

when I mentioned to him the height of the sweet clover, the farmers will have to furnish step ladders to the cows in order to get up to eat that clover.

Yours truly,

Chateauguay,
27th July 1898:

PETER MACFARLANE.

NOTE—If farmers would only attend to Mr. MacFarlane's advice about clover! The waste of this most valuable crop is positively shocking to a man who knows how far superior it is to any fodder grown.—ED.

FEEDING FODDER PLANTS

By T. C. WALLACE (WALLACE & FRASER).
Toronto, Ont., and St. John, N.B.

Feeding cattle for milk and butter, and feeding young stock bred for the dairy, is an important branch of dairying at which very few in the business excel. In fact it may be said that the great majority fail in this connection. It is quite common to see cows that have made excellent records with one dairyman utterly fail when transferred to the charge of another feeder. The buyer of such animals never thinks of questioning his own feeding, he accuses the seller of deception. Even when a farmer sells an animal which afterwards turns out a record maker in the hands of a capable feeder, he simply says he always knew the heifer would develop something uncommon. Dr. Stewart in his excellent work on feeding has done much to improve herds by teaching farmers much of the value for various purposes of the grains and fodders, based on analysis. But there is something deeper than the mere analysis of ordinary crops, and the combining of them in such quantities as to make a ration for milk, butter, or beef. The value of the fodders and grains on farms differs very materially, and this great difference is caused by another kind of feeding, the feeding of the soil. As by well-balanced rations and good fodders we improve the quality of the produce of the stock, so by proper rational attention to the requirements of the plants to be fed in the soil, we improve the quality of the produce of the land as food for the animal in performing its functions. During recent years it has been quite clearly demonstrated that the feeding quality of the grasses and all fodders and grains can be more than doubled in flesh and fat-producing constituents, as well as in bone and muscle forming elements. This is tremendously important

and should engage the earnest thought of every feeder of cattle, as it opens the way to more economical feeding by reducing the feed bill, and possibly confining the ration to home-grown stuff, on which he has the full profit of a producer. And this is of equal importance to the hog raiser and breeder of horses.

The horseman aims at producing perfect bone and developing the muscle of his animals. This can be done more economically and perfectly by the production of fodder containing a high percentage of bone and muscle-forming elements. In this connection the pastures should be more carefully attended to, so that the quality of the grazing may be improved, as a great saving is effected by having pasture grasses of full feeding value instead of the poor run out herbage on which animals usually graze. If we depend upon the silo for our winter fodder, we should aim to have ensilage of the highest possible feeding value. It is this feeding value of fodders and pastures which often turns the scale for or against the farmer, while he is puzzled by the comparatively poor yields of his stock.

The effect of feeding better fodder is also marked in the quality of the butter, milk or cheese obtained, for even with the use of the best methods of manipulation of the milk the very finest quality of milk or cheese is not produced from poor feeding stuff. There is a field in Connecticut which is noted for the quality and quantity of milk and butter produced from cows fed from it. It has also been noticed that cows changed to other fields very soon show a deterioration in the quality of their milk.

It is then an important part of the dairyman's work that he should give great care to the feeding of the plants he grows for fodder.—*Farming*.

The Dairy.

CALCULATION OF COMPONENTS OF FEED RATIONS.

COMPTON MODEL FARM.

Let us suppose that we have at our disposal the following common feeding stuffs: Fodder corn, clover hay, and wheat bran, and that we want to know how much is required to keep a milch cow of 1000 lbs. live weight in good condition and to secure a maximum yield of milk. We will feed