

STOCK & DAIRY

WHAT IT COSTS TO MAKE A POUND OF PORK.

An Iowa farmer's experiments in pork-making are given in the Report of the Department of Agriculture for 1871. The breed of hogs is not named. He had twenty and weighed them to begin with. After feed a specified amount, they were again weighed, and the increase of weight taken as the amount of pork made. Of course, all was not clean pork—it was only live weight. The following are the results recorded:—

Eighty-three bushels of shelled corn made 873 pounds of pork, or ten pounds to each bushel, making 50 2-5 cents a bushel for corn.

Forty-seven bushels of dry corn meal made 553 pounds of pork, at 11 1/4 pounds to the bushel, making 58 3/4 cents for corn.

Fifty-five and a half bushels of corn meal wet with cold water, made 731 pounds of pork, or 13 1-6 pounds per bushel, making 65 5-6 cents for corn.

Forty-six and a half bushels of cooked meal made 596 pounds of pork, or nearly 15 pounds per bushel, making 74 4-5 cents for corn.

A correspondent of the *Western Rural* gives his experience as follows:—

To determine whether I was raising hogs and corn at a profit or loss, I last season kept an accurate debit and credit account with both pigs and corn crop. I have twelve pigs, farrowed April 1; I weighed all the corn I fed from that time until I sold, Sept. 16. At that time the twelve pigs weighed 1,925 pounds; sold at four and a quarter cents per pound, amounting to \$81.81; fed 115 bushels corn worth forty-five cents per bushel, \$51.75, leaving a profit of \$30.06. We milked cows during the summer, but raising calves left not a great amount of milk for the pigs. My pigs were not of the Magie breed.

My cornfield consisted of fourteen acres of timothy meadow, that had lain in grass fifteen years. In keeping my account I reckoned man and team each at \$1 per day. The cost of ploughing, fitting the ground and planting \$72.75; cost of cultivating \$36; cost of cutting \$13; cost of husking \$45; estimated value of fodder, \$45; total expense of crop, \$121.75. I harvested 1,000 bushels of ears. Estimated amount of shelled corn 650 bushel every bushel of which I can now sell at home for forty cents per bushel, amounting to \$260, which, minus the cost of raising, leaves \$138.25 profit.

A writer for the *New York Tribune* summarizes the experiments that have been made from time to time as follows:—

I have recently seen the statement of a farmer who says he fed 13 young pigs on meal giving the lot 54 pounds per day. The pigs were a Yorkshire and Chester cross. In one week he found they gained 12 pounds each. This was getting within a fraction of 24 pounds of meat from a bushel of meal. At 5 cents per pound for the pigs, the meal netted him \$1.20 per bushel. S. H. Clay, of Kentucky, found, by accurate experiment, that a bushel of cooked meal made 17 1/2 lbs. of pork. Another writer states that by careful weighing he found that five bushels of boiled meal made 84 pounds of pork. T. J. Edgestates, that five bushels (less miller's toll) of meal boiled and fed cold made 83 1/2 pounds. J. W. Zinglar, of Indiana, says he put 15 hogs, averaging 166 pounds each, in a pen, and fed them on 142 bushels of shelled corn in 42 days. At the end of that time they weighed in the average 284 pounds each. In this case 5,600 pounds of corn made 1,770 pounds of pork, a bushel over 18 pounds, a remarkable yield. J. Silbey, of Wayne County, N.Y., reports that 412 pounds of pork made from corn cost him but a trifle over three cents per pound. N. G. Morgan states that at five cents a pound for his pork, he got \$1 per bushel for his corn. Mr. Baldwin, an English breeder, gave the preference to Indian corn over barley meal and ground peas for fattening hogs, and produced one pound of pork from two pounds of corn.

These statements says the *Stock Journal*, show that there is within a fraction of 24 lbs. of pork in a bushel of corn; and the effort of every farmer should be to endeavor to get out as much as he can of it. And to do this, he must have the right kind of hog, they must be placed in the right condition, and fed in the right manner; with a view of profit. A gentleman in our office the other day,

was satisfied, from his experience, that farmers generally feed 40 bushels of corn to secure 300 pounds of pork; and another gentleman instantly replied that his neighbors generally fed more corn for less pork. But taking this result as a fair one, 300 pounds of pork, at 4c. per pound, would be \$12, which would give, for the 40 bushels of corn, just 30c. per bushel. But 24 pounds of pork which is in the corn, and can be got out of it, means 96c. per bushel for corn, 17 1/4 pounds of pork to the bushel means 70c per bushel for corn, and 12 1/2 lbs. means 50c per bushel for corn.—*Utica Herald*.

