THE PRODUCTION OF MILK FOR CHEESE FACTORIES.

By J. W. Robertson, Agricultural and Dairy Commissioner for the Dominion.

Note.—We purpose in an early number of Farming to give our readers a somewhat full account of what Professor Robertson has done to develop and foster the dairy industry of Canada. In the meantime we are much pleased to be able to present to them the following very practical series of hints and suggestions relating to farm dairy work which he prepared for one of his earlier reports.

Professor Robertson

FEED.

The milk of cows is a secretion or direct elaboration from their blood. Whatever interferes with the health and comfort of the animals will also affect the quality and quantity of their milk. Too much care cannot be exercised in providing feed that is cheap, succulent, easily digestible, wholesome, and nutritious. The grass of early summer is too watery and weak in feeding substance to be fed alone to the greatest advantage. A judicious allowance of bran, peas, and oats, oil-cake or cotton-seed meal, will increase the milk supply and fortify the cow's system for the production of a larger quantity of milk during midsummer, fall, and winter. Broadcast fodder-corn does not meet the needs of milking cows. A soiling crop of some sort or sorts should be grown to furnish plenty of green fodder at the time when pasture may be bare from prolonged dry weather. Indian corn, when grown under conditions favorable to its attainment of mature size and quality —in rows or hills 3 feet to 3½ feet apart, with from two to six seeds per foot in the row—yields a fodder by the use of which cows are enabled to produce the largest amount of milk, butter, or cheese per acre of land required for their support. Fodder corn is not a complete ration for the most economical production of the best milk. When it is supplemented by grass, bran, oil-cake, cotton-seed meal, or similar feeds, better returns for the feed consumed are realized than when it is made the exclusive diet.

WATER.

Water is nature's vehicle for carrying about most of the matter which she requires to move from place to place. The great boulders were quietly clasped in its arms, and without apparent effort brought from the northern ridges to the southern parts of our Dominion. The tiniest specks of nourishing matter needed to replace the worn-out tissues of the body are likewise carried to their proper places in this wonderful omnibus. The identical water swallowed by a cow to serve as a carrying medium in her blood, for the equitable distribution of the elements of nutrition throughout her whole body, is made to serve a like function in the milk which she yields. If that water be impure in the first place it is likely to carry the impurity with it throughout its whole mission, from the drinking by the cow until after its consumption by the creature which consumes the cow's product. Water which has been contaminated by decaying animal matter is specially likely to retain its pollution. The milk from the cows which drink such water is a menace and danger to the public health, and interferes greatly with the commercial value of all dairy products. There should be an abundant supply of pure water, easily accessible to the cows during hot weather. It should be furnished at a comfortable temperature during the cold weather of winter. Cows which are denied access to abundance of water will not give as much milk, or milk of as good quality, as when plenty of water is provided them with wholesome satisfying feed.

SALT.

Dairy cattle should have access to salt every day, and salt should be added to all their stable feed daily. The conclusions from a series of experiments carried on in 1886 indicate that when