female classes, where Mr. J. E. Kerr, of Harviestown, secured leading honors with model exhibits. The breed made a capital show indeed, and there were no indications that its admirers are afflicted with any feelings of jealous discouragement at the pronounced popular boom in Shorthorns. The prizetakers included the Marquis of Waterford; Messrs. A. J. Owen, Queen's Co.; R. G. Nash, Co. Dublin; C. Dunbar Buller, Co. Down; Marquis of Ormonde, Co. Kilkenny; H. Bland, Kilquade, Co. Wicklow; W. H. B. Moorehead, Newry; etc., etc.

Our useful native Kerries and Dexters were well represented by some very typical specimens, showing the handsome shapes and fine milky and beefy capacities for which they are respectively noted. Mrs. Madden, Co. Dublin; the Duke of Leinster; Messrs. G. G. Mahoney, Co. Kerry; D. M. Rattray, Co. Kerry, and Wm. S. Archdall had most of the awards between them.

Of Jerseys there was a good average collection, including a number of Island-bred cattle. This timid, graceful breed does not boast a large following among farmers in Ireland; indeed, the great majority of its patrons are either of the gentry class or dairymen pure and simple. Mrs. Madden, Mr. M. O'Neill and Mr. Vere Ward Brown, all of Co. Dublin, divided the prizes.

Among the other breeds superior quality prevailed, though numerically the classes were small.

In addition to the cattle there were exceedingly good sections devoted, to (1) breeding swine; (2) Shires, Clydesdales, polo ponies, Hackneys and hunter stallions; (3) butter and other dairy produce. In the first named over seventy pens were exhibited, and a very good standard of merit was reached both by the white and black varieties. Space, however, precludes the possibilities of entering into details of these features, but it may be said that they were very successful and contained a number of capital exhibits.

EMERALD ISLE.

CATTLE-TESTING IN WISCONSIN.

Efforts are being made in Wisconsin to secure the passage by the State Legislature of a bill to prevent the further distribution of bovine tuberculosis from one herd to another, by requiring animals that are sold for dairy or breeding purposes to be tested with the tuberculin test. Prof. H. L. Russell, of the Bacteriological Department of the State College of Agriculture, writes us that their experience the last season or two in applying the test on farms throughout the State, led to the detection of 125 cases in which the disease had been spread more or less in that way. While the provisions of the proposed bill have not been definitely determined, it is expected that the herds will require to be tested once a year where sales are to be made, and, in case tuberculosis is found, once in six months.

Wisconsin has already upon its statute books a law prohibiting, under heavy penalties ($50 to $200 fine), the importation of cattle into the State for breeding or dairy purposes, unless accompanied by a certificate of inspection made by a duly-qualified veterinary surgeon, a graduate of a recognized veterinary college in the United States, Canada or Europe, showing that at the time of such inspection, and within six months prior to shipment, the cattle had been subjected to the tuberculin test, and were free from tuberculosis or any other contagious disease of a malignant character. If shipped without such inspection, they will be quarantined and subject to examination by the local health authorities.

THE FARM.

STORING A FODDER CROP OF PEAS AND OATS.

Editor "The Farmer's Advocate":

