

While fleetness and elasticity are the results of the mechanical conformation of the horse, solidity and strength are the objects chiefly aimed at in the construction of the pachydermata. The limbs have a great weight to sustain, in consequence of the huge size of the body; and hence the several bones which compose the pillars for its support are arranged nearly in vertical lines. The joints of the elbow and knee are placed low from the body; the ulna in the forelegs, and the fibula in the hinder, are fully developed, and are distinct from the radius and the tibia. The number of the toes, instead of being reduced to one, as in the horse, or to two, as in ruminants, is here increased to five: though, in consequence of their being very short, and of the skin which covers and surrounds them being very thick, they hardly appear externally, and are distinctly recognised only in the skeleton.

It would carry me far beyond the limits of the present work, were I to engage in a detailed examination of all the varieties of forms and structures which occur in the mechanism of the different tribes of mammalia, in reference to the purposes they are intended to serve, and to the peculiar circumstances of the animal to which they belong. I must necessarily pass over a multitude of instances of express adaptation, which are suited only to particular cases, and are, consequently, of minor importance as regards the general plans of organization. In the sort of bird's-eye view that I am taking of the endless modifications of structure which have been executed in conformity with those plans, I am only able particularly to notice such as are most remarkable.

#### § 8. *Rodentia.*

As the tribes of mammalia we have hitherto examined, employ the anterior extremities for the purposes of progress-

man fœtus, given rise to a monstrosity very much resembling the trunk of the tapir or of the elephant. (See Geoffroy St. Hilaire.)