

## United States Government Meat Inspection.

Interesting information about the United States Federal meat inspection is contained in the annual report made to Secretary Wilson by Dr. A. D. Melvin, Chief of the Bureau of Animal Industry of the United States Department of Agriculture. During the fiscal year, ending June 30th, the inspection was conducted at 936 establishments in 255 cities and towns, both of these numbers being the highest in the history of the service. The number of animals inspected before slaughter was 53,002,304, comprising 7,807,712 cattle, 2,214,127 calves, 29,920,261 hogs, 13,005,822 sheep, and 54,382 goats. There were inspected after slaughter 7,781,030 cattle, 2,219,908 calves, 29,916,363 hogs, 13,005,502 sheep, and 54,145 goats; a total of 52,976,948 animals. Of these there were condemned for disease or other unwholesome condition 117,383 entire carcasses and 1,009,672 parts of carcasses, making a total of 1,127,055 carcasses and parts condemned. Tuberculosis was the cause of by far the greater part of these condemnations, nearly 47 per cent. of condemnations of adult cattle and over 96 per cent. of condemnations of hogs being due to this disease. The total number of animals inspected was 7½ per cent. greater than during the preceding year.

The meats and meat food products canned, cured, or otherwise prepared under official inspection amounted to nearly seven billion pounds, of which there were condemned on inspection subsequent to the inspection at time of slaughter over 21 million pounds.

Inspection certificates were issued for export of meats and meat food products aggregating 975,066,006 pounds, this being an increase of over 150 million pounds compared with 1910.

Laboratory examinations were made of 25,818 samples with a view to detecting prohibited preservatives, prohibited coloring matter, adulterants, or other unwholesomeness, and to determine the quality of salt, spices, condiments, etc., and the sanitary condition of water supplies. It was found that the use of prohibited preservatives and coloring matters was not practiced at inspected establishments.

The Federal inspection is applied only to meats and meat food products prepared at establishments that do an interstate or export business, but the Government inspects the entire product of such establishments regardless of whether it is intended for local, interstate, or export trade. The provisions of the meat-inspection law do not apply to animals slaughtered by farmers on the farm, or to retail butchers and dealers. Establishments doing business entirely within a State cannot be reached by the Federal inspection, and must be looked after by the State or local authorities.

### TRADE TOPIC.

**HOW TO SAVE FEED.**—A marked difference exists between individual animals as regards the returns which they yield for the feed consumed—some have greater digestive powers than others. The power of assimilation of the one animal is superior to that of the other, and the advantage of the better type of animal lies in its ability to produce more flesh or milk from a unit of feed than could the poorer one. It is also an established fact that young growing animals not only make actually larger gains than more mature ones, but likewise more economical gains. That pure-bred animals are more economical to keep than scrubs is well known. Few farmers can boast of wholly pure-bred herds, but every farmer can greatly increase the milk yield of his cows. The manufacturers of Pratt's Animal Regulator claim that it will increase the economical utilization of feed, protect cattle from disease and prove a great help to dairy profits if used daily. They state that it is a most efficient tonic and aid to thorough digestion and assimilation, and that it has been used regularly for many years by some of the successful farmers, breeders and dairymen in the United States and Canada.

## QUESTIONS AND ANSWERS. Miscellaneous.

### CASEIN AND CASEIN TESTS.

1. Is there any system in vogue for the testing of milk for both fat and casein that is being successfully carried on in any one or more cheese factories in Ontario?

2. Can you give the relative value of fat and casein for the manufacture of cheese?

3. Could you give any idea as to the cost to the patrons of conducting such a test?

4. Is the fat test a fair way for the paying of milk for the manufacture of cheese?

J. N. T.

Ans.—1. The fat in milk has been successfully tested in Ontario cheese factories for a number of years. During the season of 1911 the Ontario Agricultural College successfully tested the casein in milk at ten cheeseries of the Province in an experimental way. From these experiments we conclude that casein can also be tested at factories, where suitable apparatus is provided and a competent man is employed to do the work. The casein tester used by us is known as the Hart Casein Tester. It can be purchased in six and twelve bottle sizes, costing, respectively, \$30 and \$40. It may be operated by hand or by electric motor. We have used both methods with satisfaction in the O. A. C. Dairy Department.

