

Pl. 6, W. X. represents the manner in which each lower tooth was opposed to the tooth above it, so that the hard enamel of the one should come in contact only with the softer materials of the other; viz. the edges of the plates of enamel, (b) rubbing upon the ivory, (c); and the enamel, (b'), upon the crusta petrosa, (a), of the two teeth opposite to it. Hence the act of mastication formed and perpetually maintained a series of wedges, locking into each other like the alternate ridges on the rollers of a crushing-mill; and the mouth of the Megatherium became an engine of prodigious power, in which thirty-two such wedges formed the grinding surfaces of sixteen molar teeth; each from seven to nine inches long, and having the greater part of this length fixed firmly in a socket of great depth.

As the surfaces of these teeth must have worn away with much rapidity, a provision, unusual in molar teeth, and similar to that in the incisor teeth

of each tooth, in the relative adjustment of the thickness, of the lateral and transverse portions of the plate of enamel, which is interposed between the external crust, (a), and the central ivory, (c). Had this enamel been of uniform thickness all round the central ivory, the tooth would have worn down equally to a horizontal surface. In the crown of the tooth, Pl. 6, Z. the plate of enamel is seen to be thin on the two sides of the tooth, whilst the transverse portions of the same plate, (b. b.) are comparatively thick and strong. Hence the weaker lateral portions of thin enamel wear away more rapidly, than the thicker and stronger transverse portions, (b b), and do not prevent the excavation of the furrow across the surface of the ivory, c.