

terrible colors that the mere allusion to them produced a feeling of disgust. If other amalgams were suspected of occasionally exerting an injurious therapeutic action upon the system, what could you expect of a material compounded of two such dangerous metals as Copper and Mercury? But it was admitted that there was practically no shrinkage in an amalgam of copper and mercury. This was its only good quality; but, in the face so many dangerous qualities, who of us would have the audacity to experiment with it in the human mouth. Someone has said, "it must have been a brave man who first swallowed an oyster," but, gentlemen, I tell you it required a good deal of moral courage to put the first filling of Copper Amalgam into the human mouth under these circumstances, and I have no trouble whatever in recalling all the incidents connected with my first experiment in this line.

It is not a very difficult thing to make a Copper Amalgam—when you know how; and to one who has had a life-long experience in the manipulation of amalgams it would appear a very easy matter indeed—until he tried. It was a long time before I discovered how to cause copper and mercury to amalgamate at all, and a great deal longer before I succeeded in producing a Copper Amalgam that would set; and when, after an infinite amount of trouble and work, and the expenditure of more time and money than I would care to acknowledge, I obtained a dirty and unwholesome-looking mass of what, I hardly dared to hope, was Copper Amalgam and nothing else, the result was far from promising, and I did not wonder that dentists hesitated to use it for filling teeth. But, crude as the material was, I soon satisfied myself that it possessed properties which ought to prove invaluable in Dentistry. I resumed my experiments with a better heart for the work, and a determination to conquer. I proved, to my own satisfaction, that to the presence of metallic oxides in the amalgam was due the discoloration of the tooth structure, and, in some cases, the disintegration, wearing away or "rotting" as Flagg calls it, of the substance of the filling itself.

We all know that copper and mercury are oxidizable metals—that these metals, under certain conditions, have the power to absorb an immense amount of their own oxides, and an amalgam of these metals may contain oxides without showing them. But the presence of these oxides injures the filling more or less according to the quantity contained; and great care must be taken to avoid it.