

their contemporaries commenced necessarily with unpedigreed cows that all cows are equally qualified to be used as breeders. Most difficulties experienced in breeding would be obviated if people sought rather to breed good animals of good blood than to achieve the reputation of possessing a certain strain. As it generally is, however, four or five crosses of a particular sort, without the slightest security as to the character of the original female stock, are considered much more likely to establish a man's renown than a felicitous combination of materials derived from a variety of independent sources, sound, pure, and old, but unallied to any one distinctive tribe. Successful cattle breeding is one of the finest of all arts, and the man who has no inherent taste for it will never attain eminence in it.

ALBION.

An Old Shepherd's "Don'ts"

1. Don't use a "scrub" ram.
2. Don't forget to trim the ram's feet once in six or eight weeks, and the ewe's feet at least three times a year. The wool on the ewe's rump requires trimming also.
3. Don't overwork any ram, especially a ram lamb. Confine the size of the flock in accordance with the age and vigor of the ram. A mature ram should be restricted to 50 ewes; a ram lamb, 30.
4. Don't allow the ram to remain with the pregnant ewes during the winter.
5. Don't overfeed or underfeed at any time. In order to gain the highest profits, thrift must be maintained in the flock.
6. Don't feed, except very sparingly, mangels or sugar-beets to rams. Calculi or stones may be formed in the urinary organs which may become, at times, large enough to block completely the urethral canal and cause the bladder to burst with consequent death.
7. Don't forget to cull the ewe flock before the mating season. A few good ewes well-mated are more satisfactory and profitable than a large number of indifferent ones. "Every ewe has her day."
8. Don't forget to sow your rape patch for flushing the ewes. The ewes require and deserve a vacation after raising lambs. It pays for itself in the next lamb crop.
9. Don't think you can remember each ewe's record. Have ear-marks and be certain.
10. Don't expect to fix a type by constantly changing the ram. Decide on the type which is best suited to your purpose and sustain it through thick and thin.
11. Don't forget to dip all sheep at least once a year. Newly purchased animals may be the carriers of disease. Dissemination can be prevented by quarantine and dipping.

The Shropshire Breed of Sheep

The Shropshire breed of sheep is widely distributed and is popular over a wide range of country, being admirably suited to a variety of conditions and climate. Its native home was in the County of Shropshire, England, a County which furnishes excellent pasture for its live stock, and where the climate is moderate. It is believed that Southdown, Leicester and Cotswold blood was used in the construction of this medium-wooled breed. The Leicester and Cotswold blood gave size, while quality was secured from the Southdown cross. This blood was, no doubt, used on a hardy native sheep common in that district. This native breed was black-faced and had horns, but the mature sheep did not dress out a heavy carcass. It was not until 1853 that Shropshires were exhibited at the Royal Show in England, thus it will be seen that this breed is of comparatively recent origin. However, from the date above mentioned, the breed increased in popularity very fast, and in 1884 history tells us that in the neighborhood of 875 head of Shropshires were exhibited at the Shrewsbury Royal. This was more than twice the number of all other breeds represented at the show. "Types and Breeds of Farm Animals," by Plumb, gives 1860 as the date of the first importation of this breed to America, and in 1864 it was exhibited at the New York State Fair. This breed is of the medium wool class, and is low-set, thick and compact. It is somewhat larger than the Southdown breed. Dark brown is the characteristic color of the face, ears and legs. Breeders like to have the head well covered with wool; in fact, so well covered that only a small part of the nose is shown. Small, short and moderately broad ears, covered with fine wool, are looked for. Typical representatives of the breed have strong, broad backs, deep bodies, and carry a good leg of mutton. The entire body should be covered with wool, and a pinkish skin is desired.

Mature rams will weigh around 225 pounds, and ewes from 150 to 175 pounds, although there are some which exceed this weight. The breed ranks high as a mutton sheep, and in feeding tests makes economical gains, very often winning out in competition with other breeds. Shropshires are frequently crossed with grade ewes of different breeds, and furnish lambs which fatten easily and kill out profitably.

Shropshire ewes have long been noted for the number of lambs which they produce and raise. The breed is more adapted to districts where pasture is good than to districts where the feed allowance is somewhat scanty. Under proper conditions the lambs mature early. This early-maturing and easy-fattening quality of the breed has helped increase its popularity.

Shropshire wool grades high, and the average fleece will weigh probably eight pounds, although some authorities place it considerably higher. The staple of Shropshire wool is rather compact and is longer than that of the Southdown. The close, compact nature of

the fleece is a great protection to the animal from inclement weather. As a general purpose sheep, considering mutton and wool, and the average fecundity the breed ranks high. In practically every country where sheep are kept the Shropshire is to be found. Particularly fine flocks exist in Canada, and representatives of these flocks, which are brought out at the leading Canadian exhibitions, show the breed type and conformation desired by present-day breeders. Organizations have been formed for the promotion of the breed, and of late years remarkably high prices have been paid for breeding stock, not only in England, the home of the breed, but on this side of the water as well.

The following points given in "Shepherd's Hand Book," issued by the Canadian Sheep Breeders' Association, clearly indicate the points of excellency of the present-day Shropshire: General Appearance—Attractive, indicating breeding and quality, with stylish carriage and a symmetrical form, covered with dense fleece. Constitution—Robust as indicated by width and depth of chest, strength and formation of neck, and by bold, active movement; Size—In breeding condition, when fully matured, rams should weigh not less than



In the Home of the Hereford.

