

EXAGGERATED EMPHASIS ON TYPE.

It will bear repetition that the contrast between beef and dairy type, as commonly exemplified in the show-ring and in photo-engravings, is, to quite a large extent, a matter of condition. Every stockman has noticed what a great difference in type there is between a cow in lean condition and the same animal with her ribs padded out, the concavities of her outline filled up with flesh and fat, and the angularities, accordingly, smoothed into more symmetrical contour. We have seen cows which, in milking condition, would answer very well to illustrate a lecture on dairy type, while, eight or ten months later, when fattened for the block, they would illustrate almost equally well the butcher's ideal. Of course, it is not pretended that all cows are built according to the same lines of structural anatomy. There is a difference in skeletons, and also in the inherited disposition to lay flesh and fat in certain parts of the carcass. An approved beef animal lays it along the back and over the crops, while the dairy breeds store a larger proportion of it inside the abdomen in the form of tallow. But these differences are magnified out of all proportion by those interested in representing diversity of type, and in the show-ring they are enormously exaggerated by the practice of showing the dairy breeds in thin condition, while the beef cattle are padded out with nutriment to make them show as compact plump and thick-fleshed as possible. Were the practice reversed, and Ayrshires and Holsteins exhibited with slack udders and in beefy condition, while Shorthorns, Angus and Galloways were shown in their customary breeding condition and in full flow of milk, the untutored visitor would suppose the former were the beef and the latter the dairy breeds. Even between Jerseys and Aberdeen-Angus there is no such radical difference of type (condition being in each case equal) as photo-engravings or show-ring exhibits would lead one to believe. Moreover, it is safe to say the difference between the conformation of beef and dairy types would be less than it is but for the fact that educators have in the past led dairy breeders to select and endeavor to perpetuate such characteristics as the wedge-shape, the corrugated spine, extreme spareness of flesh, and a general looseness and ranginess of type. There is no doubt that undue emphasis has been placed upon such points, and the best dairy breeders of the present day no longer seek them to the same extent as formerly. They realize that a dairy cow requires not merely "belly and bag," but heart and lungs as well, and that extreme spareness of flesh, so far from being a guarantee of milking quality, may be only due to lack of thrift. In fact, it is now pretty generally conceded that type is an unreliable index of milking quality. Private and public records show that some of the best milk and butter records are made by the substantial types of cows, or what the Holstein breeders have termed the milk-and-beef type. Not to go too far from home, we find a very good illustration of this type in the Holstein cow at the Ontario Agricultural College, Boutsje Q. Pietertje de Kol, which, in her four-year-old form, gave over ten tons of milk, and fat equal to over 900 pounds of butter, within a twelve-month. This cow, if fed for the butcher, and her horns and color changed, would pass easily for a Shorthorn of the dual-purpose type. It all goes to show that beef type and dairy capacity are by no means incompatible. True, it would not be easy to develop the combination quickly in high degree among a large number of individuals any more than it would to develop any other two excellencies in a strain. This does not argue that the two things are incompatible. It is merely according to the principle of restricted selection, as illustrated by the fact that it is harder to find one hundred men who are both tall and stout than to find one hundred who are merely tall. Nevertheless, with careful selection, and a few generations of time, the development of dairy quality in cows substantially of the beef type, and with the inclination to lay fat on their backs, instead of about the paunch, would be but little more difficult than in those conforming to the old-fashioned, attenuated dairy type, or to any other single type that might be designated. And they would have the advantage of being more rugged and wearing better, while a superannuated matron or sire would be worth more when driven over to the shambles.

Let the breeders of dairy cattle, therefore, while keeping their ambition centered on milk and butter-fat, seek to combine with this, so far as convenient, a fairly smooth, hearty and substantial type; while breeders of beef cattle, on the other hand, will do well to encourage a liberal degree of milking quality, and Shorthorn breeders, in particular, to concentrate their effort on a judicious combination, in high degree, of beef type with dairy capacity. The idea is feasible, but it requires time, judgment, and persistent development of milking function by means of hand-milking, together with yearly records of milk and butter-fat yields, to accomplish the ideal. It can be done, and such a breed of cattle, while not

displacing the recognized dairy breeds, has and will have a large part to play in American agriculture.

THE FARM.

A FEW FACTS ABOUT NEW ZEALAND.

The area of the Dominion of New Zealand is 104,751 square miles, or 67,040,640 acres, of which 28,000,000 acres are agricultural land, and 27,200,000 acres pastoral land. The area in occupation in October, 1907, was 37,564,278 acres, of which 15,330,189 acres were in cultivation or in sown grasses. The area actually in cultivation was 6,831,798 acres, of which 944,250 acres were in corn and pulse crops, 765,342 acres in green crops, 4,958,233 acres in grasses on plowed land, 114,701 acres in orchards, plantations, gardens, etc., and 49,272 acres in fallow. The area in sown grasses on unplowed land was 8,498,391 acres, and native grasses were estimated at 22,234,029 acres. The wide area of country still unoccupied consists to a very considerable extent of land in native grasses or bush, capable of carrying large flocks of sheep and herds of cattle.

