

animals, especially in many races of dogs and rabbits, we find that in the cultivated state they have acquired pendulous ears. This is simply a consequence of a diminished use of the auricular muscles. In a wild state these animals have to exert their ears very much in order to discover an approaching foe, and this is accompanied by a strong development of the muscular apparatus which keeps the outer ears in an upright position, and by which they can turn them in all directions. In a domestic state the same animals no longer require to listen so attentively, they prick up or turn their ears only a little ; the auricular muscles cease to be used, gradually become weakened, and the ears hang down flabbily, or become rudimentary.

As in these cases the function, and consequently the form also, of the organ becomes degenerated through disuse, so, on the other hand, it becomes more developed by greater use. This is particularly striking if we compare the brain, and the mental activity belonging to it, in wild animals and those domestic animals which are descended from them. The dog and horse, which are so vastly improved by cultivation, show an extraordinary degree of mental development in comparison with their wild original ancestors, and evidently the change in the bulk of the brain, which is connected with it, is mainly determined by persistent exercise. It is also well known how quickly and powerfully muscles grow and change their form by continual practice. Compare, for example, the arms and legs of a trained gymnast with those of an immovable bookworm.

How powerfully external influences affect the habits of animals and their mode of life, and in this way still further