Sheep and Shepherds. BY J. M'CAIG.

There are two principal causes or sets of circumstances that make differences in sheep. first set of circumstances embrace conditions of soil, climate and elevation which, acting in combination, evolve and preserve classes of sheep differentiated from those of places with a different set of physical conditions. Great Britain has been peculiarly fruitful in the production of many differentiated and contrasted breeds. Classified on the basis of differences due to physical causes, British sheep are frequently designated as the plains, upland, and mountain breeds. This classification is almost equivalent to a classification on the basis of weight, for, generally speaking, there is a gradual decline in weight from the plains sheep that feeds on fat pastures to the mountain sheep that travels far over rough ground for a It is important to appreciate the differences that arise from physical circumstances Heavy breeds of sheep are not naturally the best for a hilly, scant farm, and the man who introduces such a breed into such an environment will find his stock deteriorate. They will cease to be good types of the breed chosen.

The second set of circumstances operating to make differences in sheep are care and management. A wild animal carries a rather fixed and constant set of qualities and properties. It does not vary much from generation to generation, and having seen one specimen of a particular class of wild animal, you can readily recognize the species any time afterwards. If there are differences among the same species, these are due to physical causes alone. The task of transforming and improving a wild animal is slow and difficult at the beginning, but every change makes further change easier than the last one. The sheep is already a highly-improved animal. Compared with cattle, the only other meat animal of similar habits and physical organization, the elimination of offal has been greater in the case of the sheep than in the case of the cow. Sheep being, then, the embodiment and fruit of considerable art, their susceptibility and impressibility are very great. They have, so to speak, an acquired habit of easy This is a blessing to the skillful shepherd and a bane to the shiftless one. There will always be plenty of work and good pay for the former class of men in repairing the injuries and losses worked on our sheep stock by the latter class of shepherds.

To a great many men a sheep is but a sheep, and it is nothing more. There is little or no discrimination except in the broadest and most obvious features, such as those of color, size, and contrasted properties of fleece. But the differences due to differences in care and management are very striking even in the same breed. The matters that are under the control of the breeder are the choosing of sires, the culling and selection of ewes, and the character and quantity of both summer and winter feeding. It is by reason of the care in some cases and absence of care in others that we have such diversities in the character of the sheep flocks of the country. One man may be a first-class feeder, and know little about breeds Such a shepherd will have a flock of strong sheep of mixed character and countenance: some of apvool type Leicester of proximately correct Cotswold, some bald and some with nice frontal lock. Others will be mixed Cotswold and Leicester, with something of Leicester face, but with a bunch of foretop added to it. Others will be mottled in countenance, the product of a Southdown, Shrop, or Oxford ram on the long-wool ewes. And others, again, may show a couple of crosses of the dark-faces and be pretty nearly uniformly brown in face and be smaller and more densely coated than others of the flock.

Another shepherd may be strong on the breeding side and be a poor feeder (though this is not as common as being a good feeder and poor breeder). He may fancy the Cotswold, and have a well-fleeced lot of ewes of good blood and markings, but that are not kept up to the right weight. The wool parting on the back will be rather too evident by reason of the back not being covered with flesh. Want of generous feeding shows faster on the heavier breeds than it does on the middle-weight sheep. Many a man has become enamored of blood in both cattle and sheep, and has backed his faith by paying fancy prices for improved stock, but grows nothing but scrags and runts. It is always safer for a man to begin small and with stock of moderate cost, unless he excels in the matter of care and manage ment. If a man has to learn both feeding a breeding at the same time, high-class stock is almost sure to deteriorate with him.

Besides the man who knows breeds, but not management, and the one who knows management and not breeds or breeding, there is a third class who do not know either one or the other. This class of men is the class that hopes to get bread by some other way than the sweat of their brow and who are looking to get something out of their sheep without putting anything in. Their sheep are usually a bunch of run-out, mixed, grade long-wools, with long legs, light bodies, and

kempy, neglected coats. They are usually allowed to run on the road. The ram with them is oftener cross-bred than pure-bred, the lambs are neither docked nor castrated. How easy it is, after seeing sheep in all classes of environment and circumstances, such as the rape field, the ranges, the roadside, and the exhibitions, to exactly know the kind of man the shepherd is for care and management throughout the year. On the basis of a survey of a flock, shepherds might be divided into four classes

1. The class that illustrate almost total neglect with respect to both breeding and feeding.

2. The kind that feed well, but have little knowledge of breeds, and so have not evolved an ideal or favorite sheep for themselves. Such men usually despise books and agricultural papers, and fail to recognize that facts are facts, whether they are recorded in books or gained from experience.

