

SHEEP AND SWINE.

THE MERINO.

All the families of this breed, French, German, and American, spring from one common stock, that of Spain, which has a known history running back 2,000 years. The luxurious nobles of Rome required fine woolen robes and Spain possessed the only breed of fine wool sheep in the world, breeding them with great care and skill. Their origin is not known, but probably resulted as much from special conditions of soil and climate, as from skilful breeding, but, when first noticed, they were found scattered, in distinct families, in separate provinces, again divided into sub-varieties. But the different races of merinos now differ much in character and habits, and Spain has almost lost her proud position, having only two families of importance, the Escorial, and Infantado or Negretti. It is from the latter that any importations into America are made.

The merino requires a wide range of dry upland, and cannot stand moist climate or wet soil, it likes dry warm air, and does not need rich pasture.

Fench merinos were imported to the United States in 1842, and spread rapidly, but did not succeed, requiring more care than was given, and not being suited to the rough and ready system in general use. The Saxou met the same fate, owing to the good shelter and great care required, and, though their wool is the finest and most beautiful of all, yet the high price does not make up for the low weight of fleece, and at present, except in special cases, the breed is not profitable.

The American merino is the best of the breed in the world, and is frequently sent to other countries to improve their stock, (notably Australia,) bringing very high prices. Their history begins with this century, when the first importation of three was made by Wm. Foster, of Boston, who presented them to a friend, and the latter promptly made them into mutton. Other imports followed quickly however, and in 1808 rams sold for \$150 each, their washed fleeces weighing eight and a half pounds.

In 1809-10 the greatest imports were made, two flocks a total of 6,350 head, from the finest flocks of Spain, and were distributed in the States chiefly in New England. Then a sheep fever started, and was further heated by the war of 1812, when merino wool sold for \$2.50 a pound, rams for \$1,000 to \$1,500, and ewes \$1,000 a head; but peace declared in 1815, knocked the prices down to \$1 a head and the industry subsided. But it revived under protective tariffs, and especially since 1849, and some flocks had been kept pure, and bred with great care (all along) in the New England States, who reaped the reward they were entitled to.

A great improvement has been made in the breed by careful selection and mating; the carcass size, and weight and fleece have been increased, until now an average of nine to twelve pounds per fleece (washed) is common, and single cases of nineteen to twenty-four pound fleeces, (unwashed) are not rare.

The body of an American merino is plump, medium size, round, deep, not too long, head and neck short and thick, back straight and broad, breast and buttock full, legs short, well apart, and strong, heavy forearm and twist.

The skin is of a rich rose colour, thin, mellow, loose and elastic, with folds or wrinkles more or less, on neck, back of elbow, and on rump, but they are just fancy points chiefly. The wool is dense, smooth, wrinkled and even on the surface, and not open, and two to three inches in length of staple. The ears are small and covered with

soft hair, and the face partly covered with wool, but not too long.

The wool is soft and pliable, and the fleece very yolky, or greasy, in some cases losing three quarters the full weight in washing. Very successful and profitable crosses of the merino have been made with the Cotswolds, Leicesters and Southdowns.

THE PIG.

We need hardly describe the small Cumberland, York-Cumberland, Tamworth, Devons, Dorsets, Hampshire, Lincolnshire, Norfolk, Woburn, Herefordshire, Cheshire, Shropshire, Welsh, Middlesex, Nottinghamshire, Windsors, Coleshill, Bushey, Buckinghamshire, or Prince Albert Suffolks. Some of them are passing out of favor or merging into other breeds, others are of almost local value or renown, and the balance are so mixed up that it is nearly, or quite impossible to define their pedigree and points. Some (so called) breeds are often exhibited under different names and classes, and it is not probable that any of them will ever become widely known and grown, especially in America. Some of them are fancy breeds (hobbies of certain men) and are refined to such a fine point that it pierces the balloon of profit which sinks, as does the pig's constitution. Many in America speak of having "Suffolks," and they always mean white pigs, whereas there does not seem to be any such breed in England now.

In Suffolk the large breeders have both black and white, but the most noted pigs are black, and the term Suffolk now likely means Yorkshire Cumberland, but it is doubtful if there are many of these last named in America. The old Suffolks were white; rather long legs and heads, flat sides much coarse hair, and made good bacon hogs. So called "Improved Suffolk," (white) have short heads, long, round bodies on short legs, and fine hair, as long and thin as possible.

