

secretions are markedly acid, and from that cause a recurrence of decay is liable to take place ; at that period the teeth are also very sensitive. For these reasons gutta percha is a valuable filling material at and before that period until the composition of the teeth is determined and the fluids of the mouth have returned to their normal state.

It is urged as an objection to gutta percha that it shrinks from the walls of the cavity, but if the cavity be kept perfectly dry and the walls are first coated with a solution of gutta percha in chloroform and the filling then introduced without too much heat and kept under pressure until it cools all the shrinkage will be about counterbalanced by the heat and moisture of the mouth.

It is well adapted to buccal cavities in second and third molars where there is a tendency to superficial decay, as the filling must be frequently removed. Approximal cavities which can be easily approached from the side instead of the crown are suitable cases for treatment with gutta percha ; but here there is one objection to its use ; when severe pressure comes on the crown over the filling, if there is only a thin portion of tooth tissue intervening, it will give way as the gutta percha is not sufficiently hard to afford support, so this treatment is only admissible where the cavity is a considerable distance from the crown.

Cement filling has of late years taken an important place among filling materials and presents many useful properties, but has one fault which entirely destroys its worth as a permanent stopping, that is its solubility in the fluids of the mouth. It is especially soluble if there be a small amount of acid present, and acid is found in nearly every mouth from some source or other ; if the saliva be not acid itself, there are other sources from which the destructive agent may come, such as acids taken with food or medicine, or formed by the decomposition of particles of food left between the teeth. If the fluids of the mouth were always alkaline then cement fillings would give efficient service for a length of time, but although the saliva is slightly alkaline when first secreted it becomes neutral and frequently acid when mixed with the secretion of the mucous glands of the mouth, and its influence is constant upon the filling. The decay of the teeth is of itself a proof of the presence of acid, for decay in its first stages consists in a decalcification of the hard tissues of the teeth by acids present in the mouth.