FEEDING VALUE OF PRODUCTS.

Some one, and we do not know who, writing upon the relative value of different articles of food for stock, thinks that chemistry has caused numerous errors and mistakes to creep into the minds of farmers. For instance, by chemical analysis we learn that wheat straw contains one-third per cent. of nitrogen (flesh-forming substance) and clover hay one and three-fourths per cent.; we are led to believe that clover hay is nearly five times as nutritious as wheat straw, and that, therefore, it will take only one-fifth as much clover hay to feed a cow with as wheat straw. So with regard to roots: we learn from the chemical researches that turnips contain ninety-one per cent. of water and only one-sixth of nitrogen. Accordingly we are induced to estimate turnips at only one half of the value of the wheat straw, or, in other words, we should feed double the weight of turnips than of straw for the same result. He thinks that every farmer who has ever practised feeding turnips will accord to them a much higher value for feeding stock than chemistry assigns them.—*Carolina Farmer*.

THE SHEEP AT F. W. STONE'S SALE.

Having attended the sale at Mr. F. W. Stone's, in Guelph, Ont., I took some notes of the condition and appearance of the celebrated Cotswolds at "Moreton Lodge," and will give them for the benefit of your readers. The "Moreton Lodge" farm of 550 acres was lately sold to the Canadian Government for an Agricultural College farm, for \$75,000. On this farm were kept Short-horns and Hereford cattle, Cotswold and Southdown sheep, and Berkshire and Yorkshire hogs. All these had been bred up by Mr. Stone to a high standard, and had become justly celebrated. Passing by the cattle and hogs, we will take a look at the sheep. I saw nearly or quite 150 Cotswolds and 30 or 40 Southdowns, and any one of the 100 or more stock-men who attended the sale will bear me out in saying, that finer breeds of these sheep cannot be found in America. In one field I saw 20 or 30 "show" sheep—marvels for fatness, size and evenness in shape. The flock of about 100 breeding ewes were in high order.

I had heard it said so many times that Canada sheep are larger, at the same age, than the same breeds when kept in the States, that I endeavored to find out by persistent inquiry whether this fact is to be attributed to climate or to feeding, or to both. This fact I ascertained—that the same shepherd would grow sheep to the same size either in Canada or in Kentucky. Size in Cotswolds (and also in the Downs) is due entirely to judicious feeding. At Guelph, maize is an uncertain crop, and is hardly ever planted, except in gardens, or for forage. But turnips can be grown in unlimited quantities, and are so grown. Mr. Stone's crop of turnips is measured by the ten-thousands of bushels. His sheep are fed in winter on Illinois corn—bought by the car load—oil cake, oats, peas and turnips, with plenty of hay and straw. In the summer, when pastures are good, they get nothing else but grass; but in the after part of the season, they get, in addition to the pasture, early turnips, or rape. This last is much depended upon, and is fed off in the English style, by the aid of hurdles. By continual liberal feeding, the "Moreton Lodge" Cotswold ewes weigh from 100 to 300 lbs. at two years old. The "shearling" and two-year show ewes reach this latter figure. Mr. Stone's shepherd told me he could make a Cotswold ewe weigh 300 lbs. at two years old, with no other grain but Illinois corn, provided he could have all he wanted of it. He gave us an axiom in breeding, that "size follows feed."—*Erie, in National Live Stock Journal*.

NO GOOD FARMING WITHOUT STOCK-FEEDING.

J. B. Lawes, the great indefatigable experimental farmer of England, gives it as his decided opinion that the fattening of animals on the farm is the only legitimate and profitable farming, and although he uses a large

quantity of chemical manures, he does it only as a supplement to increase the stimulus to his farm-yard manure. He says that for every twenty-five pounds of food devoured by an animal he leaves twenty pounds in excrement, and this is by a growing animal; if the animal is full grown, it takes no part of the food to form his flesh and bones. Hence it is that the English farmer buys young three-year old steers in the fall, to eat his cut hay and straw, oil meal and roots and in winter to fatten them for market in the spring; he well knows that the manure they make nearly pays their keeping.

