produce improvement. At an early stage the action of mind becomes a highly important factor in the process, as we will now proceed to show.

SEXUAL SELECTION

It is a fact known to all who have studied the habits of animals that, when they come to pair, the female of most species invariably selects for mate the strongest and most courageous male. This she does, doubtless, for purposes of self-protection; but, whatever the motive, the choice has an important effect on her progeny. Let the reader note that, by the process of natural selection already described, the unfit are eliminated and only the fit allowed to survive for breeding purposes. Now, however, a second weeding-out of the rubbishy element takes place by means of sexual selection. Ultimately, therefore, the progenitors of the species are the fittest of the fit. The selection is not always consciously made by the female. In some species, at certain seasons, the males fight one another. During those battles the females stand apart, timidly awaiting the result. When the fight is over they walk off contentedly with the victor or victors. In both cases the result is the same. The fittest only survive and breed, and in accordance with a law already explained transmit the qualities which constitute fitness to the next generation.

But sexual selection does not affect strength and courage only. At a certain stage the artistic faculty makes its appearance, and the female permits admiration of beauty to modify her choice. The female bird of paradise has such an extraordinary appreciation of beauty that the very slightest advantage in the matter of plumage causes a male to be selected in preference to his rivals. The influence of this habit on the artistic development of the species will be obvious. The plumage of the peacock, the antlers of the stag, and the mane of the lion are all largely attributable to this cause.

USE AND DISUSE OF ORGANS.

Everybody is aware of the difference in muscular development between, say, the average blacksmith and the average clerk. The difference is greatest in the muscles of the arm. The explanation is simple. The muscles receive nourishment from the blood. The exercise of any organ causes the blood to flow freely to that organ, carrying nourishment, and causing the part to develop. On the other hand, the disuse of any organ impedes the flow of blood there, causing starvation of muscle and decay. An animal of any species will naturally use most, if not exclusively, the organs that are useful to it in the struggle for existence. Food is the first consideration with all animals, man included. Therefore, the organs that are useful in procuring food are developed, those that are not useful in that way decline, and in course of ages become rudimentary. This law helps animals still further to accommodate themselves to new conditions. A statement of it will enable the reader to understand that, in the long run, the conditions determine the type. Rudimentary organs enable the observer to perceive the road along which the species has travelled. They mark the stages of the evolutionary