There were in the Dominion, on the 31st October, 1907, 73,367 holdings of one acre or over in extent. There is an increasing trend towards small or moderate-sized holdings and more intense cultivation.



Ursala Raglan.

Typical English North Country Shorthorn. Winners of many first prizes and championships.

The soil is fertile, the country well watered, and the climate equable, ranging from sub-tropical to temperate. The winters are short. Except on the mountain-tops, snow seldom is heavy or remains long on the ground. Indeed, the worst that is admitted of the New Zealand climate by an official publication which lies before us is that, while it has plenty of summer in winter, it frequently has touches of winter in summer. The Dominion of New Zealand is divided into eight provincial districts: Auckland, Taranaki, Hawke's Bay, Wellington, Nelson and Marlborough, Westland, Canterbury, Otago. While the yields of grain are high, so excellent are the pasturage and forage crops sown, that the production of wool, meat and dairy produce has proved more profitable than grain-growing, and the chief products and exports consist of wool, frozen meat and dairy produce. The total value of exports for the year ending September 30th, 1907, was £19,687,573, of which agricultural products constituted 86.35 per cent.

A SPLENDID GROWTH OF ALFALFA.

Editor "The Farmer's Advocate":

I send you a sample of alfalfa. I have an acre and three-quarters of it. I cut the first on June 15th, and took 5 loads off; then, in four weeks I cut second crop, and got three loads. The sample is the third growth, and is now (August 28th) 26 inches long, and just coming into bloom, and will be ready to cut a third time in a week from now. The prospect is that I shall get three loads more off this cut. In addition to the quantity, the feed value is far ahead of any other sort of hay, and there is almost no danger of being killed by frost in winter.

Middlesex Co., Ont.

A. C. ATWOOD.

A FAIR CROP OF GOOD HAY.

The poor catch of grass seed last year, and the too close cropping of meadows owing to the scarcity of fodder in the fall, made the outlook for this season's hay crop far from encouraging when the snow fell, says the Ontario Crop Bulletin for August. However, the fields came through the winter in good shape, and the first part of the season gave promise of a large yield of hay; but dry weather set in early in June, and the crop did not go forward as well as was expected. Most of the hay was cut and housed in first-class condition, but a considerable portion was caught by rain after cutting, and has suffered in quality. A number of large yields are reported, along with some very light returns, sometimes in the same localities. The western half of the Province makes a good showing, both as to the bulk and quality of hay, but the more eastern districts are below the average in yield. Taking the Province over, however, there will be a fair quantity of good hay in the barns this winter, both for home and outside supply. Fodder of other kinds is also fairly abundant, although the feeding value of some of the grain straw was injured by rainy weather at harvest.

HANDLING THE ENSILAGE CROP.

The "Michigan Farmer" has a contribution on this subject, from which we quote:

"The improvement of the quality of the ensilage would do much to help in reducing the cost of producing milk.

Fully one-half of the stuff that goes into the siloes of the country is not worthy of being termed ensilage. It is a sour, sickening conglomeration of cornstalks, ragweed, barnyard grass and pigweed, cut and run into the silo before the corn has attained its best feeding value.

A few years ago the chief aim of the growers of ensilage corn was to grow the largest possible amount of forage on an acre of land, but the better class of farmers and dairy-men have learned that it is not so much a matter of quantity as of quality, and have discontinued the use of corn that gives the largest stalks, and are devoting their attention to growing corn that will produce a medium-sized stalk and a

good ear, and reach a fair degree of maturity before silo-filling.

"A few days before the rush of silo-filling begins, look over the silo and put everything in order, tightening hoops, fitting and numbering doors, etc., so that there may be as few vexatious and expensive delays of the whole gang as possible.

"When the corn is convenient to the siloes," he says, "we employ four teams to haul to the silo, and four men to load the corn onto the wagons in the field. We keep one man at the cutting machine to assist the crew and the feeders, and also a hand to save the strings that are used to bind the corn into bundles. This we do as a matter of precaution, more than to save the strings, for there has been a number of cases where cows have been injured by eating the strings after they had been run into the silo. Two or three men are kept inside of the silo to keep the outside edges packed and to distribute the ensilage over the surface properly. With a good working crowd of fourteen men, besides the crew with the machine, from one hundred to one hundred and twenty tons a day of ten hours is a good day's work. Of course, the exact cost of filling depends largely upon how everything works, and how the men are arranged, so that they can do the most work in the easiest manner. None but good men should be sent into the field to hand onto the load. I am figuring the cost of filling on a strictly cash basis, and allow each man two dollars a day, the teams four dollars a day, the engine and cutter and crew two dollars an hour actual running time. Of course, these figures are not exact, for there are numerous conditions that we cannot allow for that are constantly presenting themselves, but, taken one year with another, I believe that seventy cents a ton is a fair esti-