

### EFFECTS OF CASTRATION ON ANIMALS.

There are several circumstances and principles connected with the castration, or emasculation, of domestic animals, which, if duly considered, and judiciously carried out, doubtless, would have an important bearing on the economy and improvement of our dairies, the quality of our meats, and perhaps, in the staple of our wool; and it is in reference to these questions that the following hints are offered, not as established facts, however, but for the purpose of eliciting attention and further inquiry on the subject:—

It is well known that the bull, when emasculated at an early age, partakes of a very different form and character from that which he possesses when left uncastrated. He grows to a larger size; his neck, head, and horns are of a different shape; his hair is finer and less curly on the head; his meat, when cooked, is more tender and savory; and his disposition becomes almost entirely changed. Similar features may also be noticed in the castration of the horse, the ram, the boar, the cock, the dog, the cat, the squirrel, &c. From the observations of a distinguished veterinary surgeon, of the British army, who practised ten years in India, it appears that the hair of the horse, when cut in cold weather, ever after is rough and changes from a stiff, uniform calibre, to one that is irregular and fine. It also increases in number as well as in length. The hoofs of the horse, after castration, he says, become more solid and firm. He further affirms that, if a young stallion has a tendency to have a "bull neck," it may be checked by castration; and that geldings generally grow larger, with the same keeping, than studs, and are more gentle in their disposition.

Similar facts are also observable, as far as our knowledge extends, in the "splaying" or castration, of females. For instance, the effects of castration upon the cow, for 15 or 20 years' experience in France, seems so be that it increases the product of her milk one third, at an age of six or eight years, after which there is generally a regular and constant supply until death; that the milk is richer than that of the cow in her ordinary state, and consequently yields more butter, which is of a superior flavour, taste, and colour; and that, when the milk fails, or one wishes to part with her, the cow has a greater disposition to fatten. Furthermore, as the cow will not procreate, all the accidents attending gestation, parturition, &c., are of course avoided; and to those who keep cows for milk only, and to whom the loss of several months, in being dry and in suckling their calves, is of no small moment, an operation of this kind upon these animals would greatly increase their value.

The effects of castration upon the common dunghill cock must be familiar to all who have observed the large capons often exposed for sale; and we have reason to believe, that, if a similar

operation were performed on other kinds of domestic poultry, both male and female, a corresponding advantage would be gained.—*B., New York.—American Agriculturist.*

**PATENT BREAD-MAKING MACHINE.**—A patent was granted to Mr. Richard Egan Lee, Glasgow, for a machine, with requisite apparatus, having for its object the accomplishment of the following among several other points, of importance in the manufacture of bread or biscuits. 1. By the substitution of carbonated water for barm, to render bread more nutritive. 2. A saving of fifty per cent. in the cost of fuel in heating the oven, by means of an improved method of substituting steam for fire. 3. The gradual admixture of the flour with the water, without manual labour. 4. To ensure the oven being kept of an equal heat by means of an indicator and regulator, and by means of which the heat can be kept exactly as may be desired. 5. An invention for placing the bread in and removing it from the oven. 6. By the use of an ingenious contrivance to regulate the desired weight of all bread, whatever from an ounce to any number of pounds the baker may desire, without the possibility of error. 7. The saving of all manual labour in the manufacture of bread, with the exception of that of a few boys to place it upon, and receive it from, the machine. 8. The avoiding of the necessity of the human hand touching or kneading the dough. The patentee exhibited on Thursday a somewhat rude model of his invention and apparatus to a few parties whom he had invited to meet him at Exeter Hall, the objects of the exhibition being to take the preliminary steps requisite to call public attention to the subject, in the hope that his brother mechanics may come forward to examine the invention, and the trade pronounce a verdict upon its merits. The cost of a two-horse power engine is expected to be about £150, or of one erected on a smaller scale for retail bakers and public institutions, about £50. If all the objects contemplated by the inventor should be accomplished, almost a revolution will be effected in the making of bread and the baking trade.

**THE INFLUENCE OF CLIMATE UPON COLOURS.**—There is a remarkable correspondence between the geographical position of a region and the colours of its plants and animals. Within the tropics, where

The sun shines for ever unchangeably bright, the darkest green prevails over the leaves of plants, the flowers and fruits are tinged with colours of the deepest dye, whilst the plumage of the birds is of the most variegated description, and of the richest hues. In the people also of these climes there is manifested a desire for the most striking colours, and their dresses have all a distinguishing character, not of shape merely, but