

crushed, and may find their way back on to the farm again. The laws in the Prairie Provinces require such seeds to be so treated that their germinative capacity is destroyed. The most summary method of accomplishing this would be to burn them. But doubtless boiling them for an hour would serve the purpose just as well, and they could then be used for feeding purposes or consigned to the manure heap.

3. Threshing machines are required by law in the Prairie Provinces to be thoroughly cleaned before proceeding from one farm to another, and this practice might with advantage be made compulsory in other provinces.

4. If there is one thing more calculated than another to dishearten a farmer in his struggle with weeds it must be to find his efforts nullified by the carelessness or laziness of his neighbor who supplies him every year gratuitously with a fresh stock of air-borne weed seeds. For a hardship of this kind legislation would appear to be the only remedy. But legislation is useless unless it is enforced, and it appears that in provinces that have a Noxious Weeds' Act the law is to a large extent being evaded. Probably the best way to remedy this would be to have a Provincial Noxious Weed Inspector appointed as a permanent officer under the Department of Agriculture in each province. As the work would be largely undertaken during the summer months a number of temporary inspectors would be required, and it is very likely that the students attending the various agricultural colleges would be available for service. No great amount of training would be necessary to identify the weeds concerned, the students would gain experience, and at the same time would benefit themselves financially, which in some cases where they have to rely on their own resources for their education would certainly be a boon. This plan of employing the students in summer has been adopted for some years by the Irish Department of Agriculture and has worked well.

If farmers are subject to law in this matter the owners of waste ground, railway banks, etc., should also be made equally amenable. Unless the work is done thoroughly and completely little benefit will result.

To begin with, too large a number of species should not be included as noxious weeds, and these should be cut before they come into flower. If allowed to flower certain species can perfect their seeds even after being cut. All plants whose seeds are carried by wind or by becoming attached to the hair of animals should be mentioned as noxious weeds. Then poisonous plants should also be scheduled in the list, and probably also weeds which spread rapidly by underground stems and roots. But other weeds which have no special mechanism for spreading from one farm to the next should not be included, as the farmer is already protected against the introduction of such by the terms of the Seed Control Act.

J. ADAMS,
Division of Botany, C. E. F., Ottawa.

A Hint to Manufacturers.

Editor "The Farmer's Advocate":

In your issue of September 3rd is a question about filling silos with carriers, the answer is rather misleading. Carriers set only ten feet from the silo would be so straight that they would elevate a very small quantity at a time, and the top would not reach far enough into the silo to prevent waste, especially if there was a wind. Our silos round here are about 24 feet high, and we have been handling a carrier for the last seven years. We use a platform about 15 inches high, and the carriers work from a jack placed on the platform 17 feet from silo. We have found that 32 feet of carrier is the shortest that will do good work. For a 30-foot silo 40 feet of carrier will be required. A six h. p. gasoline engine will run it easily, but would it not also run a 10-inch blower which will do better work? If W. H. D. gets a carrier machine I would advise him to get a single chain carrier.

Now that I am on the subject of silo fillers I want to use it to ease my mind with regard to the plea of the manufacturers that Canadians should support home industries. I wanted to get a "medium-sized blower," one that would cut 6 to 10 tons per hour, and could be run by a 10 h. p. gasoline engine. As I couldn't see the machines to compare them I wanted to get catalogues, and so I looked in "The Farmer's Advocate" and I found there two American and only two Canadian made machines advertised; later another Canadian joined them. Now, Mr. Editor, is that the way to keep, or rather regain, the home market? Where are the other large manufacturers? Don't they want a share of the home market? There used to be others but I have lost track of most of them. I found by writing a certain plow company that it had been bought by an American company, and later I found that company had thrown it in the scrap heap, probably to get it out of the way of the American machine they are selling. However, I got a number of catalogues and tried to compare the machines, and right here is a great dif-

ference. The Americans seem to try to tell us as much as they possibly can about the article they have to sell. The Canadians seem to tell no more than they can help. Some are content with a bare picture of the machine with the width of throat and the capacity they claim. The Americans based their capacity on their shortest cut; only one Canadian mentioned the matter. Two of the American catalogues specified gasoline power and the third gave both steam and gasoline, while the Canadian catalogues all use steam as the unit of power. What is the sense of that? How many farmers have or want to buy a steam engine to-day? Gasoline or electricity are the up-to-date powers. On many of the machines the travelling table is too short; corn 10 to 12 feet long does not lie well on a 5-foot table. There are other points of equipment in which we are behind, but I have said enough. If Canadian manufacturers want to regain the home market they must advertise and revise their catalogues, as well as bring their machines up to date.

Grenville Co., Ont.

C. W. BEAVEN.

Saving Sorghum for Seed.

