

Midland show, Mr. Geo. Lewis's Timewatch (5624), it is almost needless to say that the youngsters were all that one could wish. Still, blue as is the blood that runs in the veins of these baby Shopshires, and destined as many of them are to win still more fame for the Beam House flock, we found that, as on the other farms, all the lambs had to be out day and night with their dams, in spite of the fact that a cold raw wind with frequent flurries of snow was blowing. Mr. Thomas's card will be found in our advertising columns, and we need hardly say that a visit to Beam House is essential to all lovers of Shrops who may visit England.

Studs, Herds and Flocks.

SHORTHORNS AT MESSRS. J. & G. TAYLOR'S.

Closely adjoining the Rockwood station on the G. T. R., and about eight miles east of Guelph, are situated the Shorthorn herds of Messrs. J. & G. Taylor, whose farms lie side by side, the barns standing a few rods from each other. When coming to this country these gentlemen began farming in the county of Hastings, while there, as well as in their native county of Banffshire, Scotland, they early found the benefit of using bulls of the thick-fleshed, easy-feeding, Shorthorn sort, by which means the profitable butcher beasts are produced, for which the "North Country" is so justly celebrated. The knowledge thus gained led them to embark in the more interesting and enterprising work of breeding Shorthorns. With this in view the cows Nelson Queen, by imported Count Grindelwald, Lady Lorne of the Roan tribe, Grace Darling, tracing to the Cox importation, and other early standing families, were first purchased. These have been topped out with choicely bred bulls such as the Kinnellar bred British Flag, Montecoff Hero, bred by John Isaac, Markham, and sired by Baron Lenton, dam Claudia of the Campbell Claret tribe, Radjay, imported by John Isaac, and Romeo of J. & W. Watts breeding. Fresh blood has also been infused through the purchase of cows and heifers of more recent importation. And, again, the imported cows Rose of Aberdeen and Minnie, both bred at Kinnellar, and got by Gladstone of Kinnellar, Mina tribe. Cows and heifers of similar breeding bred in Ontario, have also been added from time to time. The bull at present at the head of the herd is imported Prince Royal, bred by Mr. E. Cruickshank, of Lathenty, and imported by Hon. John Dryden. This is a lengthy, smoothly finished, thick-fleshed bull that gives evidence of being a good keeper. Altogether something like seventy head of Shorthorns are included in the herds at the present time, of which a large proportion are a very promising lot of heifers that are being bred to Prince Royal. A useful flock of Cotswold sheep is kept, in which care in breeding is plainly discernible. The Messrs. Taylor find it hard to keep up numbers of their flock on account of the demand that has lately arisen for sheep of this as well as other breeds. Rockwood is in the centre of a fertile part of the country that is carefully farmed, and good cattle are thoroughly appreciated.

MESSRS. GARDHOUSE & SONS.

A short distance northeast of the Matton station on the G. T. R., the farms of the above firm are conveniently situated for visitors on the lookout for improved stock. Both Shire and Clydesdale horses are bred for sale, and are also employed in necessary work on the farms. A good selection of mares and fillies of both these breeds is always on hand. The well-known stallion King of the Castle held first place for a number of years in this stud as well as in the show rings of Toronto Industrial, and other leading shows. Choice coach and carriage mares and fillies have also found a place among the horse stock.

Strict attention has always been paid to Shorthorn breeding. In the herd as well as in

the stud, both English and Scotch lines of breeding have in turn held sway. Many notable herds have been represented by specimens imported by the firm, as well as those purchased from other importers. For many years nothing but imported bulls of the very best type have been in use, the following names attesting to the class purchased:—

Count Grindelwald, bred by Mr. T. Stamper, Yorkshire; Prince of Ingelwood, bred by Mr. Thompson, who twice won the "Royal" with Mollie Millicent, while of later years, such bulls as Eclipse, bred by Mr. Duthie, of Collynie, Premier Earl, bred at Sittytton, and Albert and Warfare, bred at Kinnellar, are all of the thick-fleshed sorts, that have left their mark alike on this as well as other first-class herds of the country. The cows that have been purchased to place in the herd, have been of an equally good type. Of these imp. Verbena, by Royal Windsor, bred by Mr. Outherwaite, Yorkshire Eng., the two Kinnellar cows, imp. Rose of Kinnellar, by Vermont, and Cleto of the Claret tribe; all have produced some beautiful heifers to the credit of the herd. The latest arrival is imp. Sowerby's Gem, purchased at Mr. Wm. Linton's late sale, which should give a good account of herself, if we are to judge from either breeding or merit.

Leicester sheep that display good breeding are the sort favored, and in each line it is evident that it has been the aim to breed from the best.

HOLSTEINS AT SMITH BROS., CHURCHVILLE.

