text-books on orthodontia: "When one parent possesses a large frame, with full-sized teeth set in large jaws, and the other a small frame, with correspondingly small jaws and small teeth, the child may inherit the large teeth of one parent and the small jaws of the other."

After much investigation, I am unable to reconcile this view with the teachings of embryology or with heredity as set forth by Galton, Weissmann, or even Darwin; in fact, I am led to believe that such is not the case.

There certainly must be a consistent law of transmission, as, for example, paired structure. We don't have one brown eye and one blue. In further proof of this, outside of paired structure, we don't have the small feet of the female and the large hand of the male represented in the same normal being. The teeth and jaws are the product of the same embryonic layer, the mesoderm (except enamel, which obviously does not determine the size of the teeth); they are therefore very intimately related. If then, as it seems, there is a consistent law of transmission, does it seem probable to suppose that a tendency to inherit scant distribution of structure in the jaws would be transmitted from one side of the family and a tendency toward extravagant distribution in the teeth from the other?

There are also many heritages that come from one side of the family to the exclusion of the other; for instance, if one progenitor is dark-eyed, with a like family history, and the other is light-eyed, with a supporting family history, the tendency of the offspring is not toward intermediate or blended tints, but to take one or the other.

I believe that in structure so intimately related as the jaws and dentin this same tendency will hold good.

It has probably been noticed that reference to the immediate progenitors, without considering family influence, has been avoided, for this reason:* "It appears that there is no direct hereditary relation between the personal parents and the personal child, except perhaps through little-known channels of secondary importance; but that the main line of hereditary connection unites the sets of elements out of which the personal parents had been evolved with the set out of which the personal child was evolved."

Suppose for a moment it be granted that irregularities may be caused by the transmission of the small jaw of one progenitor and the large teeth of the other, according to the foregoing standard authority, the immediate parents would have very little direct influence unless this same relative disparity had existed

*Galton.