

that its porous structure becomes filled with living matter, a vital union being formed in this way. If the periosteum takes any part at all in this process, it is supposed to act as a leader, just as a sponge does in sponge-grafting. The other theory is that there is no vital union, but that there is a deposit of bone all about the root, and that the tooth is held mechanically.

All this teaches us that, as yet, we don't know very much about implantation; and that there is plenty of room for interesting experiments, and careful observation of results.

But let it not be supposed from the foregoing that implantation is a simple operation which any one can perform in a slipshod manner, with reasonable hope of success. There are dangers on all sides to be guarded against. No one should attempt the operation who is not thoroughly familiar with the anatomy of the parts. Serious complications might arise from even a slight deviation from the proper course in drilling. In the case of superior bicuspid, the location of the floor of the alveolus is very difficult to determine, and its perforation would be serious, and possibly dangerous. In the cuspid region the nerves are unusually large, and the vascular supply is derived from vessels which have no fixed canals, thus rendering this apparently safe region a somewhat dangerous one. In the case of centrals, unless the drilling is done slightly in the direction of the laterals, the instrument is liable to penetrate the palatal nerve canal. In the case of all the lower teeth, extreme care must be taken not to drill into the inferior dental canal, the result of which would be serious. Then, too, in preparing the tooth to be inserted, it should never be forgotten that it may possibly contain latent disease germs, and the disinfection should, therefore, be made as thorough as possible.

Knowing, however, the difficulties to be encountered as well as the dangers to be guarded against, and how to avoid them, I think that practitioners should perform the operation whenever the circumstances will justify it, and carefully note the results. By so doing, I feel confident that in the course of a few years at most, we will have arrived at the proper conclusions in reference to the scientific questions involved in this operation, and the best methods to be adopted in performing it.