

Feeding Wheat to Hogs.

Being moved thereto by the low prices which have prevailed for wheat, the South Dakota Experiment Station, in September last, undertook a feeding trial to determine how far it might be possible to feed wheat to hogs at a profit. The results of the experiment are published under the above title in Bulletin No. 38 of the South Dakota Station. The specific questions to which it was sought to obtain an answer were as follows:—

1. Can the farmers of this State realize more from their wheat by feeding it to hogs than by selling it at present prices for wheat and hogs?
2. Can wheat be profitably fed without some other food as a balanced ration?
3. Will it pay to grind wheat as food for hogs?
4. How does wheat compare with corn and peas (Canada field peas) as food for hogs?
5. How does quality of pork made from wheat compare with that made from corn, peas and mixed food?
6. How does the average gain of hogs fed on an exclusive diet of wheat, corn or peas compare with that of hogs fed on mixed food?
7. When should fattening begin and how long should it continue?

In order to secure an answer to these questions eighty pigs were selected from those raised on the college farm, four of them being pure bred Poland Chinas, four months and fifteen days old, and four cross bred Duroc-Jersey and Poland Chinas, four months and twenty-three days old. They were divided into four lots, numbered 1, 2, 3 and 4, each lot consisting of one Poland China and one cross-bred pig. There was considerable discrepancy between the weights of the lots, lot No. 1 weighing 164 pounds; lot No. 2, 174 pounds; lot No. 3, 191 pounds, and lot No. 4, 205 pounds. With the material at hand this could not be avoided without placing in some lots two pure-breeds or two cross breeds, and it was therefore not deemed advisable. The pigs remained in good health during the experiment, which lasted ninety days, and which was divided into three periods of 25, 28 and 37 days. Up to the time of the beginning of the experiment the pigs had been well fed on swill composed chiefly of kitchen scraps, sour milk and whey and some corn and peas. They also had the run of a good pasture a part of the time, and had been fed raps when not at pasture. Each lot at the beginning of the experiment was put in a small pen having a small out-door yard. They had all the hay and corn fodder without ears they would eat, and had free access at all times to salt and hard wood ashes. Having had free run of mixed sloop feed the change was made abruptly to confinement and a single grain ration. The grain was soaked and an accurate record kept of it. The grain fed to lot 1 was Canada field peas, unground; to lot 2 a rather poor quality of spring wheat, unground; lot 3 was fed on Dakota grown dent corn, ground; lot 4 was given spring wheat ground. The pigs were given all they could be induced to eat and weighed regularly, and when slaughtered sold for \$5.50 per 100 pounds, dressed weight, which made the live weight bring about \$4.50 per 100 pounds, the actual figures being \$4.55 to \$4.65, depending upon the slight difference in offal in the several lots. At these figures the peas netted the feeder 55.36 per bushel, the unground wheat, 55.83 the ground corn 60c and the ground wheat 58.29c.

The answer which it is believed the experiment furnishes to the questions with which it began are as follows:

1. Hogs averaging 100 pounds, purchased about September 1st, at \$4.50 per 100 pounds live weight, and fed for three months on wheat, water, ashes and salt exclusively, with an occasional handful of hay or corn fodder, and sold at the end of the time for \$5.50 per 100 pounds dressed, will return the feeder from 56

to 58c per bushel for the wheat, allowing nothing for manure on the one hand or for the labor of caring for the hogs on the other.

2. At this price it can be fed profitably as an entire ration, but it would undoubtedly pay better to mix it with some other feed, particularly during the early stages of fattening.

3. Hogs fed on ground feed make a more rapid and more uniform gain and produce pork of rather better quality, but they also consume more feed than those fed upon whole wheat.

4. Hogs fed on peas do much better in proportion during the first part of the feeding than in the latter part.

5. The quality of pork made from corn and from ground wheat is about equal, and is superior to that made from whole wheat, peas or mixed food. That made from mixed food is the fattest.

6. The average daily gain of the hogs fed on peas was 1.21 pounds; on whole wheat 1.28 pounds, on ground corn 1.40 pounds, on ground wheat 1.32 pounds, and on mixed foods 1.61 pounds.

7. The seventh question is not settled, but the experiment shows that a larger return per bushel for the food consumed would have been realized if the hogs had been sold at the end of the second period. This is particularly true of the lot fed on peas. The other lots fed on corn meal and wheat show no greater decrease in the rate of gain as the feeding period advanced than might naturally be expected from the increase of weight and age.