John Johnston, the father of tile draining in Western New York, buys store sheep in the fall to fatten for spring market, feeding them through the winter on cut straw, clover hay, with Indian meal and Wertzel beets; and he considers the quality of their manure enough improved to pay for the meal and roots.

To put on fat to an animal requires neither mineral matter nor nitrogen, only available carbon and the elements of water.

Thus to form 100 lbs. of muscular flesh and bone in a growing animal, it takes:—water, 77 lbs.; fibrin, flesh and blood former, 22 lbs.; phosphate of lime, 3/4 of a lb.; other mineral matter, 1/4 of a lb.

As stall manure supplies the nitrogenous fibrin, the potash and a good part of other mineral substances, if there is only enough of it to dispense with concentrated fertilizers, the money they cost is saved. Yet the best farmers do not neglect to supply themselves with bone material and other commercial manures to quicken and eke out their barn-yard manures.

Joseph Harris, of Martin Farm, near Rochester, perhaps the best farmer in both theory and practice in this State, says land never should be so exhausted of vegetable matter as to require a green crop to be ploughed in; he says, feed your clover and apply the dung made from it to the field, be it meadow or fallow. But if clover is ploughed in, it should be first well limed, to promote its decomposition; and lime itself is a capital manure for the clover crop.—*Southern Cultivator*.

THE COST OF POOR STOCK.

Probably few farmers think of what it costs to keep a poor cow or a land-pike hog. They readily understand that a good cow or a hog that will dress 200 pounds at six months old is profitable stock to keep, but the fact that this gain is really an amount of loss on the poor stock is rarely considered. If a cow yields 300 pounds of butter in a year which brings \$30 and another yields 75 pounds bringing \$22.50, the loss on the poor cow is just \$37.50. The fact is, it would be a more profitable operation to give her away than to keep her, for she does not pay for her feed. The dairy business of this country is not on a satisfactory footing by any means, and solely on account of the multitude of poor cows which are kept year after year. This is a matter which ought to be looked after by the county agricultural societies. Every one of these associations should introduce improved stock, by means of thoroughbred animals, into their localities. It is a good work to elevate the ideas of farmers and to foster a taste for improvements, but to the great majority of their clients the possession of such stock or the use of it is quite unattainable, on account of the want of the necessary means. By making this a special branch of their operations, the usefulness of these societies would be much increased and their importance much enhanced.—*American Agriculturalist*.

DEVON AND SHORT-HORN COWS.

An English breeder says:—"I have kept them pure, crossed the Short Horn cow with the Devon bull, and crossed the Devon cow with the Short-Horn bull. In either way, they have made a larger return, and paid for their meat much better than the pure Devon; but by far the greatest success has been to commence with the Devon or native cow and pure Short-Horn Bull, and forever after using the Short-Horn bull. I have also used the Devon bull on the cross from the Devon cow and Short-Horn bull; but the progeny rapidly declined, and no trace of the Short-Horn remained. In these days of great consumption and high prices, it does not pay to stick to stock, the breed of which requires four or five years to mature; but I am firmly of opinion that if pure Short-Horn bulls were used on the native cows and their crosses in the different districts of the United Kingdom for a few years, our beef supplies would be doubled. Many farmers have a great horror of crossing their stock, whilst others admit that the first cross is all that they could wish, but after that it is all 'gone

goose' with the next generation. Of such would ask, Have you ever tried? and, if so, How, and, With what object in view? My theory has always been—and practice and observation have fully borne me out—that we can make almost anything we like of our flocks and herds in a few years, by fully adhering to pure male animals of the kind we wish them to resemble. If beef is our object, use pure, high-class, Short-Horn bulls always; never by any chance or pretense use a cross-bred bull, even if he be the best animal you can procure, and if the cross were only once a dozen generations back. It is the use of cross-bred males on cross-bred females that has made so many people distrustful of any but the first. I wish to lay great stress on the using of pure bred Short-Horn bulls, by which I do not exclusively mean those fancy-priced beasts that figure so prominently in the agricultural periodicals, but ones selected from a good herd, where pedigree sires have been used for at least twenty years on cows of undoubted Short-Horn blood, and that have not been artificially forced. It is not difficult to purchase hundreds of such at reasonable prices.

AYRSHIRES AS MILKERS.

