

of the true relation existing between operator and patient, and will at least establish an intelligent understanding between them.

In character salivary calculus may vary from a soft granular mass, easily removed and disintegrated with an instrument, to a hard, dense, and almost flint-like consistence. This difference in density relates chiefly to the rapidity with which it is formed and the length of time it is allowed to remain in the mouth. When it is rapidly deposited and of recent formation it is comparatively soft, but seems to grow progressively harder if left undisturbed. The color also varies materially in different specimens, from a yellowish gray to a black, the former usually being associated with rapid and recent formations, while the latter is ordinarily confined to cases of long standing. In some mouths the yellowish gray remains almost indefinitely, so that the question of color is not entirely one of age; and yet in specimens of extensive accumulation, such as those illustrated, it will usually be found that the portion nearest the tooth, and also that immediately overlying the gum tissue, and which accordingly has been longest in place, is much darker than that more recently formed upon the surface.

The present reference to color relates to a staining of the calculus itself, and not to a surface deposit of black such as is commonly found in the mouths of smokers. The latter is a characteristic jet-black discoloration, unmistakably from tobacco smoke, while the former is less intensely black, with sometimes a greenish tinge, —especially where it has been long in contact with the gum,—and its source is not so apparent.

#### Serumal Calculus.

This deposit is distinguishable from salivary calculus in several particulars, but chiefly in its initial point of location on the tooth. Salivary calculus finds its lodgment on that portion of the tooth which is bathed in saliva, and therefore becomes adherent to the crown or neck of the tooth, the part not covered by the gum. It may advance and force the gum and adjacent tissues back so as to follow the root to the apex, as in Fig. 1; and yet it begins not under the gum, but crownwise of it. Serumal calculus, on