The experiment also brings into prominence the fact that hogs which have been accustomed to exercise and a mixed diet should not be shut up abruptly and confined to one kind of food. There should be a preliminary feeding period, calculated to accustom them gradually to the changed conditions. As to the quality of pork made, all the feed produced meat of good quality, the principal difference being in the proportion of lean to fat meat.

Value of Accuracy.

The president of a New England College, according to an exchange, in a recent address emphasized the moral value of accuracy. "There is a conscience of the mind," said he, "without the use of which no one can ever expect to become right minded." But more than that he urged that accuracy is a joy. "Good study," he said, "is not a pastime—no one would claim that; but it may be made a very interesting business. Attention, if it is not strained, may become a source of pride and delight. I have no doubt that if we would cultivate the habit of accuracy, we might derive quite as much pleasure from it as from the Yankee substitute of guessing at things. Not only does devotion to accuracy bring its moral gains and its pleasures, though no more valuable. Whatever shallow cynics may say, in the long run it is the accurate newspaper that wins circulation, the accurate clerk that keeps his place, the accurate writer whose words are read and heeded. The engineer true to the second, the elevator boy careful about the niceties of stopping and starting and shutting doors, the office boy who ob-serves where the waste paper basket is used and puts it there—these rise, and others do not."

Halifax Chronicle: The assignment of G. F. Mott, soap manufacturer, was heard with regret on the streets the other afternoon. It is understood the assignment was caused or hastened by the result of a big gold mine case in which he is interested. The assets and liabilities are not yet known. The preferential creditors are: The Union Bank, \$15,000; Catherine Ann Mott, \$1,000; Elizabeth J. Mott, \$1,000; Sarah E. Howe, \$2,800; W. B. McDonald, \$1,000. Lyons, Lyons, Melish & Tobin are also preferred for the amount of their legal charges. John G. Trider is the assignee.

The First Roller Mill.

In 1870 J. R. Rathbun & Son, Deseronto, Ont., placed with a Canadian firm of mill furnishers the order for a 75 barrel mill, the equipment to include smooth rollers on the breaks. The mill was in due time completed and started up, but failed to make the quality and quantity of flour which had been "promised in the bond." Ira Wescott, superintendent with John T. Noye & Sons, Buffalo, N. Y., was sent for, and on visiting the mill it was arranged to increase the capacity of the mill to 150 barrels with a full roller outfit. A new roller corrugation, invented by John Stevens, of Neenah, Wis., was put in, and in due time the Deseronto mill was completed and started up with results which were very gratifying to the Rathbun Co. The products of the mill worked quickly into favor, and the patent under the brand "Crown Jewel" sold far and wide. Thus it is the Rathbun Co. properly claim to be the pioneers in the use of Stevens' roller system, and to have been owners of the first all-roller mill in Canada.

The Cause of Existing Prices.

A recent number of the Iron Age contains a very concise account of the causes contributing to the present low prices existing in every part of the world, but especially in our own country. Of course, every country is so closely linked with every other that a paralysis in industry cannot exist in one without affecting all the others. It is like a wave of the sea, which, though rising in mid-ocean, will ultimately break against the shore. The first of the causes mentioned is the Baring failure. This was the beginning of the blight that struck the entire world. British capital began to realize on American investments, and those who had these securities began to sell them and to draw steadily from our stock of gold. The second cause mentioned is the culmination of real estate booms and other real estate speculations. The next cause is the completion of enormous iron and steel plants. Never before, the Age remarks, in the history of the American iron trade were so many large and finely equipped works built as between 1889 and 1894. The next cause is the superabundance of crops all over the world. While it is a disputed point as to whether the food crops of the world have been excessive in recent years, no doubt exists whatever that the supply has been far in excess of the immediate demand at any time and at any point, so that prices of farm products in America have been forced to a much lower point than ever before, and far lower than agriculturists have figured as the actual cost of production. Cotton has proved no more profitable than wheat. As to wool, exports are being made of a considerable portion of the domestic clip, showing that prices here are at least as low as those abroad, which is an anomalous condition in the American wool trade, because this country was never before able to supply the wants of its wool manufacturers. Under these circumstances farmers and planters are driven to the practice of the most rigid economy, greatly curtailing the demand for tools, implements, hardware and general manufactured products. One of the most important causes is the opening of a new iron field. Much has been said concerning the discovery of the Mesaba iron range, which has introduced a new element into all calculations, disturbing all values of iron and steel, and whose force in constructing cast sheets has not yet been fully measured. The next cause is the destruction of capital invested in railroads. Finally, the decline in the value of silver and tariff legislation are among the causes named. So much has been said concerning these that nothing further need be mentioned. These causes create a formidable list, and, doubtless, all have had their influence in producing the strange condition of things which has paralyzed for the present the industrial world.