

talk of contraction of gold from cold, and forget the tooth-substance. There is no appreciable change of the two, or, if any, it is not of importance.

How many are here who never saw their preceptors put a filling in a tooth in the mouth! Do not operate for any one who will not permit a third party to be present. Let the students excavate teeth in the laboratory, and finally go to the office and do *as some of my students have done,—never make a failure.*

It is damnable for a man to wilfully destroy a pulp at any time. If any vitality is left, there is hope of saving the organ. Twenty years ago I came to that conclusion. November 4, 1857, I dedicated myself to save each, all, and every part that it was possible to do.

*“Operative Dentistry.”*

Prof. ATKINSON. How would I bleach teeth? If iron discolors, cut all away but as small a portion as possible for strength; fill full of oxalic acid crystals; put a drop of water in the cavity, and mash the crystals in it. There are other agents,—salts of copper, etc.,—if we sufficiently understand chemistry, that would be available to bleach. We can use chlorine gas through a small glass pipette; must be carefully used, as it might cause oedema of glottis. Here the rubber dam is valuable. Chloride of lime, Labarraque's solution, etc., are all good.

You must not hope too much in bleaching teeth. The great majority will bleach if left to the open air. Fill with wax for a short time, and on taking it out, wash with salt water. Pure oxide of zinc with chloride of zinc is good to put in as a creamy mortar, filling the tooth full, twirling a piece of cotton in it; then cut out all but a small, thin stratum, to see the color. Don't get the teeth too white.

I generate chlorine gas by black oxide of manganese and hydrochloric acid. This works very rapidly.

The agents supposed to color the teeth may be iron from hæmatin, as the mineral, or they may be of vegetable origin; if the latter, these colors are bleached by chlorine.

My process for saving nerves, or portions of them, is to cut away all diseased parts of the tooth possible without giving too great pain, and then to sop with creasote every day—better twice a day. Often a little pus will come away. I have found the bulb come away, and leaving the pulps alive and red in the roots. In one case I have taken out the pulp of all but one buccal root. When recently exposed I treat at once; but, if not, I treat several days, and then I claim that I am no worse off than at first if I should find the pulps dead. Never put arsenic in a human being's mouth. Then put oxychloride of zinc, of cream-like consistency—