

a vapor which permeates through the grain, destroying the insect life in it. Bisulphide of carbon is a very deadly substance, but it is claimed that its effects pass off the grain, doing it no injury.

In Great Britain in 1890 the average consumption of milk per head of the population was estimated to be about sixty quarts, while seven years later, or in 1897, it was eighty quarts. In 1890 the estimated consumption of butter per individual was estimated to be 6 lbs., while in 1897 the average consumption per head of the population was 10 lb. In 1897 20s. worth of home-produced milk was consumed per head of the population as against 9d. worth of the foreign-made; while the consumption of British-made butter was 10s. for every inhabitant, as against 8s. worth of the foreign made product.

The Dominion Minister of Agriculture has received advices from Great Britain that there is a good demand there for well-fattened turkeys of good size, and advises the making of small shipments early in November. Turkeys should be fasted forty-eight hours and then killed by breaking their necks, and they are also bled from the mouth. Only choice birds are wanted, and turkeys nearly of the same weight should be sorted into boxes together. Shipments sent in November and as late as February are likely to do better than those sent immediately before Christmas, when there will probably be a glut in the market.

A breeder of Kansas has developed what he calls the "Kansan" breed. The animals rarely have horns. The experiment was started about ten years ago, when the original polled calf was born. This calf was a freak, and dehorning did not enter into the experiment at all. In a herd made of crosses of Herefords and Shorthorns, he was at the time using only Hereford bulls. From that start, crossing with Shorthorns and again with Herefords, he has bred out and back again until he has now thirty to forty of the cattle. He thinks they are an improvement on the Herefords, in the fact that they are squarely built behind, and that they are uniformly good milkers.

The tuberculosis scare seems to have reached Argentina. It is stated that out of the 200 Shorthorns landed at Buenos Ayres since May last 35 per cent. have been proved tuberculous when tested with tuberculin. The question is raised: How can there be so much tuberculosis in cattle from Great Britain which have been tested with tuberculin before shipment? The voyage to Argentina is forty days, and that sound cattle when shipped should show symptoms of the disease after that time is somewhat of a mystery. It is hinted that some British breeders have their cattle tested privately a day or two before the shipment, and consequently the public test does not show any reaction.

A Ten Days' Milk Test

From the discussion in these columns during the past month regarding the holding of a ten days' milk test next fall at the Toronto Industrial Fair, in which the food consumed will be taken into account, it will be seen that the breeders and others who have taken part in this discussion are almost unanimously in favor of conducting such a test if it can be arranged for. Some have advised a seven days' test, others a five days' test. We hardly think, however, that it would be advisable to make it less than ten days, as it would require that long to make a proper test when food is considered.

What is most important if it be decided to have such a test is upon what basis or plan will it be conducted. In our issue of August 23rd last, page 440, we gave the scale of points upon which the ten days' test at Omaha was conducted in October last. In that test the food was taken into account, and a number of different feeds were selected by the committee in charge, from which the competitor could choose the kind he would feed his cows during the test. Having once selected his feed it could not be changed, except in amount, during the test. The feeds

decided upon by the committee were corn and oats ground, wheat, bran, linseed meal, cotton seed meal, corn ensilage, clover hay, timothy hay and prairie hay. All feed used was weighed and analyzed, and each cow charged with the dry matter therein. One point was allowed for each pound of solids not fat and ten points for each pound of fat in the milk. The points obtained in this way, after adding on one per cent. for each week of lactation, were divided by the number of pounds of dry matter in the food consumed, which gave a factor which represented the relative food economy of the cows tested. This factor, multiplied by an arbitrary number, was added for each day of the test and the sum represented the score.

To conduct a test after this fashion, in which all the food had to be analyzed, would perhaps entail more work than the Exhibition Association or those who might be placed in charge of the test would care to undertake. What we want to get at is the cost of production, and which cow will produce milk, butter, and cheese the cheapest. To ascertain this a complete analysis of the foods consumed should not be necessary. All that would be required would be for the breeders and others interested to meet and select one or several foods which might be used in the test. Mr. N. Dymont, in his letter which will be found in another column, suggests that the breeders meet several months before the test begins and decide upon some one food, which breeders could feed their cows and get them accustomed to before the fair opens. If it were desirable to have more than one kind of food a number could be selected without much difficulty. When the



Tamworth sow, Oxford Queen 696 First prize in the yearling class, Toronto 1898. Out of imported sow, and sired by Nimrod 174. Owned by A. C. Hallman, New Dundee, Ont.

foods have been selected a value could be placed upon them according to the market price for which they were selling at the time of the test. When this value was found it should not be difficult to keep track of the amount of feed consumed by each cow during the test, and charge her up accordingly.

Some of our correspondents have asked that some definite plan for conducting a food test be evolved. Without going into details at all we would suggest that a test might be conducted next fall at the Industrial Fair along the lines that we have already laid down, which may be summarized as follows:

1. That the test extend over ten days, beginning the first Monday and closing second Wednesday of the fair.
2. That the value of the food consumed by each cow during the test be taken into account—this value to be based upon current market prices at the time of the test, or as may be agreed upon; that one or more kinds of feed for use in the test be decided upon by the committee in charge of the test or by a meeting of the breeders of dairy cattle and others interested; and that if more than one kind of feed is decided upon the owner of the cow shall have the privilege of selecting the one which he will feed during the test.
3. That the awards be made on the basis of butter-fat production, the quantity of fat to be ascertained by the Babcock Test and the cow or cows producing it at the