Howard S. Collins, of Collinsville, Conn., furnishes the *Practical Farmer* an interesting account as to how he came to select the Ayrshires as milkers. In 1856 he commenced farming on a poor, neglected hill-side farm of 150 acres, that at the time supported only six head of stock. He began by keeping six head, soiling them in summer and steaming food for them in winter, and every year taking up some poor land to be thoroughly cleared, manured and seeded down again.

The editor of the *Duchess Farmer* states that he has visited this farm, and, though beautifully situated, has rarely seen a more promising field for testing the merits of high farming. There are few men who have studied agriculture more thoroughly than Mr. Collins, or who have carried to the task of renovating—we might almost say creating—a farm, greater skill, system, energy, perseverance and science, and he deserves his success. On this farm he now keeps fifty head of cattle and three horses. He has tried the natives, grade Devons and grade Ayrshires, and has finally decided that, for his purpose (selling milk the year round), properly selected, thoroughbred Ayrshires are the most profitable for him to keep.

Mr. Collins is a very careful and systematic man, keeping an exact account of the produce of every cow on the farm, and his statement is of great weight.

RED DEVONS.

The Red Devons possess all the requisite qualities by nature to fill the wants of mountain agriculturists. They have the blood, bone, sinew, endurance and disposition, with beef and milk qualities combined; will keep on a less quantity of food than any other breeds in hilly sections, and make a surer return to the owner, to the stock raiser or dairyman. The Devons are sure-footed, make obedient and powerful oxen, and as a general thing, are less liable to the effects of exposure and disease. The Devon also makes a better and safer cross with the native cattle, and produces a grade well adapted to mountain ranges.—*Vermont Farmer*.

IS PEA STRAW GOOD FODDER?

A correspondent says he has not found pea-straw as valuable for fodder as good oat and wheat straw. Very likely. And yet good pea-straw may be so cured and fed, as to be worth far more than any other straw, unless it is choice bean-straw. It is more nitrogenous than wheat, oat, barley, or rye-straw, and should be fed, to get out its full value, in connection with a small quantity of corn. Sheep that have a pound of corn each per day will fatten more rapidly on pea-straw than on wheat or oat straw. The better plan is to let them have all they will eat of both pea and wheat straw—say pea-straw morning and noon, and wheat or oat-straw at night. But we apprehend the trouble with our correspondent is not so much in the way of feeding, as in the method of cutting, curing, and preserving pea-straw. If the peas were allowed to grow till dead ripe, and after cutting were allowed to remain in heaps in the field day after day without turning, and were exposed to rains and dews until nearly all the soluble matter was decomposed or washed out of the straw, and half the leaves were

the West Pay?

of our Canadians East have from their homes to the west—Kansas, place but home. en afar off. The American journal, of one who knows me recently an went from New thirteen years ago, as been constantly s, Iowa, Nebraska course of conver- a very extensive ers west of the believe those who can sell out to-day money as the car- dy wants to sell ered last week for Kansas of 460 acres, doors, 200 acres of vation, with corn acres splendid tim- airie, with house, it, and a railroad e centre. I sold acres of beautiful are more convin- eries. What is the ey are of such in- ured land such as and Farmer would country at such arming in the West sed here at the ood display of the including the tall spoke well for the rith these was not that made that cre, than one-third Canada. The cir- Western farms so r may be summed ously low prices ax on everything xorbitant rates for produce; unhealthi-

EL FOR CORN.

In war, says a New t, it is possible that enlighten the minds ny argument. The Aug. 5, five cars, ime Western Mixed ushel of 56 pounds, reme price, because ray superior to the ng handled in New on was shipped from o, via Chicago and as transferred direct ore line cars, and the Erie Railway. The expenses, ator, \$37.90; leaving ceeds, the sum of Western shipper of trifle over 8 cents a wa.

the Boston Cultivator

takes which farmers a much land. It is a ments to prove, that manuring and culti- of corn on one acre ng to raise the same has plenty of manure o, then let him plant the average yield per t the country is not at cultivated farms. ould bestow the same ares that they now e gainers in the sav- for wood or pasture e as much to dispose y to give the same ore manure and labor r, it requires the same either case. It is ch this is done, and at tells; so that by acres, farmers would pense, and these two ange from profit to with farmers is that ent calculation for r, sickness, breakage, ould be far better to way, and then after y attended to, devote improvements, such as to be forever worried being behind.