carried on in duplicate, and show the amount of feed required to produce a pound of gain during the different stages of growth.

From 54 pounds to 82 pounds it required 3.10 pounds meal per pound gain. From 52 pounds to 115 pounds it required 3.75 pounds meal per pound gain. From 115 to 148 pounds it required 4.38 pounds meal per pound gain. From 048 to 170 pounds it required 4.55 pounds meal per pound gain, and from 170 to 200 pounds it required 4.55 pounds meal per pound gain. The increased amount of food required to produce a pound of gain, as the hogs increased in weight, is very clearly illustrated in these results and require no further comment.

THE IDEAL BACON HOG

weighs, as before stated, from 180 to 200 to 225 pounds. When split down the back, the fat along the back should be about one and one-half inches in depth, and should be uniform from tail to neck, both at loin and shoulder. The side should be loin and deep, and the belly should be thick, and there should be a large development of lean in proportion to fat. These qualities, indispensable to a Wiltshire side of bacon, . are indicated in the live hog, by a light head and jowl, rather light neck of medium length, without arch on top. light shoulders, medium width of back with thickness carried well down to belly, great length and depth of side, medium bone giving plenty of strength without coarseness, and fine hair.

I herewith give two illustrations of the ideal type of bacon hog, the one a Yorkshire and the other a Tamworth, both being both specimens of bacon hogs. There are certainly some good bacon hogs in all breeds, but the large, white Yorkshire and the Tamworth are to bacon hogs as the Holstein and Jersey are in the dairy.

In the following illustration I present a diagram of a side of bacon showing the market value of the different cuts taken from a British authority. It will be seen by a close observance of this diagram that the most valuable cuts are in the side or middle pieces; this shows the necessity of hardy hogs with great length and depth of body.

It will be observed that the ham is by no means as valuable as many of the loin and side cuts. The shoulder is but a very cheap cut, hence the advice to breed hogs with pronounced lightness in the shoulder.

So much then for the style of hog most profitable for the dairyman to feed. Such a hog may well be called a dairy hog, for the dairyman above all others is the man to grow these kind of hogs.

BACON AND BUTTER.

A very attractive and profitable alliteration is bacon and butter, one being complemental to the other. I need not dilate upon the advantages of winter dairying. Under the old system of farming-winter was a season of comparative "nothing doing" on the farm. Under the new agriculture, what is known as dairy farming, farmers have the most profitable employment in winter. Butter in winter brings a better price than in summer, and feed is more abundant, while the owner and help can devote the greater part of their time to the dairy business.

But the by-product ! It is said that Swift and Armour pay the profits from the sale of the by-products of their packing houses. The hair, the feet, the blood, the entrails, etc., are so carefully husbanded that they measure the profits of their business.

Does the average winter dairyman do as much? The skim milk is a valuable byproduct that under good management can be made to pay from twenty to forty cents per hundred pounds; and the solution is simple. Feed the sweet separator skim milk to well bred hogs. For winter dairymen two young growing hogs should be factors to each milk cow, or one breeding sow to every four or five cows; or if the herd numbers twenty-five cows, then the number of breeding sows should be six.

These sows on the dairy farm should breed twice a year, and, if the reader has followed the writer in his various articles, he would see that the principal litter of