

slightest extent, even in cases that have been repeatedly salivated by taking mercurials; if so, I have never witnessed a case during many years professional observation.

I have seen a filling, but a short time since, made of silver filings and mercury, that had been in a lower bicuspid twenty-five years, the filling being perfectly sound, and the tooth all round, except near the gum, where a cavity below had nearly reached the filling. This filling was very dark on the surface, but on running a file over it slightly, it gave a pure, sound white surface; in consequence I left the filling in, and filled below it. This dark surface was the result of the silver oxidizing slightly.

Remove any amalgam filling from any tooth, and file the surface, and the filed portion will become white and metallic. In order to get protoxide of mercury, which is the only one of consequence, mercury must be heated up to 600 degrees with free access of air; then red precipitate is formed, which is the protoxide, and on raising the heat higher, this oxide is again decomposed into the simple elements.

To form calomel, which is a subchloride, subnitrate of mercury is precipitated by common salt; it is also formed by other processes. Protochloride of mercury, or corrosive sublimate, may be made in several ways. When metallic mercury is heated in chlorine gas, it takes fire and burns, producing this salt.

From the above formulas it will be seen that mercury is not readily acted on by any fluids that may exist in the mouth, as these fluids always contain, at least, from 800 to 900 parts of water in 1,000 parts, so that any acid or any other agent contained in this fluid could absolutely have no action of any moment, either on tin or silver. The latter turns dark from an oxide being formed in some mouths much more readily than in others, some mouths scarcely acting on a silver plate at all. Zauman says that mercury slowly vaporizes at all temperatures above forty degrees; some say all temperatures above sixty-six. The vaporization goes on more rapidly as the temperature is raised up to the point of ebullition 662.

All the apprehension that need give us any concern in connection with amalgam fillings, is the vaporization during the process of hardening, some of which undoubtedly will be inhaled into the lungs, as this vapor must be lighter than air, or it could not be a