THE GLENOID FOSSA IN THE SKULL OF THE ESKIMO.

great width of these palates, as compared with their length. (The palato-maxillary length in these cases has been measured from the mid-point of a line drawn across the hinder borders of the maxillary bones, to a point between the anterior margins of the central incisors; hence this measurement is not strictly comparable with those given by Dr. Keith as the measurements for the Heidelberg, Gibraltar, and Jersey specimens). The form of the palate in the Eskimoskull No. 1 illustrated here (see Plate IV), is very typical of this horseshoe shape, and is very similar to the palatal shape of the Gibraltar skull. As we have already seen, the biting and chewing muscles are all in a high state of development in the Eskimo skulls, while the external ptervgoid plates are noticeably large. Now the external pterygoid muscles are the direct agents in the side-to-side grinding movement. If the muscles on one side act, the corresponding side of the jaw is drawn forward, and the other condyle remaining comparatively fixed, the symphysis deviates to the opposite side. The alternation of these movements on the two sides produces trituration. When we turn to the teeth, although the roots do not show that degree of specialization to which those of Mousterian man had arrived, yet the form which the wearing down of their crowns takes is very noteworthy. All the teeth are in the adult very much worn down by attrition, the incisors and canines just as much as, and sometimes even more than, the others. This appearance is due to the fact that in this race, as indeed is the general rule among all races living under primitive conditions of food and cookery, the lower incisors are in apposition to those in the upper jaw and do not, as in civilized races, bite behind them.1 Hence, in a side-to-side grinding movement of the mandible, accompanied, as it will necessarily be, by anteroposterior movements as well, the surface of the incisors would play over each other to the same extent as those of the molars; in addition to which must be taken into consideration also the wear occasioned by the meeting of these teeth in biting movements of the jaws.

¹See "Craniology of Australians with reference to dentary arcade," by Sir William Turner, Journ. Anat. and Phys., 1891.

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