

ought to be exporting them largely for the improvement of European stock; and might do it if we would go to work right, to bring it about.

The pigs here are very fine, being mostly the beautiful Suffolk and their crosses. Query. Can a pig be called a beauty? I suppose so, *for a pig*, the same as a Hottentot *for a Hottentot*.

Since my visit to Mr. Maillard, I notice in a New-Jersey paper, that he was quite successful at the Burlington County Agricultural Show, in October last, where he received several first premiums for the best display of different kinds of animals, grain, &c.; all of which he generously handed over to the Society, to be offered again at their next annual show.

In implements, I found Mr. M. equally liberal; for he supplies himself with such as have proved to be the best. As an example of these, he has got up a circular horse power for one or four horses, as desired. With this, he moves a threshing machine, fan mill, circular saw, small grist mill, grindstone, cornsheller, and strawcutter, which greatly saves in the labor of men.

Mr. M. has some other things in progress, of which I should like to speak, were it not for fear of proving tedious to the matter-of-fact readers of the Agriculturist. I will therefore finish my observations here for the present, by giving a brief detail of a potato experiment which he made in 1847. When his crop was dug, he found the rot very prevalent. He immediately gathered all that seemed in the slightest degree affected by it, and put them into his steam vat, and thoroughly cooked them. They were then packed down in common hogheads. These he fed to his stock during the winter; and what remained in the spring proved as sweet and good as when first put down. I ate some myself to be convinced of the fact. Had he not resorted to this cheap and simple method of saving them, he is positive all would have been lost. He purchased of his neighbors large quantities in the same diseased state, and saved them with the same success.

SAMUEL ALLEN.

New York, December 6th, 1848.

THE DODO.—At the meeting of the Zoological Society in Hanover Square, a model of the *Dodo* was exhibited, constructed by Mr. A. D. Bartlett, of Great College-street, Camden Town, and excited great interest. Among the gentlemen present we noticed the Dean of Westminster, Professor Owen, Mr. Yarrell, Dr. Melville, Mr. Gray, Mr. Gould, &c.; they all expressed great satisfaction at the scientific accuracy displayed by the artist in so perfect a restoration of this extinct but interesting bird. It may be necessary to state that the last living specimen was exhibited in Helborn 200 years since, and the only preserved skin was destroyed by fire 90 years ago, the head and foot of which alone were saved, and are now at Oxford. The model may still be seen at the residence of Mr. Bartlett.

REMARKS ON THE PRINCIPLES OF BREEDING.

BREEDING, with a view to improvement, may be said to be founded on Nature's established law, that "like begets like." This, however, is only true in part, for there is a constant tendency to change, arising from a variety of causes; such as domestication; living in a different climate, or on a different kind of food. The management to which animals are subject has, also, its influence. While these may be looked upon as the chief causes in operation, that produce this constant change, they are the means, at the same time, in connection with other causes, which are used to effect an improvement.

In order to improve the breed, there are two modes advocated by practical breeders. One is commonly called the "in-and in system," and the other that of "crossing." The former was practised many years ago, by Mr. Bukewell, of England, which, at least, had the effect of destroying the prejudice that had previously existed against breeding from animals of the same race, or blood. But the system of breeding in-and-in, it has since been ascertained, has a tendency; after a time, to deteriorate the breed; in fact, it is limited, so far as its benefits are concerned, unless the utmost care is observed in the selection and management of the stock, avoiding everything that can possibly tend to hereditary disease. To accomplish this, the breeder must select such animals as his judgment and experience will convince him, will be likely to unite in their offspring the qualities sought. From their progeny, again must be selected only those animals which more completely exhibit the requisite qualities, and so on, from generation to generation, until the character desired is fully developed. The importance of continuing this process for a number of successive generations is obvious, from the fact, that peculiar traits of character often disappear in the first, and reappear again in the second or third generation. A desired character may be found in the parent, and inherited by only a part of the offspring, and the requisite point can only be uniformly developed by a careful selection through several consecutive generations. By this process, it is apparent that this system must be adopted; yet at the same time, it is desirable to avoid too close alliances. Hence, it is considered better to breed more distant members of the same family together than those that are more nearly related.

In improving the breeds of animals, the chief points to be arrived at, consist in reducing the parts of the least value to the least possible dimensions, which may be regarded as offal, as the head, neck, legs, &c., while the larger quarter or ham and deep chest, for fattening, and square, well-set udder, large milk veins, mellow skin, and kind temper for milking qualities, should all be developed to the greatest possible extent. In order to produce these, a strict regard should be