

BUTTER AND CHEESE—PROF. H. H. DEAN.

The beginning of the year 1918 finds the world short on food and the people hungry as never before, because it is a peculiarity of humans that the shorter the supply of eatables in the cupboard, the more hungry they become. Particularly short is the supply of butter, more especially in Great Britain, where butter has been selling for as high as \$1 per pound during the past year. Fats of all kind are scarce, milk-fat more than all others, because of the slaughter of cows and lack of labor to milk and care for dairy cattle. There is no substitute for milk-butter. The nation that relies on vegetable and animal fats, other than milk-fat, especially for children, has taken the first serious step in physical and mental degeneracy.

However, I am to deal with "Practical Suggestions on the Production of Butter and Cheese for the Coming Season."

The first one is that old one of *Better Cows*, which is at the basis of all increased production of dairy products. In these times, farmers cannot afford to feed poor cows. While we may not be able to breed very many cows which produce 100 lbs. of milk or over in 24 hours, and 20,000 lbs. milk in a year; or make 4 to 5 lbs. of butter in a day, and 1,000 lbs. in a year, the fact that we have a number of such cows should stimulate breeders to greater efforts than ever to secure these phenomenal producers, thus increasing the world's supply of milk-fat without increasing the number of cows, and at the same time we shall be conserving the supply of feed.

The organizations which are doing most to improve the dairy cattle of Ontario are The Records of Performance and The Records of Merit for pure-bred stock, and the Cow-Testing Association for the owner of common cows or unregistered stock. These, coupled with private records, are making a gradual, though slow improvement in the milk cows of Canada.

The second suggestion which, like a good appetite, always remains with us, when in a healthful condition, is to secure more and cheaper feed for butter and cheese production. Cheap and abundant grass, soilage, silage and root crops, with a reasonable quantity of grain and by-products, such as bran, oil-cake and cotton-seed meal, are essential for increasing the production of butter and cheese. Liberal feeding of the right kind of feed is an essential for increased production. Unfortunately the feed problem is a serious one on dairy farms. With the present price of grain and mill-feeds, the temptation is to lessen the quantity of these to a point below what is required for profitable production in winter time, as a certain amount of concentrated feed is essential, along with roughage, to produce milk in large quantities. Large producers require about one pound of meal for three to five pounds of milk produced. The great importance of cheap feed is realized when we consider that approximately one-half the cost of producing milk is for feed.

The third practical suggestion relates to a very acute problem on dairy farms at the present time, namely, the Labor problem. No class of farmers have been hit so hard as have dairy farmers in the present condition of labor. Many have sold their herds of dairy cattle and gone into other lines of farming because of help shortage. This condition is likely to continue for some time. The remedies which have been suggested are, to buy more dairy machinery, such as tractors, milking machines and cream separators; import foreign labor; conscript labor; utilize women help; and grow more help on the farm.