

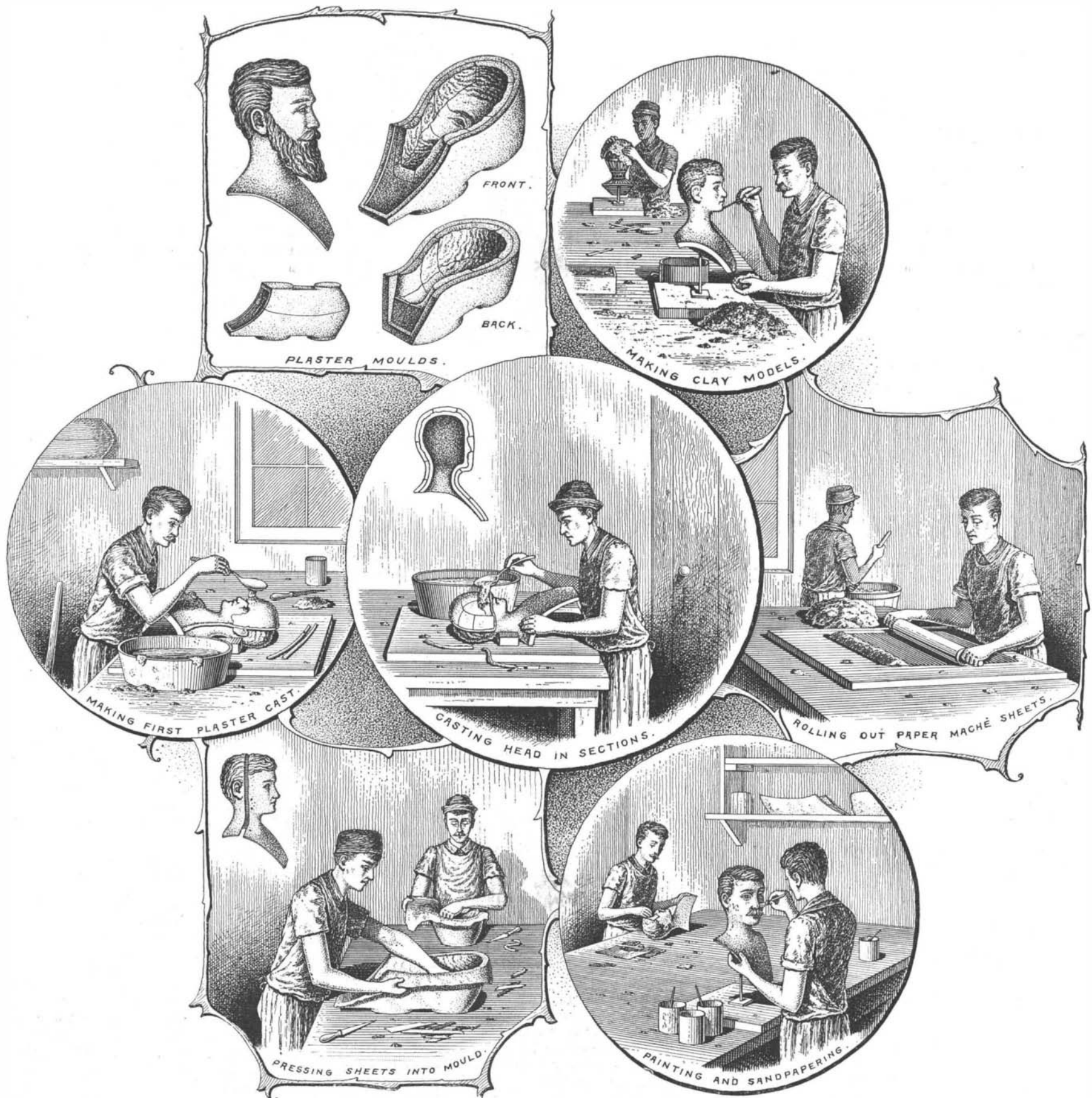
MANUFACTURE OF PAPIER MACHE BUSTS.

