

Mammals, are still scarcely distinguishable from those of Tortoises and other Reptiles. The cleavage of the yolk is partial in the case of Birds and Reptiles, in Mammals it is total. The red blood-cells of the former possess a kernel, those of the latter do not. The hair of Mammals develops in closed follicles in the skin, but the feathers of birds and also the scales of reptiles develop in hillocks on the skin. The lower jaw of the latter is much more complicated than that of Mammals; the latter do not possess the quadrate bone of the former. Whereas in Mammals (as in the case of Amphibia) the connection between the skull and the first neck vertebra is formed by two knobbed joints, or condyles, in Birds and Reptiles these have become united into a single condyle. The two last classes may therefore justly be united into one group as Monocondylia, and contrasted to Mammals, or Dicondylia.

The deviation of Birds from Reptiles, in any case, first took place in the mesolithic epoch, and this moreover probably during the Trias. The oldest fossil remains of birds are found in the upper Jura (*Archæopteryx*). But there existed, even in the Trias period, different Saurians (*Anomodontia*) which in many respects seem to form the transition from the *Tocosauria* to the primary ancestors of Birds, the hypothetical *Tocornithes*. Probably these *Tocornithes* were scarcely distinguishable from other beaked lizards in the system, and were closely related to the kangaroo-like *Compsognathus* from the Jura of Solenhofen. Huxley classes the latter with the *Dinosauria*, and believes them to be the nearest relations to the *Tocornithes*.

The great majority of Birds—in spite of all the variety in the colouring of their beautiful feathery dress, and in the