the vegetable productions on which they feed, but do not chew them. Their teeth frequently present an appearance of having been chipped off, but never, like the fossil teeth of the Iguanodon, have a flat ground surface (see fig. 304, b), resembling the grinders of herbivorous mammalia.

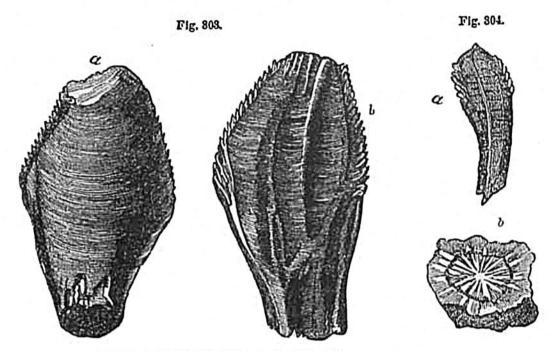


Fig. 803. a, b. Tooth of Jouanodon Mantelli. Fig. 804. a. Partially worn tooth of young individual of the same. b. Crown of tooth in adult, worn down. (Mantell.)

Dr. Mantell computes that the teeth and bones of this species which passed under his examination during twenty years must have belonged to no less than seventy-one distinct individuals, varying in age and magnitude from the reptile just burst from the egg, to one of which the femur measured 24 inches in circumference. Yet, notwithstanding that the teeth were more numerous than any other bones, it is remarkable that it was not until the relics of all these individuals had been found, that a solitary example of part of a jaw-bone was obtained. More recently remains both of the upper and lower jaw have been met with in the Hastings Beds in Tilgate Forest. Their size was somewhat greater than had been anticipated, and Dr. Mantell, who does not agree with Professor Owen that the tail was short, estimates the probable length of some of these saurians at between 50 and 60 feet. The largest femur yet found measures 4 feet 8 inches in length, the circumference of the shaft being 25 inches, and, if measured round the condyles, 42 inches.

Occasionally bands of limestone, called Sussex Marble, occur in the Weald Clay, almost entirely composed of a species of *Paludina*, closely resembling the common *P. vivipara* of English rivers.

Shells of the *Cypris*, a genus of Crustaceans before mentioned (p. 31) as abounding in lakes and ponds, are also plentifully scattered through the clays of the Wealden, sometimes producing, like plates of mica, a thin lamination (see fig. 307). Similar cypris-bearing marks are found in the lacustrine tertiary beds of Auvergne (see above, p. 199).