

more efficient successor.* In this last stage the form of the tooth had entirely changed, and the crown had become flat, like the crown of worn-out human incisors, and capable of performing imperfect mastication after the cutting powers had diminished. There is, I believe, no other example of teeth which possess the same mechanical advantages as instruments of cutting and tearing portions of vegetable matter from tough and rigid plants. In this curious piece of animal mechanism, we find a varied adjustment of all parts and proportions of the tooth, to the exercise of peculiar functions; attended by compensations adapted to shifting conditions of the instrument, during different stages of its

and here we find a provision of another kind to give efficacy and strength. The front was traversed longitudinally by alternate ridges and furrows, (Pl. 24, Figs. 2, 5, 6, 7, 8), the ridges serving as ribs or buttresses to strengthen and prevent the enamel from scaling off, and forming, together with the furrows, an edge slightly wavy, and disposed in a series of minute gouges, or fluted chisels; hence the tooth became an instrument of greater power to cut tough vegetables under the action of the jaw, than if the enamel had been in a continuous straight line. By these contrivances, also it continued effective during every stage through which it passed, from the serrated lancet-point of the new tooth, (Fig. 1), to its final consumption. (Fig. 10, 11.)

* In Pl. 24, Fig. 13, the jaw of a recent Iguana exhibits the commencement of this process, and a number of young teeth are seen forcing their way upwards, and causing absorption at the base of the older teeth. Figs. 10, 11, exhibit the effect of similar absorption upon the residuary stump of the fossil tooth of an Iguanodon.