

hand pressure, more than a quarter of century old; and that when looking at gold fillings standing perfectly good to-day which were inserted many years ago, with very meagre facilities compared to those we now enjoy, we cannot but recognize the fact, that what was capable of being done under such circumstances in the olden time, is even more possible at present, with our improved means. But this is no more a reasonable argument for adhering to hand pressure, than that we should keep to the old key of Garengéot because it was successful in the hands of the old operators. If such a principle were held, there would be an end to all progress in the profession.

Without attempting to discuss the various principles concerned in preparing cavities, and filling, I will merely refer to one important consideration, viz.: that all other conditions being efficiently fulfilled, the more uniformly dense the gold, the better, in all probability, will be the operation. Now whether we consider the plan of consolidating each piece of gold as it is introduced, or a large body of metal which has been loosely placed in a cavity for condensation *en masse*, or the final condensation after the cavity has been completely and firmly packed, it stands to reason that the mallet will subserve the object much better than the pressure of the hand and arm. In principle it is analogous to a nail driven into a board. The most powerful hand alone could not force a nail to any extent into the wood; but the impaction of a light hammer in the hands even of one of inferior muscular development, will easily drive it up to the head. I have frequently used the mallet on hand pressure fillings of the best operators, which fillings were to all appearance solid and flush, and have invariably succeeded in driving them in, so as to be compelled to renew their fullness. By weighing the pieces of gold before introduction, I found in several instances, that I could condense these fillings, so as to enable me to put in from a quarter of a grain to three grains more gold, according to the size of the original filling, and the circumference of the mouth of the cavity. It will be easily understood that the greater the circumference of the orifice of a plugged cavity, the more easily could the contents be condensed in this experiment; and that the latter is also facilitated by convenience of access, and the strength of the walls.

Several months ago a trial was held in Boston, between automatic mallet force and hand pressure, to determine the difference of density,