

trous result may be to himself); a fine Durham Heifer, and a few excellent sheep and poultry. The chief causes of these disasters may be traced to the constant rolling of the ship, and the very boisterous state of the weather. We regret to learn that the stock were not insured.

A short time previously, Messrs. Stone & Jles, of Guelph, lost at sea a fine Durham Bull and seven cows, in calf, Heifers of the same breed, carefully selected from the herd of Mr. Langton, M.P. for the County of Oxford, and brother-in-law to the late Earl Ducie; also fifteen of the finest Cotswood Sheep, from those celebrated breeders, Mr. Banner, of Gloucestershire, and the Messrs. Gillet, of Oxfordshire. During a frightful gale, the sea swept the entire deck, carrying the cattle at one sweep into the ocean. Messrs. Stones and Jles we are glad to learn were moderately insured.

A few months ago, the Messrs. Wade of Coburg, who are so favourably known for their enterprise in this direction, lost at sea some very superior Durham cattle, as have also several others, both in the British Provinces and the United States.

We likewise learn from an esteemed correspondent in New Brunswick, that Mr. Cumming, Veterinary Surgeon, was deputed to go to England to procure a number of the best Stallions of different breeds, to be distributed over the Province. Mr. Cumming selected eight animals, which are described as possessing first rate qualities; three of them however perished in a severe hurricane when the vessel had been only eight days out. The average cost of the animals was about £300 each.

These melancholy facts sufficiently indicate the necessity for some great improvements being effected in the modes of transporting live stock across the rough Atlantic. The system as commonly pursued by individuals is fraught with infinite anxiety and risk, and as the above facts indisputably show, is but too frequently attended by heavy pecuniary loss. We trust that something practically beneficial will arise out of a late application of the Board of Agriculture to the Government, urging the great importance of making arrangements with the proprietors of the line of Canadian Steamers for the carrying of improved Stock at moderate rates, and with better, and safer accommodation than are usually obtainable.

In conclusion we have much pleasure in calling the attention of our readers to an article on the importation of cattle, in another column of this journal. The subject deserves to be fully investigated, and must not be allowed to drop without some practical results.—*Upper Canada Paper.*

HINTS ON BREEDING GRAZING CATTLE.

We commend the following suggestions, which we take from the *New York Spirit of the Times*:

Some breeds of cattle are disposed to carry fat internally, and others externally, while in others it is deposited between the layers of muscles, forming what is called "marbled meat." In the races of cattle disposed to carry fat externally, are the once-famed "Wishley breed," with large fatty rumps, and the African ox, with his immense humps of fat on his shoulders. These animals have little or no internal fat. The Herefords are distinguished for this peculiarity of carrying much external fat, making these exceeding good "handlers." The "improved Durham" are highly prized for their "marbled beef."

The animals which reach the greatest weight of muscle and fat, with the least consumption of food, are the Herefords and Durhams; the former breed will fatten, at the age of two and a half years, to one thousand pounds; while nearly all other breeds require at least one year longer to attain this weight—an important fact that should not be lost sight of by breeders of grazing cattle.

In calling attention to the "principles" of breeding, we cannot perhaps do better than examine the "rules" followed by the most successful English breeders.

The following are the means by which Bakewell established the permanent character of his cattle:

He first selected the best animals of their respective kinds, and coupling these, endeavored to develop in the highest degree those characters which he deemed good, looking mainly to those peculiarities of conformation which indicate a disposition to fatten. He arrived at producing a large cylindrical body, and a smallness of the neck, head, and extremities, or what is called fineness of bone. A saying of his, often quoted, is, that "all was useless that that was not beef." Hence, the principles which guided him, were the most meat from the least food, the least oil, and the size of the best joints; smallness of the bones, aptness to fatten, and arrive at early maturity, he kept constantly in view. He always bred from the best animals, making the very best selections of both male and female. He thought the production of a large quantity of milk was inconsistent with the property of yielding much meat.

Charles and Robert Colling made many improvements in the Durhams. They, like Bakewell, seem to have regarded size in their animals as a quality secondary and subordinate to those which they wished to produce, and to have directed almost exclusive attention to beauty and utility of form and development of the properties of early fattening. Having, by skillful selections, become possessed of animals with the properties sought for, they continued to breed in and in.

C. Colling's first great improvement was made on a young bull, which he obtained by a kind of chance of a poor man, from a cow tied by the roadside. His sagacity led him

to see the value of the young animal. He likewise afterwards obtained a cow, which, however, on being removed to superior pasture, became so fat, that she did not again breed. The calf inherited the same property, and as he grew up, became so fat as to be useless as a bull. This bull was termed Hubback: he was the sire of the celebrated Bollingbroke.

Colling, by continually breeding from his own stock, seems to have pushed refinement in breeding to its limits, having produced that delicacy and impairment of constitution which never fails to accompany a continued intermixture of blood in a limited number of animals. He now attempted various crosses with cows of various other breeds; but his most fortunate cross was with a most beautiful polled Galloway cow, of a red color; and his "short-horn" Bollingbroke. The produce, being a male calf, was in due time conjoined with Johanna, a fine short-horn cow; the produce being another male calf, was put to "Lady," a true-bred short-horn. This cow, with her descendants, at his sale in 1810, forty-eight lots, brought £7,115, or about \$716 each.

Michael Dobson, one of the earliest improvers of Durhams, visited Holland, for the purpose of selecting bulls of the Dutch breed. His stock were of great size, coarse, great consumers of food, did not fatten very early, produced much internal fat, and were well adapted to the uses of the dairy. This district, Holderness, was distinguished beyond any other part of England for its dairy stock, and many cows of this variety are yet to be found more or less mixed with the Durham blood. The effect has been to improve their form, but to impair their milking properties; nevertheless, the modern Holderness still stand in the first rank of dairy cows, and the great London dairies are chiefly supplied by them.

The following are the principal characters found in animals possessing the faculty of fattening readily:

The head small, face long from the eyes to the point of the nose, front broad, muzzle fine, nostrils capacious, neck short, light, nearly straight, and small from the back of the head to the middle; full, clear, and prominent eye; the back straight from the top of the shoulders to the tail, which should fall perpendicularly from the line of the back; the chest wide and deep; the ribs deep and circular—this depth of "barrel" is most advantageous in proportion as it is found behind the elbow; hips wide apart; loins and back well filled up with muscle; quarters full and large; flank deep and well filled out; bones small and flat, but not so fine as to indicate too great delicacy of constitution; the hide, a very important part rather thin, expansive, and mellow, well covered with fine and soft hair.

These are the principal characters which indicate the property of secreting the fatty tissue, and they may be said to be universal,