

simply developed; and we sincerely hope they will. Besides the double cross of Duke of Gloster through his dam, the calf inherits no fewer than three repetitions of that cross through his sire 2nd Duke of Wharf Dale. Mr. Eastwood, it will be remembered, bought at the Townley sale, in addition to Royal Butterfly's Pageant, Bampton Butterfly by Royal Butterfly for 350 guineas; Double Butterfly by the same bull for 300 guineas; and Duke of the Butterflies thirty-three days old, by Duke of Wharfdale (19.6.18) for 160 guineas. Three of his purchases were of the Bampton Rose tribe. Double Butterfly belongs to the Killarby family of Madaline by Marcus; but the finishing crosses, the splendid brothers Master Butterfly and Royal Butterfly, Bampton Rose bulls, impart Mr. Eastwood's favourite blood with peculiar emphasis."

We add another extract from the *Messenger* in reference to M. Thury's plan for producing the sexes at will:

"Mr. Bruere says that he tried the Thury plan, wanting females, and, except in one instance, males came. There was, however, another case in which twins of opposite sexes were produced. We fancy that people will return to the old way of thinking, and, putting Professor Thury on one side, conclude that some animals are prone to bring forth or engender males, and others females; or that an eminent living physiologist may conjecture rightly when he suggests that the several ova are already of one or the other sex, and that the fetus comes necessarily according to the sex of the ovum producing it. It is conceivable that means might be adopted by which sex should be, not determined, but ensured: some means of eliciting the female or the male ovum, and drawing it, in preference to one of the opposite sex, forth from its tomb of dormant life; but the secret does not seem to have been discovered by M. Thury."

Flax Seed and Flax Bolls as Food for Stock.

We some time ago stated that the *Irish Farmers' Gazette* strongly advised its readers to use the above articles for feeding purposes. Our able contemporary continues to give line upon line and precept upon precept, in reference to this matter. We quote part of a recent article which well deserves perusal:

We have sometimes had occasion to advise a man to give a "bit of cake" to some unthriving beast, but our advice has been answered with a shrug of the shoulders, and an "oh! oil cake is all very well for big men, but poor farmers cannot afford such things;" while that very man had but a short time previously left forty or fifty pounds worth of flax seed in the steep hold where he had watered his flax crop. Now, a man who really understands the value of flax seed or flax bolls would as soon think of selling the coat off his back as dispose of those articles, if he has cattle and sheep to eat them, unless he has a decided overplus after satisfying his own requirements. Even the chaff of the bolls is of value, as may be easily ascertained by putting it in a box fitted with a close lid, and pouring boiling water over the chaff, allowing it to remain covered up for ten or twelve hours. Put a little salt among it, and if given even in this state to cows, it will be found to have the effect of increasing their yield of milk. This fact—the value of the chaff of flax bolls—was pointed out many years ago by our old friend, Mr. Nixon, of Chrome Hill, near Lisburn and our own experience has corroborated his opinion. Do not, therefore, allow even the chaff off flax bolls to be thrown away, for depend upon it, if this is done, much really good feeding material is thrown away. Of course, if it is mixed with boiled turnips and other materials such as are frequently given to milch cows, so much the better; but even the chaff itself ought not to be despised as a thing without value. Flax bolls when put through the mill, should not be divested of the chaff, and mill seeds or oat husks should be run through along with it, as such prevent the stones from being clogged, and by absorbing the oil, become valuable as feeding materials.

A mixture of crushed linseed ground corn and cut straw was prepared by Mr. Marshall Yorkshire, in the following manner:

"The crushed linseed is boiled in water—1lb. of linseed to 1½ gallon of water—for two or three hours. The ground corn and chopped straw are mixed to gether first, and the boiled linseed is poured over them and mixed with them, on a floor with a shovel; the heap allowed to stand one or two hours, and given while yet warm; for if allowed to stand a few hours the mass ferments and quickly turns sour. Hence the necessity for the strictest cleanliness in all the vessels and implements made use of."

