

The Ontario Agricultural Gazette

The Official Bulletin of the Dominion Cattle, Sheep, and Swine Breeders' Associations, and of the Farmers' Institute System of the Province of Ontario.

FARMERS' INSTITUTES.

1898 9.

The meetings held during December have been unusually successful, and the delegates sent out have given excellent satisfaction. The attendance has been larger than heretofore and the general interest in the meetings greater.

The attention of institute officers is respectfully called to clause 6 of the Rules and Regulations governing Farmers' Institutes, which reads: "All memberships shall terminate on the 31st of December each year." Also to clauses 48 and 49 of the Rules and Regulations, which read: "On or before the 10th of January each year the Secretary shall send a revised list of members for the current membership year to the Superintendent, and on or before the 10th day of each succeeding month he shall forward the name and address of each additional person who has since the previous return become a member of the institute."

"Within one week after the close of each institute meeting or series of meetings the Secretary shall forward to the Superintendent a detailed report of said meeting or meetings, in which shall be stated the name of the place or places where sessions were held, the number of persons present at each session, the name and address of each person who read a paper or gave an address, the title of the address or paper, and a comment upon its value, whether good, fair or indifferent." ("Use Form A. of Secretary's minute book for making returns required by this clause.")

The attention of the Secretaries is respectfully called to the explanations to be found in each of the five books which comprise their Institute set. Lists of members for 1899 have already been received. Mr. C. W. Young, Secretary of the Cornwall Institute, has sent us a list of ninety-nine members. The same gentleman is also Secretary for Stormont Institute, and has sent us a list of forty-eight names for that Institute. Mr. Freeman Britton, Secretary of the South Leeds Institute, has also sent us a list of members for 1899 numbering eighty-six. We have also received from Mr. W. J. McNaughton, Secretary of the Glengarry Institute, a list of eighty-four members, and from Mr. J. P. Fox, Secretary of the Dundas County Institute, a list of one hundred and sixty-three members.

"Why is a chicken like a farmer?"
"Because it always expects to have a full crop."

AN ABRIDGED REPORT OF AMERICAN EXPERIMENTS WHICH ARE OF VALUE TO CANADIAN FARMERS.

(Continued from last issue.)

MOISTURE SUPPLY IN CHEESE CURING ROOM.

The best method of supplying moisture to cheese curing rooms has been under investigation at the Wisconsin Station. It was found that cloths hung up and kept moist answered best.

The cloths are supplied with water from a $\frac{3}{4}$ inch water pipe which runs along the top of the room. Very small holes were drilled, about six inches apart, on the upper side of the pipe. Strips of cotton cloth were hung over this pipe, and, when the water was turned on, it went through the holes, wet the cloths and flowed down through them. The flow of water through the pipe was regulated by a valve, so that it would drip slowly from the bottom of the cloths. Under the cloths was a tray one foot wide and four inches deep for catching the dripping water and carrying it off into a drain. After the valve was once adjusted, a steady flow through the sheets was carried on for two weeks. One hundred square feet of cloth was used in the experiment, the curing room containing 5,000 feet of space. Those in charge of the experiment considered that double that surface of cloth might have been used to good advantage.

FIELD CROPS—SEED CORN.

Several of the experiment stations have made tests of seed corn taken from different portions of the ear to see which were the most productive. At the Georgia station the tests went to prove that kernels from the tip were equal, if not superior, to those from the middle and butt of the cob.

At the Kansas station the butt kernels were taken from ears raised from butt kernels in 1895, and the middle and tip kernels from ears raised from middle and tip kernels respectively. Of the butts 85.9 per cent. germinated, of the middle 90.3 per cent., and of the tips 72.9 per cent.

The average for five years showed that there was not much difference, although the corn from the butt kernels was slightly higher, averaging 39.74 bushels per acre. That from the tip kernels averaged 39.04 bushels, and from the middle kernels 38.52 bushels.

The Ohio Station experiments, which covered a period of nine years, showed similar results, the difference in the crops of corn from different portions of the ear being immaterial.

YIELD OF CORN SOWN IN HILLS, DRILLS, AND BROADCAST

During 1895 and 1896 the Cornell Station devoted considerable attention to the comparative yields per acre of corn sown in hills, drills, and broadcast. The average for the two years is given as follows: Corn in hills, 17,070 pounds of stalks, 5,640 pounds of grain, or a total of 22,710 pounds. Corn in drills gave 19,815 pounds of stalks and 4,352 pounds of grain, or 24,167 pounds in all, while corn sown broadcast produced of stalks (no grain being formed) 29,585 pounds, the broadcast method of seeding thus giving the largest crop.

An analysis of the crop of 1895, however, made when the crop was in the best condition for forage, showed that the percentage of each food constituent—protein, fat, nitrogen—free extract and fiber was smallest in the corn which had been sown broadcast, and greatest in that grown in hills, with the single exception that the drilled corn contained a slightly higher percentage of fiber, which is the least valuable constituent.

The corn grown in hills thus ranked first in feeding value, although it produced the smallest weight of crop, while the absolute feeding value of the broadcast corn was, in view of its large yield, somewhat greater than that of the drilled corn.

A serious objection to corn sown broadcast is that it is quickly affected by drought. Cultivation of the soil is absolutely needed in order to keep it moist enough to supply the demands of the growing crop, and this cannot be done where corn is sown broadcast. Moreover, corn does best when the sunlight can permeate to every part of its structure.

MANURE FOR THE CORN CROP.

An annual test was made during six years of corn culture on the same land at the Massachusetts Station to compare the effect of applications of six cords of manure per acre and of four cords of manure together with 160 pounds of muriate of potash per acre. The manure, applied alone, gave the best results. In connection with these experiments hill and drill culture were tested. Drill culture produced the largest yield. As a green manure, where corn is grown continuously, white mustard sown in the standing corn when it was receiving its last cultivation was found worthy of recommendation.

ALFALFA.

The Colorado Station has been making exhaustive studies on the growth of the Alfalfa plant, its changes