

an axe, striking a sharp blow with the head on the spot indicated above. When the animal is felled, cut its throat lengthwise from a point nearly opposite where the jaws form a pivot to the brisket, then insert the knife full length and sever the jugular vein. Use a good knife six or seven inches long and have it steel sharpened.

As soon as the animal is dead skin out the head and remove it, then the forelegs to the knee, afterwards the hind legs to the gambrel joint. Turn the animal on its back and notice the line formed in the inside of the hind legs by the hair coming together or feathering out, follow the this line with the knife in skinning. Do not run too near the tail; in a cow your line should come about six inches behind the udder. Skin down the sides, leaving the fore legs with the hide on. Cleave the pelvis bone and the brisket. Take the evener of a set of double trees and insert one clevis in each gambrel cord, if the clevis is not long enough use an S hook. Hook the tackle to the middle clevis of the evener and raise the carcass so that the upper end is about as high as a man's head--then remove the entrails, using care to do a neat job. If any washing is needed do not wash the inside of the carcass--wipe it out with a damp cloth that has been wrung out of clear, cold water; an open fabric like gunny sacking is the best. After the entrails are removed skin down the back as far as convenient and saw down the backbone, then raise the carcass higher, skin down the back and saw down the backbone more, continue in this way till the two halves hang apart; then skin out the forelegs and your beef is hung for cooling. As soon as this is done salt your hide and do it up neatly, leaving the trimming for the hide buyer to do unless you are an expert in putting hides in shape for market. When the beef is thoroughly cold, take down and cut up for fresh meat or to salt, as suits.



Producing Export Bacon

At the annual meeting of the Dominion Swine Breeders' Association, held in Brantford on December 2nd last, a report of which was given in FARMING for Dec 13th, Mr. G. E. Day, B.S.A., Agriculturist, Ontario Agricultural College, read a very valuable paper on the production of bacon for the export trade. This trade is an important one, and particular attention must be given to the production of the right quality of bacon if we hope to develop the export trade in that article. The quality of Canadian bacon does not come in touch so much with American as with the Irish and Danish article.

In his address Prof. Day states that the best live weight of hogs for the production of the best Wiltshire bacon range from 170 pounds to 190 pounds, though these are not cast-iron units. The hog should be light in head, jowl, neck and shoulder. He should have medium width of back, great length and depth of side, good thickness through from side to side of belly, well developed ham, and medium bone. He should be active and sprightly and possess general smoothness of body, showing no coarseness in any part. When cut down the back the fat should be of uniform thickness over loin and shoulder, and firm in texture, while the belly should be thick. The carcass should show a good development of lean meat, with a fair amount of fat. In addition to a uniformity in quality there must also be a uniformity in quantity if the trade in Wiltshires is to be developed.

One of the objections to the bacon hog is that the packer wants the hog before it is heavy enough to satisfy the feeder. This objection is hardly tenable as it has been clearly proven at various times that the cost of producing a pound of gain steadily increases as the hog grows heavier. From frequent weighings of 36 hogs fed last summer at the O.A.C. the following facts were brought out: While increasing in live weight from 54 lbs. to 82 lbs., hogs required 3.10 lbs. meal per lb. gain; from 82 lbs. to 115 lbs., 3.75 lbs. meal per 1 lb. gain; from 115 lbs. to 148 lbs., 4.38 lbs. meal per 1 lb. gain, and from 148 lbs. to 170 lbs. 4.55 lbs.

meal per 1 lb. gain. The greatest and most common objection to the bacon hog is that it costs more to produce it than it does to produce the fatter types. This contention is not borne out by facts. In the latest experiments at Guelph the group which evinced the most desirable characteristics from a packer's standpoint was first out of six in point of economy of gain. The group, scored second by the packer, was fourth in economy of gain, while the group, scored third by the packer, was second in economy of gain.

The bacon hog is born not made. Food can modify, but it cannot overcome individuality, and the foundation of our bacon industry rests upon judicious selection and mating of breeding stock. In the investigations at the college very good bacon hogs have been found practically in all the leading breeds. In some cases, however, those which came nearest to the packer's standard were furthest from the standard of excellence for the breed. The great bulk of the hogs sent to the factory is made up of grades and crosses and not of pure-bred hogs. What is the best cross is not known. However, if a sow possesses undesirable qualities from a bacon standpoint, it is folly to mate her with a boar of a breed characterized by the same qualities and hope to produce a bacon hog.

One of the great difficulties which the packers have to encounter is the soft condition of the fat of many hogs. This is something that feeders should give special attention to. Losses from soft bacon will ultimately fall upon the producer. Soft bacon does not mean fat bacon. It means a soft condition of the fat, which develops while the bacon is in the salt, and reduces the value of the side according to its degree. An absolutely soft side is comparatively worthless, and between this condition and firmness there are all shades and degrees of tenderness. It is claimed that this softness is due to over feeding and forcing hogs to heavy weights at an early age. This may be the case where forcing is carried to extremes, but in the experiments at the college more softness has been found among unthrifty hogs that were too lean to be slaughtered than among heavier and fatter hogs which had received the same food and treatment. The blame is also put upon the feeding of corn. But soft bacon has been produced at the college without feeding corn. It is also claimed that soft bacon is due to the lack of exercise. Yet, perfectly firm bacon has been produced from hogs that have had the least possible exercise from time of weaning to slaughtering. The feeding of clover is also blamed for it, yet reports are to hand of hogs that were sent from a clover pasture to the factory and pronounced first-class. From this it seems clear that softness is not due to any one cause, but may result from various causes, acting either singly or in conjunction.

Investigations regarding the causes which may produce soft bacon are merely in the initial stages. The most extensive and reliable experiments on record regarding the influence of food or the firmness of bacon are those conducted at Copenhagen, Denmark. These experiments go to show that the continued feeding of corn to young hogs tends to produce softer bacon than when barley was fed alone, and that the softness varied according to the proportion of corn in the ration, or the length of time during which corn was fed. They also showed that wheat, bran, and rye shorts produced similar bad effects. At the College, from experiments conducted previous to 1898, it had been noted that hogs fed in pens from the time they were two months old were more seriously faulted for tenderness of fat than similar hogs fed in outside lots where they had plenty of exercise. It was also noticed that hogs which had exercise till they weighed 100 pounds and were then put in pens and fattened rapidly were pronounced firm. These examinations were made before the bacon was salted, and are therefore not altogether reliable. During 1898 hogs were fed in six different ways, and the bacon was examined after it had come out of the salt, so that there could be no mistake about its firmness. The results of these experiments are summarized as follows:

Thirty-six pure-bred hogs were purchased when from 7