sale the half-starved animal will be only a scrub in the eyes of the public.

There is yet another important point which I must mention—namely, gentle treatment. The very best feeding, if accompanied by a kick and a growl, will not induce a cow to yield to her utmost capacity. As a matter of fact, a cow that is abused in any shape or form will yield milk of less quantity and poorer quality than if she were treated with gentleness, and exhaustive experiments recently carried out in America prove this up to the hilt. The man who kicks or otherwise ill-treats a cow should be flogged without mercy. A reasonable amount of shelter is also necessary, otherwise some of the nerve force which would be spent in the production of milk is spent in maintaining the heat of the body.

It will be generally agreed, I am convinced, that the above recommendations are inseparable from, and must, indeed, go hand-in-hand with, good feeding if the best results are to be obtained from dairy herds. It is now a well-known fact that milk and butter-fat yielding capacity of breeds of cows and of individuals is hereditary, and that this natural function can be artificially developed only to a limited extent. This, of course, applies more to the butter-fat than to the milk yield, for the quantity of the latter may undoubtedly be increased by certain systems of feeding; but no system of feeding will appreciably increase the percentage of butter-fat.

Liberal winter feeding of the dairy cow is undoubtedly of the utmost importance, and it is a deplorable fact that a number of cows in New Zealand die in winter through starvation. It is absolutely essential that the cow should reach her period of lactation in fit condition, and this cannot be accomplished on bare winter pasture alone. Having a large stomach-capacity, the cow requires a bulky feed. This should be of two classes, a succulent feed and a dry one. The combination may consist of roots and hay—mangels and lucerne for choice. The amount necessary for an in-calf cow will depend on the breed and size. The average cow will consume 10 lb. of hay and from 20 lb. to 30 lb. of mangels. A good supply of mangels is invaluable, and no other food is more successful in stimulating the milk-flow. For the best results a limited quantity should be carted to the grass paddocks daily. To turn cows into a mangel-paddock, thereby wasting about as much as they consume, is, in my opinion, the very worst policy. Even with a supply of good hay alone a herd of cows may be very successfully brought through the winter; but something more succulent is required when the cows calve early, in order to stimulate the milk-flow. For this purpose nothing is better than the mangel. In a report on last year's mangel crop that appeared in the *Journal* I made some strong statements as to