Editor "The Farmer's Advocate":

In regard to saving Sorghum or sugar cane seed I would advise for one's own use, or for small quantities to go through the patch just before cutting and gather the largest and darkest-colored heads. Tie these up in small bunches and hang in a ventilated room, preferably with a little artificial heat, and leave without threshing off of heads until ready to sow. As for large quantities for the seed trade I have not as yet arrived at a satisfactory method, although I have been trying for many years. Heating and moulding when in any considerable bulks, either in head or threshed, seems to be its worst trouble. It will often remain out all winter, if heating is prevented, and a variable percentage grow in spring, but there is too much uncer-



Cutting the Corn.

Thousands of tons of this great crop have been cut this year.

tainty about this method. My practice is to gather the heads off as I use it in early winter, spread on the floor in a ventilated room, stir frequently, and just before required thresh with horses tramping it, as our fathers used to thresh peas. Sorghum should be cut just before frost comes.

Middlesex Co., Ont.

EDGAR M. ZAVITZ.

Ontario's Agriculture Will be Fostered.

Editor "The Farmer's Advocate":

Permit me to correct an erroneous impression conveyed by your leading editorial in a recent issue of "The Farmer's Advocate" under the heading "Curtailling Agricultural Expenditure." It is quite true that this Department like everyone else has had to consider the financial situation forced upon us by the war, but any changes made on this account only refer to a very small percentage of the entire work of the Department. I am glad, therefore, to be able to assure you that there is no intention on the part of the Department to "curtail expenses at the expense of production and the country at large" as you fear. While it is probable that the usual series of Institute meetings may not be held this winter, you may rest assured that there will be plenty of meetings and educational agencies of various kinds to bring to the attention of the farmers the demands created by the present situation for an increased production. I quite agree with your statement in an adjoining column that "there is not a fall fair which should suffer" by the changes in reference to the expert judges or the grant, which latter does not affect this year's fairs in any way. I would also like to endorse the suggestion that the present is a time when everyone should unite in the work, as the present

is a time which calls for some sacrifices on the part of all. The Department, as in the past, will be prepared to assist all those who will help themselves, and I think it will be found before the winter is over that the Department will have done its part in leading this movement.

Toronto, Ont.

JAS. S. DUFF,
Minister of Agriculture.

THE DAIRY.

Creamery vs. Independent Tests.

Editor "The Farmer's Advocate":

Some of the creamerymen are raising strong objections to the tests made by independent parties, and claim that these tests place them in a very unfair position. The chief ground on which they base their objection is that the samples sent by patrons are not representative of the quality of cream delivered to the cream hauler or to the creamery direct. One man says that in a case at his creamery, ordinarily the wife or children turn the separator, but when a sample was taken of the cream to be sent to the College for testing the farmer turned the separator himself at an increased speed, consequently the cream tested much above normal and this was the cause of considerable trouble between the creameryman and the patron. There is a good deal of truth in this contention, hence it may be well to clear the ground of misunderstanding on this point, so far as possible.

In the first place it may as well be understood that the cream-seller, who is not satisfied with his tests, has a perfect right to appeal to an independent, competent party. Nearly every creameryman will concede this point, although some, appear to not like it very well when patrons send samples to other parties to be tested, as they seem to think it a reflection on their honesty and square business dealing. This

is a mistaken idea, as farmers, generally speaking, have no way of testing their cream, and rightly or wrongly are inclined to be suspicious of the cream-purchaser's tests. There ought to be some way provided whereby this testing business could be placed on a better and more satisfactory basis.

In the second place, the patron who sends a sample of his cream to an independent party should be sure that it is representative of the quality of cream which is being sold. Otherwise the independent

test is of little or no value. Generally speaking, a sample taken from one run of the separator is not representative—it may be above or below average as much as five, or more per cent. fat. The reason for this is that "speed" and "feed" of the separator are very important factors in deciding the percentage of fat in the cream, and in ordinary practice on the farm, these are seldom or never constant.

The best way to get a representative sample of the cream is to take a sample from each delivery, or have the hauler or creameryman do this, keep the sample under lock and key, so that there can be no tampering with it, and at the end of the test period, whether daily, weekly, bi-monthly or monthly, send or take the sample to a competent, independent person, and where this is done, we venture to say there will not be over one per cent. difference between the creamery test and that of the arbitrator, where the creamery is doing an honest, straightforward business. If the creamery is not giving a "square deal" then the sooner the patrons know it the better.

Where the test period is for one week or longer, the sample should be preserved with a tablet or with a three-one, potassium bichromate-corrosive sublimate preservative, which is cheap and can be got at any drug store. Five or ten cents will buy all the preservative a cream patron would need for a year.

Where a composite sample cannot be conveniently taken, then the next best plan is to take a sample from the can of cream as delivered to the driver, railway, or creamery, after thorough stirring of the contents of the can, because if taken from the top of the can it will not be representative—the test will be too high, as the richer cream will be found on top of the can, the same as in milk. If a two-ounce bottle is filled, corked tightly, packed securely and mailed