2. For the manufacture of cheese, we consider fat and casein in milk to be of equal value, pound for pound.

3. We have not as yet made any calculations as to the cost of conducting casein tests at cheese factories. The cost for fat testing is pretty well known, and averages about one dollar per patron for the season.

Dr. E. B. Hart, of the Wisconsin Experimental Station, and inventor of the Hart Casein Test, has made the following estimates as to cost of testing casein in Wisconsin cheese factories. They are probably, approximately, correct for Ontario. However, they are given with reserve for Ontario, until the matter has been more fully investigated.

"In a factory having 30 patrons, and making casein tests twice a month, there would be 720 tests to make in a year. The cost of reagents for these would be \$2.52. Adding the price of the tester, the total cost for the first year would be \$42.50, but as a pound of chloroform and a quart of 10-per-cent. acetic acid are furnished with the tester, the cost for the first year would be less than \$42, including the tester. This would make the cost of operation for each succeeding year about \$2.50. For a five-year period, the cost of tester and chemicals would be \$10.52 per year, including the first cost of the tester."

"Labor, and breakage of glassware, should also be considered, as for any test. At Sheboygan Falls, during July and August, only one bottle was broken in making over 100 tests, so that, barring carelessness, the cost for breakage would be almost nothing."

"To run 30 tests, it will take a cheesemaker from 1½ hours to 3 hours, depending upon the skill of the maker, and local conditions. More time might be required if the composite samples had to be warmed or cooled, but if properly cared for, very much of this extra labor would be unnecessary. Two hours would be a fair average of the time required to test the 30 samples. At \$2 per day, the cost of labor would be less than \$1 per month, or \$12 per year. Counting reagents and labor, the cost of operating the test would be about \$15 per year. Adding the initial cost of the machine, \$40, the total annual cost for the five-year period would be about \$23 per year."—Bulletin 197, Wisconsin Station.

4. There is a difference of opinion as to whether or not milk fat is a fair measure of the cheese value of milk. My own opinion is that fat alone is not a correct measure of the relative cheese values of milk. It is much better than paying by weight of milk alone, but both casein and fat should be tested if we wish to pay for cheese milk on a just basis.

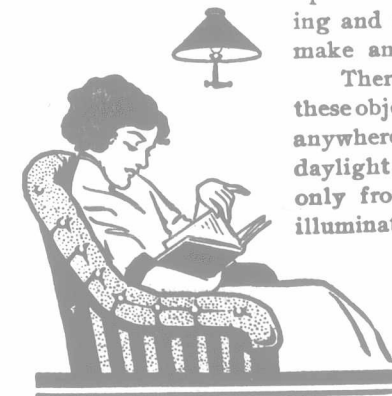
H. H. D.

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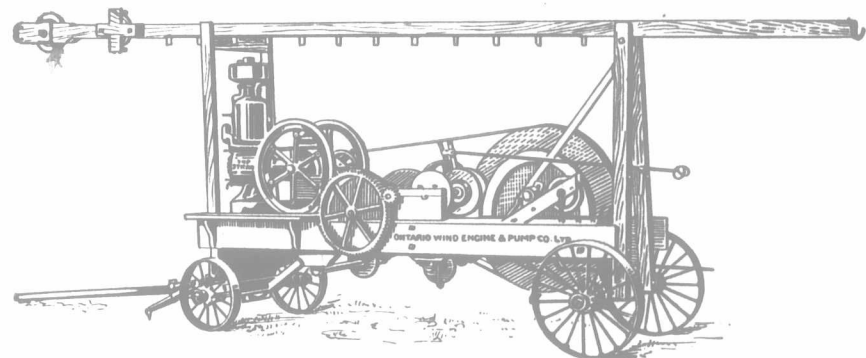
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