

composed of digitalis, 2 grains; pulvis antimonalis, 6 grains; and nitre, half a drachm. Our own experience has been that, in most cases, a roomy, warm and dry, but well-ventilated pen, with cooling laxative food, and a dose or two of purgative medicine, will effect a cure; although, in one or two cases, where the animal seemed feverish, we have found the use of a little nitrate of potash, in doses of thirty to forty grains, of benefit. This may be given in the feed night and morning.

Feeding Cotton Seed Meal.

In Bulletin 28, issued last year by the Iowa Experiment Station, is an interesting account of an experiment in feeding hogs on cotton seed meal in various quantities in conjunction with corn and cob meal and buttermilk.

The hogs were divided into five lots of three each, and fed for a period of twelve weeks as follows: Lot No. 1 was put on a ration of corn and cob meal and buttermilk; lot No. 2 on corn and cob meal, buttermilk, and cotton seed meal, beginning with a half pound per day; lot No. 3 on the same, except that the amount of cotton seed was double that of lot No. 2; lot No. 4 got corn and cob meal, buttermilk, and gluten meal; lot No. 5 corn and cob meal, buttermilk, and cut clover hay. The total amount of grain fed to each hog was the same in all lots, the amount of cotton seed meal and gluten meal fed being substituted for a corresponding quantity of corn and cob meal. All the meal was soaked twelve hours before feeding and was fed in two feeds, night and morning, the buttermilk being fed at noon; plenty of pure drinking water was allowed, and also a supply of salt and ashes. All feed was carefully weighed, and any that was left was weighed back and deducted. Three other similar shoats were turned into a barn behind ten head of cattle that were being fed seven pounds of cotton seed meal each in their daily ration. This was done to determine the effect of allowing hogs to follow cattle that were being fed on cotton seed meal. The hogs fed cotton seed meal made decidedly the best gains, but, strange to say, at the same time the use of cotton seed meal in any quantity proved fatal. The conclusions arrived at by those conducting the investigation were as follows:

(1) Cotton seed meal is fatal to hogs when fed in sufficient quantity; the total amount required to prove fatal being in this case from 27 to 33 pounds per hog.

(2) Hogs in this experiment were fed without

injury for seventeen weeks following cattle that were fed from four to seven pounds of cotton seed meal per head daily.

(3) Cotton seed meal added to corn and cob meal ration for hogs materially increased and cheapened the gains over corn and cob meal alone.

(4) Cut clover hay added to a corn and cob meal ration and soaked twelve hours before feeding gave no advantage in gain over corn and cob meal alone.

The lot which made the best gains were fed on the ration having the narrowest nutritive ratio, viz., 1 to 8.7, thus apparently indicating the superiority of a balanced ration in feeding.

The evil results experienced at the Iowa Experiment Station from feeding any quantity of cotton seed meal correspond to the results obtained in 1892 in a similar test made at the Texas station; at the same time, it may be pointed out that in a test made by Professor Henry in Wisconsin last winter, not only were no evil effects noticed, but better results were obtained by feeding cotton seed meal in conjunction with cornmeal, middlings and milk than were obtained from a similar ration in which oil meal was substituted for cotton seed meal, although it must be remembered that in this latter case the test was only carried on for seven weeks and the quantity of cotton seed meal fed was only half a pound per day to each hog. In this case, the hogs getting the oil meal ate five per cent. more feed to produce one hundred pounds gain than did those getting cotton seed meal.

Our own experience in feeding cotton seed meal to hogs has been so limited that we cannot say anything as to its advantages or disadvantages, but we are satisfied that while a small quantity of oil meal may be used to advantage in feeding breeding animals, or in fitting for exhibition purposes, it is not a food to be used to advantage where it is desired to produce meat suitable for making bacon of first quality, as it is almost certain to make the fat soft and greasy.

It can probably be used most profitably as a supplementary food in those districts where corn is fed in large quantities, but where the feeder has plenty of barley, peas, and skim-milk, we would counsel omitting the oil meal, as a general thing, from the daily ration for fattening pigs.

In the Iowa experiment, cut clover hay was not found of any advantage, when mixed with corn and cob meal. This was probably due to the fact that the particles of cob in this meal exercise a mechanical effect in separating the particles of meal, and so do away with the need for cut hay in one important point.