

of caverns; and their remains are frequently dug up in the superficial marls, clays, gravel and sand of England. As the teeth of these animals will occasionally be met with by the collector, a brief explanation of their form and structure may be useful.

TEETH OF MAMMALIA.—The organization of the teeth in the herbivorous mammalia, essentially consists in the adaptation of the three elements of dental structure to the peculiar conditions required by the habits and economy of the different species. Thus, in the Elephant, Horse, &c., the dentine, cement, and enamel are disposed in vertical plates more or less inflected; the enamel and cement penetrating the body of the tooth, and embracing corresponding processes of dentine; an arrangement by which a grinding surface, composed of three substances of unequal densities is produced and maintained in every state of detrition.* But these teeth do not possess the symmetrical and complicated structure observable in those of many of the reptiles and fishes we have previously investigated. In the carnivorous mammalia, the enamel constitutes an external shell or case, investing the body of dentine, and presenting sharp cusps, or trenchant ridges, adapted for the laceration of flesh, as in the Tiger, or modified so as to form instruments for snapping and crushing bones, as in the teeth of the Hyena.

* Professor Owen.