The illustrations accompanying this subject represent the manufacture of papier maché busts used principally by clothiers, milliners, etc., for show purposes. The busts are generally fastened over the top of wire frames made the same shape and size of a man or child, over which suits of clothing are placed to show the quality and style of the material. The material used for these busts is composed of a mixture of carpet paper, or felt, whiting, glue, linseed oil, and shellac, the material being stirred and mixed together with water to about the consistency of dough, and then rolled into sheets and pressed into plaster of Paris moulds. The first operation in the manufacture of these busts is the making of a clay model. A frame is first formed of pieces of wood

The plaster of Paris is then poured all over the section by means of a large spoon, to the thickness of an inch, and left to set for about five or ten minutes. After setting, the clay strip is taken off, the model turned over, the plaster of Paris joint of the front cast oiled, and the back then plastered over in the same manner as before. After the back section has set, the two parts are then removed from the clay model. Another cast is then made of the interior of the plaster cast, which forms a duplicate cast of the original clay model. The plaster duplicate, when set, is then taken out of the jacket and scraped and smoothed into a perfect working model. A cast of this model is then made in small sections, a strip as before being placed on the model, spacing off the section to be cast.

After the small section has been cast and set, the

about three feet in length and two feet in width, and rolled out in sheets ranging from 12 × 15 inches in width to about 15 × 22 inches in length and about from three-sixteenths to one-fourth of an inch in thickness. The operator, when the sheet is rolled out, places it while wet into the mould. The material is then pressed into the form by hand, the operation taking about one-half hour. After the papier maché is pressed into place, the overlapping edges are trimmed off with a knife and the moulds laid away on shelves to dry for about fifteen hours. After drying, the two mould sections are put together and the two papier maché joints fastened together by pressing a little of the wet material along the joints on the interior, after which the mould is left to dry again for twenty-four hours. When the joints are thoroughly dry the papier maché head is taken out and



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made about the same size and shape of a head and bust. The frame is supported in an upright position by means of a circular iron rod running up through the center, it being fastened securely to the top piece of the frame by means of iron nuts. The model maker then plasters the clay roughly over the framework to the depth of about an inch, and then with his tools forms out the features. The tools are made of steel and are curved and slightly spoon shaped at the ends. It requires about one week to form a life size model, about twenty pounds of clay being used for the operation. After drying for one day, it is then ready to have a cast taken from it. The cast is made of plaster of Paris in two sections, the front, or face, being formed first. A strip of clay about one inch in thickness is first placed all around the clay head, as a dividing line between the front and the back section.

clay strip is removed and placed again in position for the adjoining section. This operation is continued in the same manner until the entire head is cast. Some of these heads are composed of about twenty-five pieces, it requiring about two days to perform the operation. When the casting is completed over each half a plaster of Paris mantle or jacket is then cast over the sections, from about three-fourths to one inch in thickness, the operation taking about 1½ hours. The plaster jacket is allowed to set for about ten minutes. The sections or parts are then taken out of the jacket and dried thoroughly for about twenty-four hours and then shellacked. They are then put in place again as before and are ready for the papier maché. The ingredients forming the papier maché are mixed with cold water into a pulpy mass like dough. A quantity of the material when ready is placed on a marble slab

sandpapered and painted. The head is smoothed off by rubbing over the surface No. 2 and No. 3 sandpaper, after which the head is given a coat of bluish white oil paint and then two coats of flesh color. The eyes, hair, lips, etc., are painted with tube colors. The sketches were taken from the plant of H. A. Buchholz, New York City.

THE supreme court of Italy has recently decided that the original manufacturers of phenacetin are entitled to the exclusive use of the name "phenacetin," although said name is now in common use. The ground given is that phenacetin, although not a purely fanciful designation, is not the proper and official chemical name of the substance, and that the original manufacturers were the first to adopt the name phenacetin.—La Propriété Industrielle.