3. The kind that know something of breeds and breeding, and that talk a good deal, and leave the Professional care of the flock to someone else. shepherds are almost unknown in this country apart from owners, and it very rarely happens that anyone can give the fullest satisfaction to the fastidious sheep-owner. The opportunities are larger for the workingman here, compared with what they are in the Old Land. On account of the larger available areas of free lands, it is easy for any man to become a proprietor on his own account.

4. The last class of shepherds is the lot who are at the top of their business in both breeding and feeding; who know their favorite breed in every detail, and who know other breeds pretty well besides, and recognize in them excellencies on a par with the excellencies in their own, but suited to different circumstances, uses and environment. They are always open for information from books, papers, their neighbors

Shorthorns in the Model Dairy Test.

From the result of the very extensive test made in the Model Dairy at the Pan-American Exhibition, considerable satisfaction may be claimed for the breeders of Shorthorns, whose aim it is to produce that which is in so very great demand amongst those engaged in general farming and dairying-a cow that will produce stock of first-class quality for the export beef trade, and while in milk be very profitable as a dairy cow.

There is very great encouragement, also, to those dairy farmers who in increasing numbers are striving by the use of Shorthorn bulls from the best dairy strains available to retain the milking qualities of their herds while very largely increasing the value for beef of the stock they raise, the advisability of this course being more and more apparent as the already large demand for stockers of good class is increasing. It has been found that the increase in value of the young cattle sired by a Shorthorn bull, when sold, as in most cases they must be, on the dairy farm, because of lack of room on the farm, at about one year old, makes a handsome profit in addition to the milk products.

These farmers, then have good reason to think they are on the right lines when they consider the showing the Shorthorn cows have made in the most extensive test made in America. Taking the showing of the Shorthorns, the only cows for which-in Canada-is made the claim of dual purpose, as compared with the average of the four dairy breeds we have largely in use in our country, we find the average per cow in the production of total solids, which we presume is most desirable in our great cheese industry, the



A GLIMPSE OF THE C. P. R. STOCK YARDS, WINNIPEG.

and are cellencies, defects and peculiarities of their own breed and flock. It is to this last class that the higher task of selection and improvement of the general sheep stock of the country specially be longs. They are afraid to sell a bad sheep, and prize the patronage of old customers.

To which class do you belong?

The busiest season for the "Farmer's Advocate" staff is approaching, and you will confer a favor by prompt renewal.

A Good Udder.

It is generally conceded that the best type of udder met with among British breeds of cattle is that possessed by Ayrshire cows. Even the udder of the Ayrshire is not perfection, however, because too often it suffers from one of the worst shortcomings that a milch cow can possess, namely, small teats. The ideal udder is long, broad and deep: it is carried well up under the body, and its point of attachment with the quarters-or rather the space behind the quarters known as the escutcheon-is very high up. The ideal udder is rectangular in shape, and has a wide area of attachment to the body, so that under no circumstances, even when practically empty, does it dangle about between the legs, as sometimes seen in the case of badly-formed udders. The size and position of the teats constitute one of the most important points in the formation of a good udder. These should be placed at almost equal distances apart, and they should be of good size. Very small teats, or teats so closely packed together that when the ndder is fairly empty the points almost touch one another, are very objectionable, and should always be avoided - (Exchange.

twake to the ex- Shorthorns were only 57 cents less per head total production for the whole period of menths, which if the gain in live weight, at three cents per pound, be added to each, then the Shorthorns lead with \$13.79 to their credit. the cost of food be reckoned, the profit would be in favor of the other herds by 65 cents per cow for the same period.

If a difference of one half cent per pound for the increase in live weight be allowed the Shorthorn for superior quality of beef, which is reasonable, the result would again be in favor of the Shorthorns by 81 cents.

Without doubt, in America, for the production of butter-fat the dairy breeds have very large individual records, in excess of those made by the Shorthorns, yet it is with averages the farmer or dairyman has to deal, and it is encouraging that the Shorthorn has made so good a showing.

It was with difficulty cows in reasonable shape for going into a test could be picked up just at the last moment. But, to be sure, all the breeds would have this to contend with. less or more, and we'will have to suppose each got a fair average.

Much more attention is each year being given to the development of dairy qualities in the Shorthorns in Canada, and we shall hope before long to see them in the place they have in the dairy shows in Great Britain—at the very top.

There is room enough for all breeds of value. and the farmer will change only when he sees more profit available, and the result of the Model Dairy test gives him a pointer.

The five Shorthorn cows were able to stand a good third, in competition with strictly dairy herds, for production of milk solids, and at the same time make a gain in weight of 802 pounds. showing they retain the beefing qualities while taking a good place at the pail.

A. W. SMITH. Middlesex Co., Ont.

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