

laid on to another, they will adhere to one another, or will become welded together so that they cannot be separated, if a moderate pressure, or concussion, is made upon them.

Dr. French wished to know, why some gold becomes hard, when annealed, and why some foils were so much more adhesive than others.

Dr. Whitney said that the gold beaters keep us in the dark on this subject, one beater giving one reason, and another another. One foil beater had assured him that the adhesiveness of foil was brought out by the degree to which the gold was heated, during the process of beating, and he, Dr. Whitney, thought that this theory was the correct one, for we find if we take the most adhesive foil and expose it to the atmosphere for a few hours, that it loses its adhesiveness; and that the adhesiveness will be restored if the foil is heated again. He thought foil should be heated to so high a temperature that, on introducing it into the mouth, the moisture from the breath would not condense upon it, and that the annealing lamp was an indispensable article on every dentist's operating table. Foil should be handled as little as possible with the fingers, as no matter how carefully you wipe your fingers, there will always be more or less moisture left on the surface of the gold from the perspiration, which may easily be detected by heating it.

Dr. Barrett uses a little of Morgan's plastic gold, to commence his fillings with, in almost every instance, and condenses as thoroughly as if he were using foil, but does not think that any of the plastic golds should ever be used on the surface of the filling, no matter how well and thoroughly they may be condensed; cannot use Morgan's gold at as high a temperature as foil, because a high heat makes it become hard and brittle; his object in annealing gold, is first, to drive off any moisture that may have collected on the surface of the gold, and secondly and chiefly, to change the polarity of the particles of the gold. He thought that this might be demonstrated to the satisfaction of any one, by the examination of a piece of foil under a microscope before and after heating it. The heating seemed to change the position of the particles of the gold, in relation to each other. The jarring motion produced a change in the particles of iron in car wheels. He thinks that heat changes the position of the particles more in sponge gold than in foil.