In your edition of March 21th I was much impressed with your article entitled "The Simple Way." Please allow me to give my experience. A year ago this spring we sowed six acres of peas and oats mixed, at the rate of two parts of oats to one of peas, with the intention of curing it like hay, and cutting it in the winter to mix with corn silage. It was sowed on clover sod, and grew an immense crop. We got it well cured, but the problem was to find room to store it; so we got an engine and cutting box with a blower to cut it and blow it into the barn. We intended opening out the coils to the sun for a couple of hours before cutting it up, but the day did not turn out favorable, so we had to go on without doing so. We have a feed room in our basement twenty feet square and nine feet deep, so we blew the feed into the mow above and let it down through a hole in the floor, and kept it well tramped; this room held about two-thirds of the feed. Some of our neighbors predicted a failure, as they thought it would all spoil. It heated so bad that you could not hold your hand in it. Some advised spreading it out, but I knew that would not do. I did not feel anxious about it but kept tramping it every day for about a week, and filling it from the top as it settled. It proved the most satisfactory feed that we ever had on the farm. It kept in perfect condition and is always ready for mixing with the ensilage. You can easily see the advantage of sowing it in this way, as one handling suffices. Mice or rats never work in it as they do in unthreshed, uncut grain. We kept four loads for the sheep, which the mice chewed up very badly. We fed nineteen head of fat cattle, four milch cows, and all the other young stock—about thirty-five head in all—on this and five acres of corn ensilage, with a little hay at noon. If any of your readers ever try this experiment, never stir the feed, but keep it well tramped, or cover it with sheaves, if convenient.

ANDREW McKAY.

Victoria Co., Ont.

Planter.

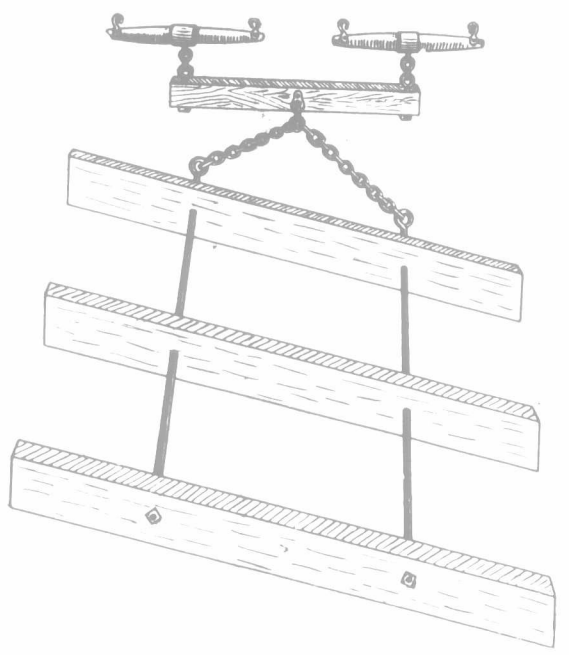
International champion American-bred Shropshire shearling ram in 1906. Bred by John Campbell, Woodville, Ontario.

A ROAD JOINTER.

Editor "The Farmer's Advocate":

I have observed of late the advocates of good roads urging the use of the split-log drag for dressing up our highways and keeping them in repair. How general its use has become I am not aware. However, one thing I am assured of, though crude in its mechanical structure the principle involved is good. With some improvements which I will suggest it may be rendered very useful, and with a little practical good sense applied in its operation it surely will be a valuable acquisition to the machinery for road-making, and that at a nominal cost. After the roadbed is prepared and properly graded, with it its maintenance may be readily secured, if prompt attention be given. Allow me to suggest some improvements on the drag, which while retaining the general principles involved, will render it more efficient in its purpose and easy in its operation.

In its construction procure three pieces of deal, 6 feet long, 2 inches by 6 inches; get two eye bolts 4 feet long, of ½-inch iron; arrange your deal; insert your bolts on a diagonal line, on an angle of about thirty



degrees, as shown in the accompanying sketch, on the front and bottom edge of the deal affix an iron plate—say about two inches wide by ¼-inch thick—allowing it to project about ¼-inch below the deal (abandoned or half-worn sled shoes will serve this purpose well); then [illegible] floor over the frame in part with inch boards, making convenient standing room for the teamster while in operation.

This structure when completed, though retaining some of the features of the split-log drag, is not a drag as used in that sense, but rather may be denominated a road jointer. While the drag being drawn [illegible] the road, having but two bearings, will, as a consequence, dip into low or soft places and collect material, the jointer, having its three bearings, will of necessity, shave off the higher parts of [illegible] and deposit in lean places. This jointer, when properly constructed, will, in very many instances, supersede the cumbersome and expensive imported road machine, doing better work at much less expense.

