chickens it is not necessary to go to the trouble of making crates. Get some packing boxes of any size, take out one side of the box, nail laths over it and the open top, up and down on the side that is to be the front, place the box on something up from the ground, and have one lathed side underneath to let the droppings fall through, and the other in front for the birds to feed through.

In feeding take finely ground oats with the hulls sifted out, or a mixture of finely ground oats, barley and buckwheat, equal parts. Wet it with sour milk, skimmilk or buttermilk, make it into a thin porridge and feed in the troughs. Give chicks all of the mixture they will clean up, and don't have food before them at all times. Feed twice a day. In addition to the meal, some raw vegetables should be added to the fattening ration, and a little beef scraps or blood meal.

* * *

The chicks sometimes will go off their feed if they are not carefully managed the first few days after going into the fattening crates. They should be fed lightly at first. Parasites, too, may bother them so much that fattening is slow and expensive. See that they are free from lice before commencing. Give them a good dusting with insect powder anyway to make sure.

The chicks need grit and fresh water quite as much in the crates as they do in the yards. Have water before them all the time, and give grit once or twice a week.

* * *

It is a little difficult to fatten fowls in ordinary pens. They require more feed, make slower gains and do not produce as high a quality of meat as crate fattened birds. Some practice feeding heavily on grain and mash for three weeks or a month before feeding, and good gains sometimes are made, but it rarely pays. Crate fattening is much easier whether a man has a dozen birds or several hundred. It is not much trouble to arrange a few old boxes into fattening crates.