180 to 225 pounds, and ewes should weigh not less than 125 to 170 pounds; Fleece and Skin—Fleece of good length, dense, elastic to touch, medium fine, free from black fibre, slightly crimped, with evenness of texture throughout; scrotum of rams well covered with wool; skin light cherry color, clear and free from dark spots; Body—Well proportioned, with shoulders well placed, fitting smoothly upon chest, which should be deep and wide, broad and straight back, thick loins, well covered with firm flesh; hind quarters well finished; twist deep and full; Head and Neck—Head short, broad between the ears and eyes, bold and masculine in rams, without horns, well covered with wool, ears short and erect, eyes bright, color of face and ears dark brown. Neck of medium length, strong and masculine (especially in rams), symmetrically joined to head and shoulders; Legs—Well set apart, broad, short, straight, color dark brown and upright.

Hog Raising at the Central Experimental Farm

At the Central Experimental Farm, Ottawa, is maintained a large herd of swine, and from this herd upwards of five hundred young sows and boars are shipped yearly to serve as foundation stock or herd headers on Canadian farms. Special attention has been given to the breeding of Yorkshires and Berkshires, and, by careful selection of breeding stock and handling them in the most approved manner, herds of excellent breed type and showing marked uniformity of conformation and quality have been built up. In the breeding herd are in the neighborhood of forty-two Yorkshire sows and eighteen Berkshires. The gilts are allowed to acquire size before being bred, and then only one litter

is farrowed the first year but two litters are raised from the mature sows.

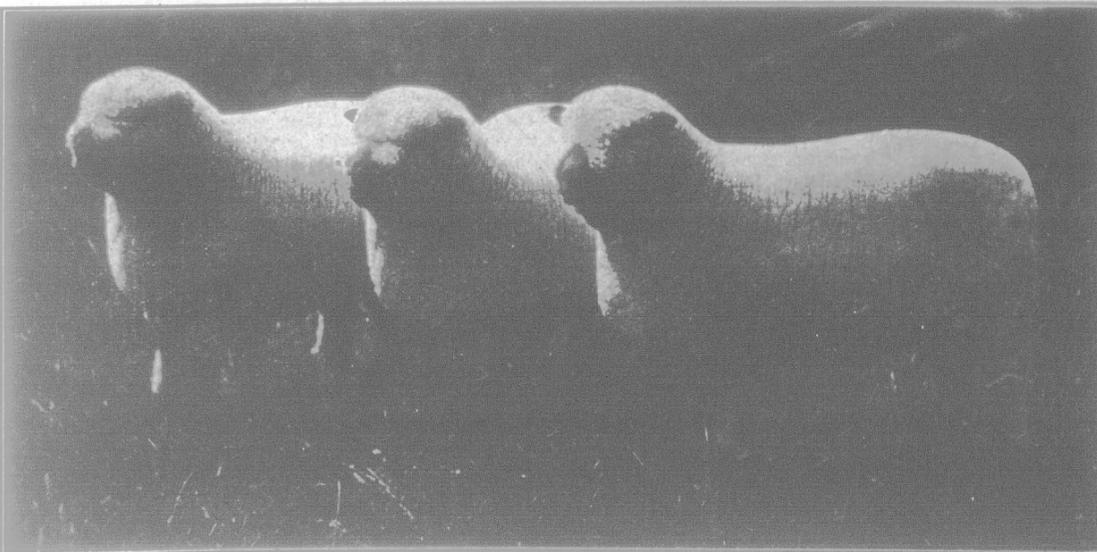
The brood sows live in six-by-eight and eight-by-ten cabins the year round. During the summer these cabins are placed in rape and clover pasture lots, but for winter they are drawn to the main buildings for convenience in feeding. The sows are fed as economically as possible, but the aim is to have them gaining in flesh during the gestation period and in fair flesh, but not excessively fat, at farrowing time. During the summer pasture is largely resorted to and forms the basis of the ration. Professor Archibald claims that one acre of rape this year saved between \$75 and \$80 in grain in the maintenance of brood sows. Red clover has also proved valuable in maintaining the sows. Brood sows are fed heavily on mangels and clover hay during the winter. Professor Archibald informs us that the hay is fed in racks, and tons of it are eaten. Grain is fed according to the condition of the sows, and the quantity is increased as farrowing time approaches. This system of feeding develops bone in the young pigs. On the average farm comparatively little clover hay is fed the sows, but we believe that considerable of this

fodder might advisedly be included in the ration of the stock. The concentrate part of the ration is made up of shorts, bran screenings etc. Shorts in particular is as a rule cheaper than cereals, considered on the basis of digestible nutrients.

After farrowing, the sows are fed on milk-producing ration with shorts as a basis. Screenings, some corn, bran, and oil cake are also fed. The feed is soaked from twenty-four to thirty-six hours, as experiments at the farm have proven that soaking increases the digestibility of the concentrates. A large frame building, well lighted and ventilated, is used for a farrowing pen. It is divided into pens 10 by 12 feet. In some pens the floor is of wood, and in others of cement. An iron guard rail is placed on three sides of the pen to protect the young pigs. It is ten inches off the floor and ten inches out from the wall. This prevents the sow from lying close to the partition, and no doubt saves the lives of many of the little pigs.

Very little straw is used in the pen for the first few days. Cut straw or chaff is preferred, as there is less danger of the pigs becoming entangled and being unable to get out of the road when the sow lies down. With the large number of sows the average number of pigs raised per sow is from eight to nine for the two breeds. This is a particularly good average considering that there are around sixty sows in the breeding herd.

On the farm is a large open piggery where the sows and their young are placed when the pigs are a few weeks old. Adjoining this are several paddocks, and the young pigs have plenty of opportunity to secure exercise by working in the soil. Whole grain is sometimes scattered on the floor and covered with straw, and the pigs are kept busy rooting for it. Self-feeders are also in use for the pigs nearing the weaning age. Shorts, screenings, sifted oats, and tankage are placed



A Trio of Shropshires.