

quantity or quality of the milk. For this reason probably the harder pressed and cheaper oil cakes, such as linseed cake, were more economical for the feeding of dairy cows, whereas for fattening cattle the best results were given by cakes rich in oil, these, although dearer, being for this purpose more economical. In summer, when pastured was abundant and of good quality cows in full milk did very well indeed without additional food, but from 2 to 3 lb. undecorticated cotton cake per day was often a useful addition. Undecorticated cotton cake had rather a costive tendency, but this was useful rather than otherwise when the cows were at pasture. This cake would also have a good effect on the faeces as the droppings of the cattle were made much richer. For winter feeding the following had been found to be a useful ration for cows in full milk;—Six lb. bean meal, 2 lb. oats (bruised), 2 lb. bran, 1½ lb. linseed cake. 28 lb. turnips, 10 lb. cabbages, 15 lb. oat straw (partly chopped.) In replying to the discussion which followed his lecture Mr. Gilchrist said that the principal heads of his advice might be recapitulated as follows:—(1) Let the foods on the farm be as near as possible those suitable to the dairy stock and the land; (2) Get a rough idea of what the food is deficient in, and then buy the food most nearly representing the deficiency; (3) Try to realise what is wanted for the different classes, of animals; (4) Then, with the aid of tables, get the feeding-stuffs reduce to a fairly manageable form. The paper, we may add, has been republished in pamphlet form.—*Ag. Gazette.*

DR. McEACHRAN'S REPORT ON THE GERMAN PLAN FOR SECURING UNTAINTED MILK.

The milk supply of the large cities in Germany has for many years been the direct concern of the municipal governments of those cities. The importance of the subject seems to have been recognized there sooner than in any other country. During his visit to Germany Dr. D. McEachran, Chief Veterinary Inspector for the Dominion, made a careful investigation into the milk supply of the various large German cities. The largest and best equipped service he found in Berlin. Speaking about the history of the movement for a purer milk supply in that city he says:

"In 1881 the first steps were taken to provide

Berlin with pure and cheap milk as well as good dairy produce, and a small building was opened for that purpose with three sale waggons. In less than two years this was found quite inadequate, the public sympathy being so fully offered to the enterprise that it became necessary to construct at once a central dairy on much larger dimensions. These buildings were gradually increased in size, and the business done became so extensive that sixteen years later when I visited the institution, instead of three sale waggons being employed, as at first there were one hundred and fifty-nine.

POPULARITY OF THE PLAN.

"Regarding the distribution of milk itself at the end of the first year of the enterprise nearly two million and a half litres were supplied to the city and in 1896 nearly twenty-seven million litres. At present the daily quantity produced, seventy-five thousand litres, meets the needs of some forty-five thousand householders and is obtained from dairies containing in all fourteen thousand cows.

"In connection with the production of this milk the following statistics may be of some interest. For the proper working of the apparatus necessary for the cleansing of the vessels containing the milk a daily quantity of from twelve thousand to fourteen thousand kilograms of coal is employed. The place is lighted by sixteen hundred incandescent and fifty-two arc electric lights and the power necessary is supplied by three dynamos of over a thousand amperes. In connection with the institution there are twelve hundred workmen many of them specially employed and retained in special houses, such for example as locksmiths, tinsmiths, saddlers and other like workmen, and a special printing house has been opened in connection with the institution. About one hundred and eighty waggons and two hundred and forty horses are required to carry on the delivery work as it is at present. Not only do the waggons carry ordinary milk but likewise whey; the best fresh milk for children, sterilized milk for children, cream, skimmed milk, buttermilk, butter and various kinds of cheese, and arrangements are made whereby various kinds of fresh fruit are carried about on the same waggons.

"Having collected the milk from about one hundred and thirty different sources, there are daily brought to the dairy about seventy-five thousand litres. This having been tested as