alfalfa clover (1) which is now making a good show for a third crop of fodder. There is also a field of green barley and rape growing together, which Mr. Boden is trying as an experiment for a change of horse feed. The milch cows get their present daily lunch taken to them from a field where corn, oats and vetches had been sown broadcast, and although the corn made a poor growth, the oats and vetches have turned out wonderfully. Some fifty or sixty steers are fattened here every winter in a building where they are permitted to run loose, and get their feed placed in mangers round the sides.

Yesterday two of the staff in charge of the experimental work on the Central Government Farm at Ottawa visited the Reford farm, and, in company with several other gentlemen interested in agricultural matters, including the vesteran agricultural journalist, Arthur Jenner Fust, visited and examined the various departments of the farm, including the dairy and poultry buildings, and all expressed themselves as being exceedingly pleased with the appearance of the farm, its buildings and its live stock, which are a tribute to the efficient manager, Mr. James Boden.

Witness.

## The Grazier and Breeder.

## ON BREEDING.

(BY THE EDITOR.)

The problems connected with this subject are numerous and intricate. For example—why is the produce of a Dorking cock and a Cochin hen, quite different to the produce of a Cochin cock and a Dorking hen? It is so, and remark, that the difference, though more or less various in quantity, is constant in quality.

Why, again, in the mule, is the produce of the male horse and the she ass utterly distinct from that of the stallion donkey and the mare? So different, indeed, is one from the other, that there is a distinctive name for it in England, viz. the "Hinny," the mule being, almost invariably, the offspring of the male ass and the mare; the "Hinny" being very seldom bred.

Once more; there is the well authenticated account of the thoroughbred bay mare. This

animal, whose pedigree did not contain one ancestor whose colour was in the least degree mixed with white—gray thorough-breds being extremely rare, so rare that, during a pretty long experience on the turf, the writer only remembers three or four—was accidentally, served by a gray cart horse, to the intense disgust of her owner. The foal was bay; but seven succeeding foals, all got by bay, or brown, racing stallions, had, every one of them, more or less, stains of white in their coats!

As to the original whence our domesticated animals spring, there can be little doubt that, as in the case of wheat, and other cereal grasses, they have been fostered and cultivated by the hand of man, until the rough progenitors of our modern Devons, Kyloes and Herefords, have, in the persons of their descendants, become the smooth, finished pictures we now see at our exhibitions.

These are races as distinguished from the breeds: we may talk of the Devons as a race, but the term cannot, with propriety, be applied to the Shorthorns; it requires only a glance at a herd of the former to see that, from their colour and general conformation, they have never been mixed with other stocks, whereas, the latter bear evident marks of having been, so to speak, created by the wit of man out of an amalgamation of selected specimens of various kinds, until a type, previously fixed upon by each separate improver, has become fixed and determined.

We need hardly say, that the first person who formed the idea of originating a breed of domesticated animals which should be superior to the native races, the aborigines, was Robert Bakewell, of Dishley. He began with the sheep; which, rough and ragged, small and ill-shaped, as was the stock then bred from, he succeeded, by patient selection and considerate matching of parents, in improving into the "New Leicester." The horned cattle of his neighbourhood, for he wisely chose the animals nearest to his hand, next felt the magic touch of his genius, and became the modern "Longhorns," highly esteemed in the pastures about Leicester and Rugby; prizes being not very long ago given by the Royal Agricultural Society for the best specimens of the breed.

Stirred up, we may well suppose, by the fame of Bakewell, the brothers Colling next appear on the scene. They, fortunately, for us as for themselves, had better and more abundant

<sup>(2)</sup> Lucerne. ED.