

many times ; for, at the inner side of the base of every old tooth, there is always the bony germ of a new one.

The eyes of this marine monster were much larger than those of any animal now living ; in volume they frequently exceed the human head, and their structure was one of their most remarkable peculiarities. In front of the sclerotic coat or capsule of the eye there is an annular series of thin bony plates, surrounding the pupil. This structure, which is now only met with in the eyes of certain turtles, tortoises, and lizards, and in those of many birds, could be used so as to increase or diminish the curvature of the transparent cornea, and thus increase or diminish the magnifying power, according to the requirements of the animal—performing the office, in short, of a telescope or microscope at pleasure. The eyes of the Ichthyosaurus were, then, an optical apparatus of wonderful power and of singular perfection, enabling the animal, by their power of adaptation and intensity of vision, to see its prey far and near, and to pursue it in the darkness and in the depths of the sea. The curious arrangement of bony plates we have described furnished, besides, to its globular eye, the power necessary to bear the pressure of a considerable weight of water, as well as the violence of the waves, when the animal came to the surface to breathe, and raised its head above the waves. This magnificent specimen of the fish-lizard, or Ichthyosaurus, as it was named by Dr. Ure, now forms part of the treasures of the British Museum.

At no period in the earth's history have Reptiles occupied so important a place as they did in the Jurassic period. Nature seems to have wished to bring this class of animals to the highest state of development. The great Reptiles of the Lias are as complicated in their structure as the Mammals which appeared at a later period. They probably lived, for the most part, by fishing in shallow creeks and bays defended from heavy breakers, or in the open sea ; but they seem to have sought the shore from time to time ; they crawled along the beach, covered with a soft skin, perhaps not unlike some of our Cetaceæ. The Ichthyosaurus, from its form and strength, may have braved the waves of the sea as the porpoise does now. Its destructiveness and voracity must have been prodigious, for Dr. Buckland describes a specimen which had between its ribs, in the place where the stomach might be supposed to have been placed, the skeleton of a smaller one—a proof that this monster, not content with preying on its weaker neighbours, was in the habit of devouring its own kind. In the same waters lived the Plesiosaurus, with long neck and form more strange than that of the Ichthyosaurus ; and these potentates of