

WHY DO SO MANY AMALGAM FILLINGS FAIL?*

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I presume the question is not intended to include those cases of recurring caries clearly due to predisposing causes prevailing in the oral cavity; such causes have, and ever will, continue to produce recurring decay, irrespective of the filling material used or the quality of operations performed.

I deny that we should in any degree recognize failure in those cases of recurring caries due to causes and conditions entirely beyond our control, any more than the physician acknowledges failure in his treatment, when a patient has a second seizure of typhoid a year or two subsequent to treatment for the same disease.

It is not the intention to enter into any so-called scientific solution of this question. I propose briefly to state the conclusions arrived at from years of observation of amalgam fillings inserted by others as well as by myself.

I am convinced all cases of recurring caries which may be properly called failures are due to two general causes—bad amalgam and defective preparation of cavities. Bad amalgams may result from improper proportions of desirable metals, or from the introduction of some objectionable element in the alloy, or a good alloy may be spoiled in the amalgamation by leaving too much mercury, or by using impure mercury, or by allowing the amalgam to partially set before using.

Amalgams made from improper alloys shrink or swell in the setting—according to the excess of either metal—in either case making a defective operation. Fillings made from amalgams too soft, or partially set, lack the so-called “edge” strength, and have not the resistance necessary in grinding surfaces. The alleged “balling,” or “spheroiding,” of amalgam fillings I have not observed. Defective preparation of cavities is undoubtedly responsible for the greater number of failures. Without implying censure on my professional brothers, or admitting fault on my own part, I make the statement that three-fourths of all amalgam fillings in approximal cavities have been placed on imperfectly excavated or defectively formed cervical walls. The disposition to avoid “hurting” the sensitive and timid, is a barrier few of us have the moral courage to surmount, and a still smaller number can afford to disregard the protests of such patients. The

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