

The cements are very valuable as capping or nonconductors in large cavities under metallic fillings where the pulp is nearly or altogether exposed, because the salts of a metal are not as good conductors of heat and cold as the metals themselves. In the choice of a cement for this purpose one should be sought which will not produce too much pain and discomfort to the patient. If the pulp is exposed it is well to cover the exposed part with oxide of zinc, mixed into a soft putty-like mass with creasote, then apply the cement in a consistency which will require little or no pressure and leave unmolested until thoroughly set. A filling made of oxide of zinc and powdered silica mixed with phosphoric acid is less irritating than one mixed with zinc chloride and makes equally as good cement for lining cavities.

Tooth tissue will not decay under oxychloride filling, and even partially decayed dentine will become hard and serve for many years when left over a nearly exposed pulp if covered with this cement. The ingredients of the cement act as both stimulant and antiseptic, inducing in some cases better organization in the living tissues to which it is applied. It is the only filling material that adheres to the wall of the cavity and will therefore be more likely to exclude moisture, but when the filling becomes dissolved away from the edge of the cavity it will allow recurrence of decay just the same as any other filling, when not in contact with the wall of the cavity. Where the operator intends to insert a metallic filling in a tooth of soft composition it is well to line the cavity with oxychloride or other cement, allowing it to come as near to the edge as possible without being exposed, make the retaining grooves in the cement, and fill with gold or amalgam, whichever is most suitable to the case.

This method will give the advantages of a hard surface with the preservative influence of the cement against the walls of the cavity.

The good qualities of oxychloride or oxyphosphate filling may be enumerated as follows:—It is a non-conductor, it adheres to the walls of the cavity, therefore excludes moisture; it has a beneficial therapeutical action on tooth tissue with which it is in contact, it is easily introduced and easily adapted to the walls of the cavity, and it is very near the color of the teeth.

It may be used to advantage in the following cases:—For filling nerve canals and pulp chambers, for lining cavities in sensitive teeth, for capping exposed pulps, for temporary or test fillings, for filling