

For various reasons it is considered best in the case of these cows that the dry substance in the ration of each one should be about 28·5 pounds, and that the quantity can somewhat exceed that with profit; that the fat should not be less than 0·8 of a pound, and may without danger of waste be carried up to 0·95, and that the soluble nitrogenous substances, the starch, sugar and gum, should amount to from 12 to 13 pounds.

Our ration therefrom is deficient in every respect, except as regards the soluble non-nitrogenous substances. To make up for this deficiency, we may use our potatoes. But we learn from the tables of the composition of the foddering materials that, in order to supply 0·57 of a pound of nitrogenous substance, the quantity needed for a suitable ration, we would have to use 28·5 pounds daily for each animal; and we doubt whether it is best to do that, because our stock of potatoes would be insufficient, and we should still have to buy something more, and because, also, in adding 28·5 pounds of potatoes to each ration, we should carry the amount of dry substance up to 33 pounds and over, which would be altogether too much.

What else shall we do? On consulting the markets, we find that we can buy rye bran for $1\frac{1}{2}$ thalers, or oil-cake at $1\frac{2}{3}$ thalers per cwt., or rye itself at $1\frac{1}{2}$ thalers per bushel of 84 pounds. The cheapest course would appear to be to get the rye; we ascertain from the tables that an addition of 34 pounds of rye meal to each ration would bring the proportion of nitrogenous substances up to 2·66 pounds, or a little above the lowest limit that was considered consistent with judicious feeding. Let us see what will be the composition of the ration in other respects:

	Dry subst.	Nitrog. subst.	Fat	Non-nitrog. subst.
3.5 lbs. Rye-meal.....	26·06 3·00	2·28 0·38	0·67 0·07	12·47 2·35
Total.....	29·03	2·66	0·74	14·82