## PART IV.-FEEDING FOR BACON.

Soft Bacon. If we are to maintain and develop our trade in bacon with Great Britain, it is of the greatest importance that we pay strict attention to quality. Not only must our hogs be bred to give the desired conformation; but they must be fed and managed in such a way as to give the desired quality. One of the greatest defects in quality with which our packers have to contend, is a tendency of some sides to turn soft during the process of curing Softness has nothing to do with fatness; in fact, a thin side is more apt to develop softness than a fat one. In a soft side, the fat is soft and spongy; and sometimes even the lean is affected. There are all degrees of softness up to a mere slight tenderness; but any degree of tenderness detracts very much from the value of a side; and a really soft side is practically worthless. The percentage of soft sides is sometimes very high, even as high as 40 per cent. of the total at cer in seasons of the year. It will, therefore, be easily understood that such a condition represents an enormous shrinkage in value; and this loss is bound to be reflected in the prices paid the farmer for his hogs. to say nothing of the injury to the reputation of our bacon in Great Britain. This is not a matter, therefore, which affects merely the packer. It affects the bacon industry as a whole; and the farmer, sooner or later, must shoulder the loss. It is important, therefore, that the farmer should pay particular attention to the question of quality.

## Causes of Soft Bacon.

To describe all our experiments under this head would occupy too much space, and would be found tiresome, and perhaps confusing, to the average reader. The conclusions which follow are based upon a careful analysis of our work to date, descriptions of which have been published from year to year in the annual report of the college. We have also been able to draw upon considerable unpublished data.

Exclusive Meal Feeding. This is perhaps one of the most common causes of softness, especially when hogs are confined in pens from birth to the time of marketing. Some kinds of meal are more dangerous than others; but wherever exclusive meal feeding is practised, and the exercise is limited, more or less softness is almost sure to result.

Corn and Beans. Of the grains in common use, corn has the greatest tendency to cause softness. Its injurious tendency can be modified by mixing it largely with other meal, and by feeding skim milk, green foods, and roots; but its tendency to produce softness is so strong that it must be regarded as an undesirable food.

We have not experimented with beans; but the Central Experimental Farm at Ottawa found that beans have an effect similar to corn.

Lack of exercise. Lack of exercise has a tendency to produce softness; but this tendency can be largely overcome by judicious feeding.

Unthriftiness. Unthrifty hogs, no matter what the cause may be, invariably produce soft bacon.

Lack of finish. Thin hogs have a marked tendency towards softness Marketing hogs before they are properly finished, is no doubt responsible for a good deal of softness.

Holding back. When a hog is finished, it should be marketed at once in order to produce firm bacon. If the feed is cut down, so that the hog makes no gain in weight for some time, or loses in weight, the bacon from such a hog is almost sure to be soft.