Let us now pass on to the breeds of pigs in America, that is varieties originating there but hardly yet possessing the properties to entitle them to be called "breeds." The first is the "Chester white" of which one firm of breeders yearly ships about 3,000 pigs. They are coarse, large and hardy, strong constitution, suited to common farming, and the sows make a splendid cross with some small refined pure bred boars, Berkshire, or Essex or Small York.

The sows are good mothers and breeders, and the young pigs are quick growers, have strong digestive powers, and are vigorous. Their bodies are long and deep, colour white, back broad and straight, legs short, hams and shoulders full, very small head, (in proportion to body,) short nose, dish face, and broad between eyes, medium size ear, thin skin, straight hair, and almost no neck. They reach great weights, from 600 to 900 pounds, are quiet, and take on fat easily.

The second is the Magic (or Poland-China) pig, very largely kept in the Western States. This is said to have sprung from an improved breed, introduced into Ohio in 1820, large, long, coarse, and poor fatteners, which were much improved later on by the Big China then coming into use. After this they were crossed by "Irish graziers" and "Berks," and to-day are known as long bodied rather slow-growing pigs, but reaching great weights; black and white in color, ears hanging forward, heavy bacon sides, heavy hams and shoulders, wide backs, great feeders, and rather coarse.

The third is the Cheshire or Jefferson county pig. The Cheshire breed in England are almost unknown now, but were a very large and coarse breed, long legs and ears, mixed black and white in color. It is said that one of these old sows in-

troduced about forty years ago to the United States, (Jefferson county, New York,) was crossed by a Yorkshire boar, and from them sprung the present family. They are white, very handsome; are large with fine bones, ears fine, and small, snout short, cheeks full, bodies long and square, shoulders and hams good. But it must be understood that the offspring of any of these three "breeds" do not always come true to form, colour or habits, simply because the types are not yet fixed, though many breeders of them claim otherwise, but almost any day in their own country homes good evidence to the contrary can be seen. Probably the best use for them is for crossing the sows with refined, pure bred boars.

IMPROVING WITH SOUTHDOWNS.

Many farmers who desire to improve their sheep cross them with Southdowns, and are often surprised that the offspring do not shear fleeces of much greater weight than those of the common flocks. It may as well be stated at once, in order to dispel any anticipations in that respect, that while the Southdown will greatly improve the size and quality of sheep, they are of but little value when wool is the object. The Southdown is not bred for wool. Their fleeces are not intended for combing purposes, as are those of the Cotswold, nor can they compare with the Merinos for texture. Even when bred in their purity they give poor results as wool producers, and as no sheep can excel in all attributes neither can the Southdown produce the best quality of wool and mutton combined. But with so much said of a detrimental character it may be stated in favour of the Southdown that it makes a better cross with common flocks than the Cotswold, and it is superior to the Merino in carcass and hardiness. Southdown lambs are more saleable than any others, and while crosses between common flocks and the larger breeds may not be always compatible, a dash of Southdown makes the union easier. For ability to subsist on scanty herbage, activity, freedom from disease, and quality of carcass, the Southdown still holds its place at the head of our mutton breeds.

WEANING PIGS.

The litter that has been brought up to weaning time on the generous diet before recommended will be in condition to assimilate enough food, without the mother's milk, to prevent the universal check in growth that comes to the calf and colt and average pig after weaning.

If the sow is to raise two litters a year, the litter may profitably suck eight weeks; but if she is to have but one litter a year, then she can be at no better business than furnishing milk and comfort to her young a month longer. She should be generously fed, that her strength and milk supply be kept up, as far as possible.

Many good sucklers become thin and weak after a strong litter has drained them for two months. We have often found that if a quart of milk be added to the slop of the brood sow she would eat with greater relish; and the addition of the milk not only makes a more palatable ration, but a more digestible diet. Here is one of the secrets in economical use of milk. It so completes a ration of corn, oats, and mill feed as to make a larger per cent. of the feed digest. Hence the feeding value of milk is greater than its analysis would indicate. As a general rule it pays better to feed the milk to the pigs than to the sow, but in the case of flagging appetite or strength of the sow a share of it can be put to no better use than to keep her up in digestion and appetite. At such times condiments and tonics and condition powders are usually recommended, but they are