

Tortoises, and Lizards; and in a less degree in Crocodiles. (Pl. 10, Figs. 4. 5. 6.)

In living animals these bony plates are fixed in the exterior or sclerotic coat of the eye, and vary its scope of action, by altering the convexity of the cornea: by their retraction they press forward the front of the eye and convert it into a microscope; in resuming their position, when the eye is at rest, they convert it into a telescope. The soft parts of the eyes of the Ichthyosauri have of course entirely perished; but the preservation of this curiously constructed hoop of bony plates, shows that the enormous eye, of which they formed the front, was an optical instrument of varied and prodigious power, enabling the Ichthyosaurus to descry its prey at great or little distances, in the obscurity of night, and in the depths of the sea; it also tends to associate the animal, in which it existed, with the family of Lizards, and exclude it from that of fishes.*

power. They may be compared to a person near-sighted, who sees objects with superior magnitude and brilliancy when within the prescribed limits of his natural powers of vision, from the increased angle these objects subtend." Yarrel on the Anatomy of Birds of Prey, Zool. Journal, v. 3, p. 188.

* There are analogous contrivances for the purpose of resisting pressure, and maintaining the form of the eye in fishes, by the partial or total ossification of the exterior capsule; but in fishes, this ossification is usually simple, though carried to a different extent in different species; and the bone is never divided transversely into many plates, as in Lizards and Birds; these capsules of the eye are often preserved in the heads of fossil fishes: they abound in the London clay; and occasionally occur in chalk.