

placed in the muffle of the furnace and fused. When removed from the muffle it is then placed in a cold muffle and the air excluded until sufficiently cool, and when removed a shrinkage of about one-fifth in bulk will have taken place. This is known as the first biscuit. It will also be observed that cracks have formed; in some instances the body has separated from the matrix. These inevitable results make it necessary to resort to the second biscuit. A quantity of body is mixed to a creamy consistency. This is carefully jarred into the cracks, and in order to keep it from flowing out a clean and dry napkin is pressed against the surface. This absorbs the excessive moisture, and then it will be comparatively easy to mould the stiffer body and restore the original carving. It is again passed through the furnace, and should come out almost a perfect tooth in shape. But in order to imitate the natural expression with greater precision, the anterior surface of this prepared base is ground off sufficiently to make room for a prepared veneer, a front having the proper blending of color and shading to correspond with its natural neighbor, a more precise manner than could be accomplished by depending on the mere individual carving and shading before fusion.

FORMING THE MATRIX—Plate IX.

A piece of platinum, No. 60, is prepared as seen at A. The hole in the center is somewhat smaller than the tube, E. By means of the small pointed instrument, asbestos fibre is made into a rope as shown at B. The

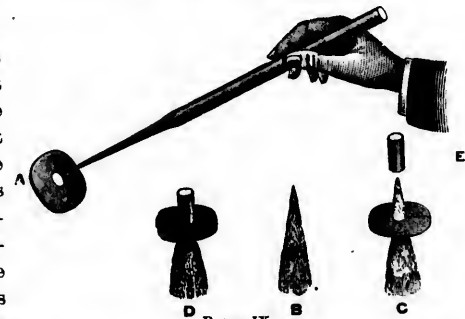


PLATE IX.

tube, E, is then passed over the fibre as indicated at C, and when packed by means of the instrument it will appear as seen at D. This will be found a very convenient and rapid method of holding the platinum tube firmly in position while soldering it to the base.