King's Co., Nova Scotia. T. H. PARKER

CORN SMUT IN CORN BELT.

Editor "The Farmer's Advocate":

Corn smut, which occurs to some extent wherever corn is grown, is causing a great loss in the value of the crop each year. Careful investigations show that throughout the corn belt of the United States the loss from corn smut is from twenty cents to one dollar per acre. Allowing the estimates to be based on the lowest figure, the farmers of Indiana alone are losing annually $800,000.

Farmers and experiment station workers have recognized the serious nature of this plant disease, and large sums of money, as well as the time of the investigators, have been spent, with a hope of determining its nature and methods of eradication. These investigations have proven that corn smut is not transmitted to the plant through the seed or seedling, but through surface infection. In this respect it differs from the loose smut of oats and the stinking smut of wheat. In the case of oats and wheat, the smut spore adheres to the grain, and by treating the grain with formalin, hot water, etc., the spore may be killed. Experiments carried on by Dr. J. C. Arthur, of the Indiana Station, will be of interest in this connection:

TREATMENT OF SEED CORN TO DECREASE SMUT IN CROPS.

Treatment of seed.	No. of plants.	No. plants smutted.	Per cent. of smut.
Untreated	335	47	14.0
1 lb. copper sulphate in 15 gals. water ½ hour	295	41	13.9
Ammoniacal cupric carbonate 1 hour	256	27	10.5
Water at 140° F. for 5 min...	287	42	14.6

This work shows that corn smut cannot be reached by treatment of the seed. Some work has been done with seed corn treated with formalin, with results similar to the above. Extended investigations have been made as to the value of spraying the corn plant during the growing season. Spraying the plants with some fungicide, especially Bordeaux mixture, has been found to largely prevent the smut, except in the ears, but it is deemed too troublesome and expensive to be practical. At the present time the only practical method of eradication to be recommended is that of gathering the smut pustules or balls and destroying them. These should be gathered between the first of July and the time the corn is mature (two or three trips being made through the field during this period), and at the time of harvest, and destroyed by burning or placing in boiling water.

This method may appear tedious and troublesome, but it is believed that the results will justify the trouble and expense.

G. I. CHRISTIE.

Purdue University Experiment Station.

MORE PRAISE FOR THE SPLIT-LOG DRAG.

Editor "The Farmer's Advocate":

A few lines in regard to the split-log drag. I think it is a fine thing to keep the roads in good repair. I did not enter the contest for a prize, but I have made a split-log drag, and have tried it on a piece of clay road about a mile and a half long which was badly cut up by wagons, there being some very deep grooves. The one scratch up and down made a wonderful change. A road commissioner and a couple of neighbors who saw it working praised it as a fine thing for the cut-down roads. My drag is made out of ash, seven feet six inches long, by twenty-eight inches wide, and the weight is about two hundred and sixty pounds. I wish you every success with the split-log-drag contest and "The Farmer's Advocate."

North Renfrew, Ont. W. A. McMULLEN.

ORIGINATED IN CANADA.

Editor "The Farmer's Advocate":

On reading over "Our Maritime Letter," by A. E. Burke, I see we are asked to name a single variety of grain originated in Canada. The late Mr. Chas. Arnold, of Paris, gave to Canada a new variety of barley, and also the celebrated pea known as "American Wonder." That pea was obtained by a cross between "McLean's Little Gem," dwarf, and the "British Champion," tall, which pea holds its own in many gardens all over the world, and is also the parent of many new dwarf varieties, several of which have been introduced and sent out by Sutton & Sons. Forty-odd years ago that well-known firm offered for sale only two varieties of dwarf peas; now they have eleven, which still include the "American Wonder." Charles Arnold also gave us a new apple, called "The Ontario." C. J. FOX.

Middlesex Co., Ont.