The quantity given daily to fattening heifers, weighing 6 cwt., was 2 lbs. of crushed linseed, 5 lbs. of ground corn, 10 lbs. of chopped straw, and about 40 or 50 lbs. yellow bullock turnips, with a little long straw in the racks at night. The cattle were fed four times daily, alternately with the food prepared as above and the raw turnips.

Mr. Warnes, who experimented largely with baseed as cattle food, directs that the linseed "be first reduced to a fine meal, one pound and a half of which, stirred with 12 lbs. of water while it is boiling, with 4½ pounds of barley, bean, or pea-meal, and given to a bullock of between 40 and 50 stone, every day, will, in addition to Swedish turnips, be quite sufficient, or, perhaps, more than he would be inclined to eat. Linseed meal may also be boiled and mixed with boiled turnips, mangels, &c., and given with advantage to fattening bullocks, and it may be also mixed with pulped turnips, in the proportion of one or two pounds per head, according to the size of the beasts, and the purpose for which they are intended. In fact, a man with plenty of flax bolls in his possession can do almost anything with stock, and we would advise all who have a supply of that article, and beasts so eat it, to think twice ere they send it in its natural state to market. Let them send it on four legs, and get all the benefit possible out of it for their own advantage, in which we may include a very decided improvement in the quality of their farm-yard dung; abundance and good quality of which is still the mainstay of farming, notwithstanding all that is said, or can be said, in favour of "artificial."

Swine as Stock.

Few domesticated animals are more universally found than swine; and so it is of their flesh when the animal is fattened; it is used in some way in almost all families, if not in all, when but half fattened it is often slaughtered, and found better than that of any other farm animal's flesh in a similar condition. It is a maxim that animals should be well fed from their birth upwards, and of none is this more emphatically true than of swine. The "swill-pail breed," as it is called, goes to confirm this maxim. But it is not true, as affirmed by some, that any breed is a good breed, provided it be well fed, for there is a difference, and, therefore a choice in breeds of hogs, as of other animals of the farm.

Swine multiply rapidly; two litters in a year, of eight or ten pigs each, may be ordinarily raised from a sow, and even more, but two are enough. Sixteen pigs annually from a sow, kept as a breeder, are said to be better than twenty four. Where the number is large the pigs are generally puny things, for they are not sufficiently fed from the sow to grow well. There may be exceptions to this rule, but generally it will be found true. During the suckling season the sow demands feed that is suitable to making milk; whey, milk, and even water when these are not to be had, —thickened with meal, may be used for this purpose. On weaning the pigs, dry, heating feed should be used for the sow. The pigs, when weaned, should be fed with cream, milk, or whey, with a little meal stirred in. They will soon, however, be able to "rough it," as the phrase goes, with store hogs, of which they become a part.

It is generally acknowledged that swine produce the most flesh meat for the feed consumed, with the least quantity of bone, of all the farm animals, and also that they feed on more that would otherwise be entirely worthless, than other farm stock. It has been said that any family may keep one hog or more, with but little feed in addition to the waste or garbage of the household, and this is one reason why the hog is so generally found. There is hardly any green thing that swine will not feed upon, thrive and grow in the store condition, raw feed is generally given; cooked feed in the fattening season is said to make flesh faster than uncooked, though it is claimed by some that the meat is not so good. The Western pork is mostly made of hogs fed on uncooked feed, and the flesh, as maintained by some, is firmer, and the pork sweeter to the relish than that fed on cooked feed. This is a subject worthy of consideration by farmers.

While cattle and sheep are only kept to any extent on cultivated farms, the hog, on the contrary, is domesticated near almost every dwelling for reasons already stated. There is no meat that so small a piece will prepare so large an amount of vegetables for family use, as pork; hence, another reason for the universality of swine. On dairy farms, hogs are generally kept as consumers of whey and sour milk. These liquids, with a little meal, produce a large amount of meat for families and for the market, and this too from much that would otherwise be thrown away as waste. This serves to enhance the value of

