

the essential process of digestion commences. The food is here converted into a pulsatous mass called chyme, and is passed into the first portion of the bowel (the duodenum), where it is further acted upon by the secretions from the pancreas and liver, and the chyme is converted into a milky fluid called chyle, and is now prepared to be absorbed by villi of the intestines, and by the lacteals carried through the lymphatic glands, and thence to the blood, to enrich it with nutrition, and by it to be carried to each tissue in the body, to repair waste, and build up the tissue.

While the nutriment is thus circulated through the system, the waste products and effete matters are carried out of the system by the peristaltic action of the bowels.

The process of digestion in the bovine species is much more complicated, and, at the same time, more thorough than in monogastric animals such as the horse.

In fact the more conversant we become with the anatomy and physiology of the ox, the more perfect we see the wonderful arrangement, and perfection of adaptation of means to an end, in the digestive system of the ox tribe for the conversion of food into beef to be, viewed in the abstract: the huge, coarse, bony frame, the large feeding capacity and perfection of the digestive apparatus, the quiet, phlegmatic temperament, their sedentary and inactive lives, all point to nature's having intended the bovine species as food for man.

In preceding numbers of the "Journal" we noticed the peculiarities of the different breeds of cattle, some of which are natural, while others are the result of judicious selection and care in breeding. We will here merely notice that, as the result of years of study and practice, breeders have produced certain families of cattle which, in a most extraordinary degree, have developed the fattening tendency. The improved breeds not only produce more flesh in proportion to the food consumed, but they arrive at maturity much sooner, attain a greater size, and together are more profitable to both the breeder and the feeder.

The breeds in which these qualities have been most cultivated are the "Short Horns," the "Herefords," and the "Polled Angus;" and the purer bred they are the better feeders they prove to be.

As few farmers can afford to stock their farms altogether with pure bred stock, grades will be found in many cases to retain the fattening qualities of the pure bred progenitor.

Of all breeds the short horn is the best to use for crossing with: no bull will stamp his characteristics on crosses like the short horn; hence, for producing grades for feeding, the short horn cross

should always be preferred. They grow faster, larger, and produce more weight per pound for food consumed than any other cross.—*Mr. McEachron in the "Montreal Journal of Agriculture."*

### HOUNDS AND HUNTING.

If the position which enthusiastic votaries of the "noble science" claim for hunting as the "national sport" is to be estimated by the arrangements made for carrying it on, and the expenses which are incurred in maintaining the packs of hounds, the claim will probably be admitted even by the closest adherents of Mr. Beesley and Mr. Freeman. Taking the whole of the United Kingdom, there are no less than 162 packs of foxhounds, numbering altogether 5,280 couples. Besides these there are 18 packs of staghounds with 420 couples, 6 packs of other hounds with 200 couples, and 130 packs of beagles and harriers with 2,078 couples, or a grand total of nearly 16,000 "dogs"—if huntsmen will pardon the use of the word in such a connection—devoted specially to the pleasures of the chase. Of course, all these packs cannot be kept up and regularly hunted without an enormous expenditure on food, kennel requisites, and the necessary labour incidental to their maintenance, without reckoning the equally necessary expenditure entailed by the actual hunting. The keep of the horses used for hunting alone will amount to an enormous sum. The largest pack of staghounds is Her Majesty's, which numbers 40 couples, but these figures are nearly doubled in the case of several packs of foxhounds. The Duke of Beaufort keeps 78 couples of hounds, the Cottesmore hounds number just one dog more, Lord Fitzwilliam, Sir Watkin Wynn, Mr. Garth, and the Earl of Zetland, keep 120 hounds apiece. The largest Irish pack is the Meath, which this season contains 70 couple; and the largest Scotch pack is the Duke of Buccleuch's, which hunts the country round Melrose and Kelso, and comprises 54 couples of hounds. Ireland boasts the largest pack of harriers—the Monaghan—of which Lord Rossmore is master, and which contains 30 couples of dogs. The number of foxes which exist in different parts of the country must be very much larger than really is the case if all these foxhounds are to be rewarded with a "find"—let alone a "kill"—every time they are out. All the packs hunt at least once a week, and many of them have four and even five regular days out of every six on which to hunt Master Reynard. Even the harriers do not confine themselves to chasing their ostensible quarry "puss," and many packs of "harriers" number a certain proportion of foxhounds. It is more than likely that the most highly-

prized vovmin, as the fox has been called, would be less numerous than at present if it were not for the existence of the packs of hounds whose sole object in life is to hunt and destroy them. But abolish foxhunting, and what a blank there would be among the cherished institutions of the country.—*London Globe.*

[Toronto, and latterly, we believe, Montreal and Ottawa, are aping England in the matter of Hounds.]

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