

the college, where the delegates to our dairy convention will be able to meet and study for themselves the measures that have been taken to give the dairy cow a suitable place to do her work in.

#### AN ECONOMIC FEEDER.

The dairy cow should be an economic feeder. She utilises a large amount of cheap roughage, but with it she must be supplied with certain kinds of food or she will not make returns. There is no time that the flow of milk is so well kept up as when the cow is on the new grass in June and early July. The grass possesses not only the nutrient, but it has what we term succulence. It is juicy and is much relished. Water of course must be supplied, but water cannot take the place of the succulence of grass. So we learn from this that we must provide something throughout the year to take the place of the succulence of the new grass. Our prairie grasses or even our tame grasses do not come on early enough in the spring so, we must resort to some other means. It may be that we can furnish silage and keep it over so as to have it for spring feeding. Or we may store mangels or sugar beets and these afford an excellent succulent food for the dairy cow. Fall rye may be sown in August and used for early spring feeding. Sow a mixture of oats and peas at the ratio of a bushel and a half of oats and a bushel of peas early and at intervals of two weeks.

This makes a good substitute. Then when the grasses dry up in the early autumn, late sown grain or corn fodder may be provided to keep up the flow. In winter, besides the ordinary roughage, mangels, sugar beets and potatoes may be fed with the best of results. If alfalfa can be grown, and we have every reason to believe that it can, this will add very materially to the ration of the cow and will prove an excellent substitute for some of the expensive mill feeds, such as bran and shorts. (Turnips may be fed, but care should be taken to feed them after milking at night and make sure that the odours are out of the stable in order to prevent contaminating the milk.)

The dairy cow must have full access to an abundant supply of good pure water. She cannot make milk without it, nor can she make pure wholesome milk without pure water. Salt should be before her at all times.

#### BREEDING.

A dairy heifer if well grown may be bred so as to freshen at two and one half years. During her first period of lactation (milking) she must be well fed and it is during this period that she is trained for her future work. Feed her well and milk her as long as you can, eleven or twelve months if possible. Do not let her dry up. It is the long persistent milker that pays. Do not breed her for at least six months after dropping her first calf. This will allow her time to build up and mature. Keep the heifer calves from good milking dams. Have all your cows tested so that you may know exactly what each is doing. The average butter producing powers of the dairy cows of New York, Iowa and Nebraska is 150 pounds of butter per year. Some individual herds that have been carefully selected with the assistance of the seals and the Babcock ad well eared for, give an average of four