swine as farm stock. A poor man that has a small garden, and keeps a cow, can keep a pig or two, and thus produce meat for his family from what would otherwise be thrown away, almost sufficient for their subsistence, so far as animal food is concerned. A part is used fresh, with the offals, part is salted, a part is cured as bacon, and part is made into sausages, and besides, the lard is used as an important article in cooking a great variety of things for the table. For the labouring population, who learn to live economically from necessity, no other stock animal is so important as the hog. It is emphatically a home production, converting what would otherwise be lost into what saves money for other family uses. It would be difficult to see how the poor could live as well as they now do, but for the pig. There are those who denounce this animal and the use of its flesh for dietetic purposes; yet most of them consume swine's flesh or lard in some form. It will be a long time before dietetic reformers, so called, will succeed in expelling swine from among farm animals, or their flesh from the table. In its nutritious qualities pork is ranked with beef as 24 to 26; to mutton as 24 to 29; and to chicken as 24 to 28. Sucking pigs at the age of three or four weeks, are deemed luscious food by some, but it is rather indigestible; therefore, not well adapted to the stomach. Of breeds there are many; they are quite various, concerning which breeders and feeders differ widely in choice. Between the Suffolk and the Yorkshire, or Chester County, the difference is wide—some preferring the one and some the other, while others still prefer grades derived from crossing the larger breeds with the smaller to either. It is easy for all to be suited in this respect in these days of improvement. Those who prefer Chesters or Yorkshires to Suffolks or Berkshires can be suited, as those can who prefer grades, as some do, obtained by crosses of these different breeds.—*Mass. Plowman.*

A HOG was recently sold in Atchison, Kansas, which weighed 1,122 pounds net. It brought ten cents per pound, making \$112.20.

AN honest farmer thus writes to the chairman of an English agricultural society:—"Gentleman, please put me down on your list of cattle for a bull."

A noted racer, "Blair Athole," has lately been sold in England for 7,500 guineas, or about \$37,000—which is by far the largest sum," says *Bell's Life*, given in modern times for a race-horse."

A JUDGE OF PORK.—"No man was better calculated to prejudice pork than my husband was," says Mrs. Partington; "he knew what good hogs were, he did, for he had been brought up with 'em from his childhood."

MONSTER HOG.—Mr. Thomas F. Tibbits, of Little River Mills, Victoria County, N. B., killed a hog recently, aged two years, which weighed seventeen hundred and eleven pounds. We have seen nothing recorded to equal this.

A HEAVILY STOCKED FARM.—At a late meeting of the East Lothian Agricultural Club it was stated that one of its members then present, Mr. Hope, of Fenton Barns, England, was keeping, in 1863 upon a farm of 653 imperial acres, only 98 of which were in turnips, 1,200 sheep, 90 cattle and one hundred pigs.

LARGE HOGS.—Within the past few days our farmers have been bringing into the market great quantities of well-fatted pork, for which high prices have been readily paid. Mr. John Jenner, of the Township of Raleigh brought in one hog which alone weighed 664 lbs., and brought in cash \$44. Mr. Robert Lowe, of the Kent Mills, being the purchaser. The hog was bred by Mr. Pardo, of Raleigh, and fed by Mr. Jenner. More recently Mr. Peter Grey, of Harwich, brought a hog to market which weighed 637 lbs., for which he offered \$41.61. Kent for ever.—*Chatham Planet.*

PRICE OF FAT STOCK IN ENGLAND.—Sir A. de Rothschild's annual sale was held on the 7th ult. at Aston-Clinton, Bucks, and was attended by Messrs. Slater, Cowell, Shopland, and other metropolitan butchers, also a large number of butchers from surrounding towns and districts. The Highland Scots, 3-year olds and 4 year olds, averaging £29 each, Short Horn oxen and steers, 2½ year olds to 4-year olds, ditto heifers and cows, 3-year olds and upwards, £37 13s. 6d. a piece. The sheep and pigs excited much competition. Two-shear Oxford Downs averaged 71s.; ditto Sussex Downs, 57s. Berkshire and cross-breed pigs realized 10s. to 11s. per score of 20 lbs. Some choice specimens of cross-breed pigs (small white and Berkshire) made 12s. per score. Total proceeds of sale, over £2,500.