

difference is not eliminated, and by careful trial I find that I cannot find it with this instrument. For instance, an amalgam that has stood until it has become stationary, if measured at a temperature of 32 degrees and then measured again at the temperature of the human body, or 98° F., will not show shrinkage or expansion on account of thermal change with this instrument, so that we regard thermal changes as being eliminated entirely from our measurements. These tubes have a groove cut around the bottom of the walls of the tube, for this reason: We find that a smooth



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tube with parallel walls, if filled with amalgam that will shrink will allow the amalgam filling to drop out, and it is necessary that we make a cut in the wall to keep the filling in the tube. Notwithstanding that, several of the fillings we have made here have become shaky in the tube. They cannot fall out, but they will shake about so that we cannot continue the measurement with this instrument; but we can follow it with the microscope.

Now, the report of the fillings made here, as many report of fillings are made, will be a jumbled mass of which you can get neither head nor tail as to whys and wherefors. We have made fillings of amalgam and measured them. Generally we have not