

by actual compression, and partly by the growth of the brain and skull being thereby limited to certain directions. Hales, the Ethnographer of the Exploring Expedition, after describing the process as practised among the Chinooks, remarks: "The appearance of the child when just released from this confinement is truly hideous. The transverse diameter of the head above the ears is nearly twice as great as the longitudinal, from the forehead to the occiput. The eyes, which are naturally deep set, become protruding and appear as if squeezed partially out of the head."* Mr. Paul Kane in describing to me the same appearance, as witnessed by him on the Columbia River, compared the eyes to those of a mouse strangled in a trap. The appearance is little less singular for some time after the child has been freed from the constricting bandages; as shown in an engraving from one of Mr. Kane's sketches of a Chinook child seen by him at Fort Astoria.* In after years the brain as it increases, partially recovers its shape; and in some of the deformed adult skulls one suture gapes, while all the rest are ossified, and occasionally a fracture, or false suture remains open. An adult skull of the same extremely deformed shape, among those brought home by the Exploring Expedition, illustrates the great extent to which the brain may be subjected to compression and malformation without affecting the intellect. It is that of a Nasqually chief, procured from his canoe bier in Washington Territory. (No. 4549.) The internal capacity, and consequent volume of brain, is 95 cubic inches. The head is compressed into a flattened disc, with the forehead receding in a straight line from the nasal suture to the crown of the head, while the lambdoidal suture is on the same plane with the foramen magnum. The sutures are nearly all completely ossified; and the teeth ground quite flat, as is common with many of the tribes in the same region, and especially with the Walla-walla Indians on the Columbia River, who live chiefly on salmon, dried in the sun, and invariably impregnated with the sand which abounds in the barren waste they occupy. I assume the unimpaired intellect of the Nasqually chief from his rank. The Flathead tribes are in the constant habit of making slaves of the Roundheaded Indians; but no slave is allowed to flatten or otherwise modify the form of her child's head, that being the badge of Flathead aristocracy. As this has been systematically pursued since ever the

* Ethnography of the U. S. Exploring Expedition, p. 216.

† Prehistoric Man, Vol. II. p. 320.