Hat-pressing Machine. A machine for bringing a hat or cone of hat-making material to the form of a hat. In Fig. 2438, the hat is placed on a heated mold w over which fits a dome, whose lower edge is an elastic membrane, which assumes the shape of the hat; water is forced into the dome, and compresses the film o on the hat, and forces the latter on its mold.

The smaller view shows the steam-heated mold w and dome b in section, while the larger view is a side elevation. f, f' are the force-pumps by which water is forced into the dome b through the bent pipe g and trunnion-tube c, which is on an adjustable bracket i; the mode of connection allowing a vertical motion to the dome in closing and opening, and a horizontal motion when securing the foot of the dome in the ring d by means of a bayonet-joint attachment.

In Fig. 2439, the hat g is shown in process of extension downward to fill the hat-shaped mold. The pressure of water is at the first derived from a head, but as greater force is required, the cistern tap is closed and the force-pump is brought into action, injecting water through pipe d into the dome e; at i is a connection with a manometer which indicates the pressure.

In Fig. 2440, A is a compressible block of rubber, which, under pressure, expands to fill the whole interior of the hollow die and press the hat-cone against the surface, while the brim is held between yielding surfaces which preserve its shape.