

and four of the children had the right central incisor slightly overlapping the left. Prominent upper teeth, accompanied by contraction of the arch, or large mandibles, will be often found to be transmitted through many generations.

Talbot is of opinion that in race crossing an explanation of some irregularities can be found.

Each nation has its peculiar characteristics and customs, which manifest themselves in "the head and skeleton, the general contour and mould of the body, the manners," etc., and the older the race the more fixed these characteristics. One race may possess large jaws and equally large teeth, another small jaws and proportionately small teeth. If, now, a person of the one race marry one of the other, it is quite possible, even probable, that irregularity in some shape will be present in the offspring. In support of this view Talbot instances the fact that in new races, such as the American where inter-racial marriage is frequent, irregularities are prevalent, while in races such as the Chinese and African, irregularities are seldom met with. On the other hand, the presence of irregularities among the Hawaiians must not be lost sight of. Mr. J. R. Headridge⁴ considers that this hypothesis of Talbot's is untenable and instances that in dogs, where crossbreeds between parents of very different sizes are frequent, irregularities are very rare. In practice one certainly meets with cases where one parent has large teeth and jaws, and the other small teeth and jaws, the offspring inheriting the large teeth of one parent and the small jaws of the other. That inter-marriage of races plays a part in the production of some irregularities seems extremely probable. The question, however, demands a more thorough investigation.

That diminution in the size of the jaws has taken place in the inhabitants of England, is shown by the statistics of Talbot.⁵ According to this observer the early Britons possessed maxillæ, varying in their lateral diameters⁶ from 2.12 to 2.62 inches. In modern Englishmen the maxillæ vary from 1.88 to 2.44, the minimum diameter has thus decreased more than the maximum. A comparison of the maxillæ of ancient Romans and modern inhabitants of southern Italy gives a similar result. With the present generation those drawn from the lower social scale have wider maxillæ than those from the higher.

Modern civilization probably produces these effects in the maxillæ partly through the arterial system. The brain and osseous structures of the face derive their main blood supply from the same source, viz., the common carotid. The strain of modern education, the character of amusements, indeed, the whole environment of the individual, entails a greater call upon the brain than the more primitive mode of living in days gone by and thus necessitates a larger supply of nutritive material to that structure.