

as soon as cement has set and placing it above the second mold and so on. The mold for the inner surface was built of $\frac{1}{2}$ -inch sheathing supported by 2x4 inch-dimension. It requires a little mechanical genius and skill to devise and construct satisfactory molds. Bolts were imbedded in the wall for use in fastening the plates on, this method proving very satisfactory. After removing the inside form or mold the rough spots on the inner surface of the wall were smoothed with cement. The slabs were quite satisfactory, keeping as well as in the wooden silo I used eight years ago. Men who have been over the state a great deal have pronounced it the most perfect cement silo they have seen. J. S.

Lumpy Jaw in Cattle

A. W. Bifling, veterinarian, Illinois Experiment Station, gives the following information regarding Lumpy Jaw:

This disease more often affects cattle than other animals. It is due to a fungus sometimes called the ray fungus or actinomycosis. The fungus occurs upon grass and other vegetation and it is only when it becomes introduced into the tissues that it causes trouble. The disease comes from eating and outside sources and is not contagious in the usual sense of the word. Several animals may become affected while on the same pasture, but this is due to all being exposed alike. Some years the number of cases is greater than others, owing to the greater development of this fungus. The disease affects the jaw more often than other parts due to the fact that the tissues are sometimes broken in the act of chewing, thus permitting infection. Any part of the body may be attacked.

Treatment.—The disease is comparatively easy to treat. A drachm of iodide of potash is given twice a day for two weeks to twenty days. For cattle weighing twelve hundred pounds or more the dose is somewhat increased and lessened for calves. If pus is present in the lump it should be let out by incision. In a few refractory cases a second period of treatment may be required after resting for ten days. About eighty per cent. of recoveries may be expected. Affected animals should be kept away from the healthy and off the pasture field. In the case of milk cows the milk should not be used. The state does not pay for such animals when it is found necessary to destroy them.

Cleaning Seed Wheat

A southern farmer gives his experience in removing chaff and cockle from seed wheat as follows:

Make a strong brine, by adding salt to water. This brine will float chaff and a portion of the cockle, but not all. If molasses or ordinary cane (sorghum) syrup be

added, in proper quantity, and well stirred, the specific gravity of the brine will be increased sufficiently to float the remainder of the cockle. When the brine is made it will be necessary to use a proper quantity of salt above the capacity of the water to dissolve. Then when the molasses or syrup is added, an additional quantity of salt will be dissolved, thus increasing the specific gravity of the liquid sufficiently to answer the desired purpose. The quantity of molasses or syrup is added, an addition can be ascertained by testing.

In the above test I used ordinary molasses, but presume that syrup of cane will answer equally well.

A liquid prepared as above will float all the chaff and cockle and from 75 to 90 per cent. of the lighter grains of wheat. The skimmings should be immediately removed and then the wheat that has settled to the bottom to wet the wheat with fresh water. Proper tests have shown that the germinating power of wheat, thus treated, will not be injured in the least. It may be better to wet the wheat with fresh water before it is immersed in the brine.

The above plan will not only clean the wheat of all filth, but will also vastly improve the quality of the wheat by retaining the heavier grains only.

Help in the Farm Home

A Western farmer in discussing the farm help problem and the efforts being made to bring in suitable men, pertinently asks what is being done to secure female help for farmers' wives. While the Dominion and Provincial Governments vie with each other in securing men from across the sea, only a few girls are brought from the old country every year, and they are quickly picked up in Winnipeg on arrival. But few of them ever reach farmers' homes.

And so the farmer's wife and daughters are left to manage as best they can. If extra men are employed, there is extra work in the home; extra dishes to wash, extra mending to do and extra cooking to be done, all of which taxes the already overworked housewife, who complains but little.

This is the situation in many a farm home, not only of the West but of the East. While the farmer has been complaining of the scarcity of male help, there has been just as great, if not a greater scarcity, of female help in the country, of which we hear little or no complaint. What is going to be the outcome of it all it is hard to say.

Brained Beef

Three pounds of good beef with some fat, one small onion, one small carrot, one head of celery, one cup cooked tomatoes, a little lemon peel, three whole cloves, salt to taste and a saltspoon of cayenne pepper. Before putting in the

pot, place the meat in a hot skillet and brown thoroughly upon both sides. This preserves the juice of the beef and improves the color and flavor of the gravy. Then put in the pot and add only sufficient boiling water to cover. Cover closely and put on the back of the range, where it will boil slowly. Watch carefully, adding boiling water to replenish, sufficient only to keep the meat well covered, that the gravy may be rich. Cut the vegetables in small slices or cubes, add lemon peel, cloves and pepper, and cook in a saucepan, separate from the meat, with a little water, and cook until all are tender. When the meat is thoroughly done, so it will slip readily from the bone, take out and set the liquor where it will get thoroughly chilled, then remove all the fat. Slice the beef. Add the cooked vegetables, including the cup of cooked tomatoes, to the skimmed liquor. Put sliced meat in and bring all to a boil, thickening with a little flour. Take out the slices of meat and place them on a hot platter, and partly cover them with the gravy. Do not add salt until meat is cooked, as in boiling down it is liable to become too salt.

Books and Bulletins

HORSE-BREEDING IN CANADA—By John D. Duchene, D.V.S., Quebec. This is a copy, a little bound with paper cover, with numerous illustrations showing anatomical and other points of a horse. The physiology of the horse is described in detail and information given as to proper breeding and feeding. A chapter or two are devoted to the Canadian horse with special reference to the type to be found in Quebec. The book is printed in English and French, and would prove of value to horse-breeders generally.

SMALL FRUITS—their origin culture and marketing. Bulletin No 111, Pennsylvania Department of Agriculture.

COMMERCIAL FEED STUFFS—Bulletin No. 107, Penn. Department of Agriculture.

SCAB IN SHEEP—Farmers' Bulletin No. 159, N.S. Department of Agriculture.

CRANBERRY CULTURE—Farmers' Bulletin No. 176, U.S. Department of Agriculture.

YEAR BOOK FOR 1902—U.S. Department of Agriculture.

REGISTRAR OF LIVE STOCK—Report for 1902, giving account of the annual meetings of the Shorthorn, Avrahams, Bedford, Hackney, Clydesdale, Shire Horse, Harness, Hunter and Saddle and Canadian Horse Breeders' Associations.

KEEPING QUALITIES OF MILK and economic methods for improving the same. Bulletin No. 88, Maryland Agricultural Experiment Station.

THE DURATION OF THE LIFE OF THE TUBERCLE BACILLUS IN CHEESE. By F. C. Harrison, Ontario Agricultural College. A reprint from the 19th annual report of the Bureau of Animal Industry.

THE SIXTH ANNUAL REPORT of the National Live Stock Association, volume contains 500 pages, neatly bound, giving report of annual convention held at Kansas City, Jan. 13 to 16, 1903.