In a short visit recently paid to the establishment of the above named firm we were most favorably impressed with the thoroughly practical manner in which the different details are carried out. Although a part of the business consists in shipping a goodly number of cans of milk to Toronto daily, we were agreeably surprised at the thrifty and growthy condition which the calves of all ages displayed, showing what care and skill in feeding will accomplish. As we entered the yards a herd of some thirty black and white beauties were taking their morning airing, and enjoying the fine weather out of doors, preparatory to their again being tied for their midday meal. This lot consisted of the milking cows, which in age date from two years upward, the Smith Bros. appearing to favor early development in order to obtain good results at the pail. Among such a throng space will not allow an individual criticism. Viewed as a whole the herd exhibited a smoothness of finish combined with quality and touch that indicate the highly bred dairy cow, while numbers of individuals carried all the characteristics of heavy milk yields in their largely developed udders and prominent milk veins. The success attained by any herd depends quite as much upon the character of the bulls in use as the selection of the females, and in this particular this herd has had the benefit of exceptionally fine individuals. Mink's Mercedes Baron, that has heretofore held premier position at the head of the herd, has for a length of time given most satisfactory results. He is now four years old and is still fresh and vigorous as a yearling, and shows the fine form that is the unmistakable criterion of good breeding. The bull is strongly bred in performing lines that doubtless will tell when his heifers come to be tested. The two-year-old bull Tirrannia 2nd's Prince Castine was purchased to mate with the heifers sired by the foregoing. He is a bull of very fine finish, remarkably smooth, and very large. He, too, is richly bred; his dam when tested proved an extraordinary butter producer, as well as an exceptional milker, while his sire is also bred equally strong in producing lines. Altogether, the herd displays skill in handling and a choice of selection that has awakened a popularity that is evidenced by the demand that is found for both bulls and heifers, as we were assured that over fifty sales were effected during the last year.

A choice herd of Yorkshire pigs are kept, some of them exhibiting more than ordinary merit. In smoothness of form and coat they were exceptionally fine, displaying good feeding qualities.

Those who are interested in the above breeds should send for Messrs. Smith Bros. catalogue, which will give all the information desired.

The Raising of Dairy Calves.

BY W. J. PALMER.

In all branches of dairy farming the farmer must necessarily depend to a large extent on his cows to enable him to carry on his business successfully. In some cases, especially when milk is supplied to cities, the dairyman finds it more profitable to purchase milk cows as he needs them, fattening or selling off those that show a tendency to become dry. But in the majority of cases it is found to be more profitable and satisfactory for each dairyman to raise his own calves, as by so doing he can breed his best cows to a first-class dairy bull and thus get calves which, under proper care and treatment, will develop into superior dairy cows. By continuing this course of action he will greatly improve his herd and increase their producing power.

Some people tell us that it is impossible to raise good dairy calves profitably, as they require abundance of new milk to keep them thriving, and this new milk is a very expensive food. Fresh milk certainly is the best food for the young calf, and the natural method of taking it is for the calf to draw it from the udder of the dam, but there are many considerations among dairymen that come in to prevent this method of feeding. This is only practicable among the breeders of pure-bred and high-priced stock which are grown primarily for beef. Dairy products have become too valuable to permit calves intended for the dairy or for beef to be raised upon whole milk; they must and can be grown just as well upon the refuse of the dairy, skim-milk and whey, if other and cheaper foods are used in conjunction.

In order to understand the real feeding value of skim-milk and whey, it is necessary first to study the composition of new milk, and then see what constituents are removed in the processes of butter and cheese-making. The composition of new milk is generally constant with the exception of its fat, which is the variable constituent. Its average composition is: water, 87.5 per cent.; fat, 3.60 per cent.; albuminoids (casein and albumin), 4.00 per cent.; sugar, 4.20 per cent.; ash, .7 per cent. In buttermaking the sole object is to remove as much of this fat as possible, hence skim-milk has practically the same composition as the new milk, with the exception of the fat, which is removed in the cream and goes to make butter; a small proportion of the casein is also removed with the fat. Skim-milk from deep or shallow pans has about the following composition:—Water, 90 per cent.; fat, .7 per cent.; albuminoids, 3.50 per cent.; sugar, 5 per cent.; ash, .8 per cent. Hence, we see that it is almost a perfect food, containing all the essentials necessary to build up and sustain the body, with the exception of fat. This can be supplied in oil meal or some of the grains, such as oats, pea meal or bran. One hundred pounds of skim-milk contains about 3½ lbs. albuminoids, or material for forming muscle and flesh; 5 lbs. sugar, which goes to keep up the heat of the body and perhaps to form fat; about four-fifths of a pound of ash which builds up the bones, and over ½ lb. of fat. Hence, if calves are fed skim-milk (warm) in small quantities at a time, with a little oil meal or grain in addition, they will thrive and grow rapidly. It has been valued at from 20c. to 25c. per 100 lbs. (10 gals.) for feeding purposes, but this is a low estimate. Practical men give it a higher value than this.