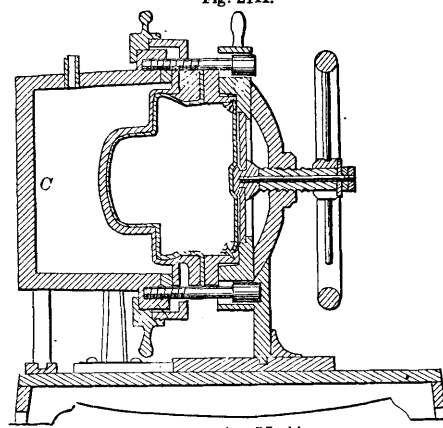


Hat-stretching Machine. A machine having a series of radially arranged arms, hinged to a head-block *b*, so as to be expanded. They stretch out the hat-cone, which is placed over them, and prepare it for blocking. In the example, Fig. 2442, the block is raised into contact with the stretched top of the hat, and then

Fig. 2441.

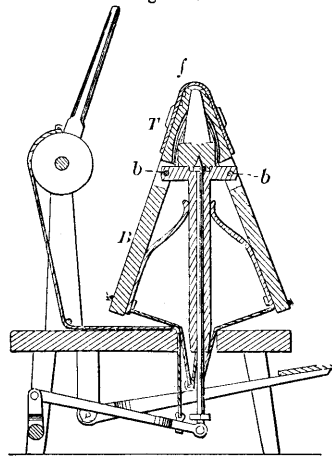


Hat-Pressing Machine.

pushed up by means of a lever, so as to draw it up. The rubber bands fit on the body, and holds it when the stretcher-levers *B* are separated at their upper ends. The hat-cone *f* is shown as clamped to the conical system of levers by the band *T*.

In Fig. 2443, the pieces *b d d'* are adapted to receive a cone supporting both the crown and brim portions; rising with the cone, they carry it against two other sets of ribs or rollers *m^s m^s* radially arranged, by which contact the body is crimped or stretched so as to have the requisite fullness to be

Fig. 2442.



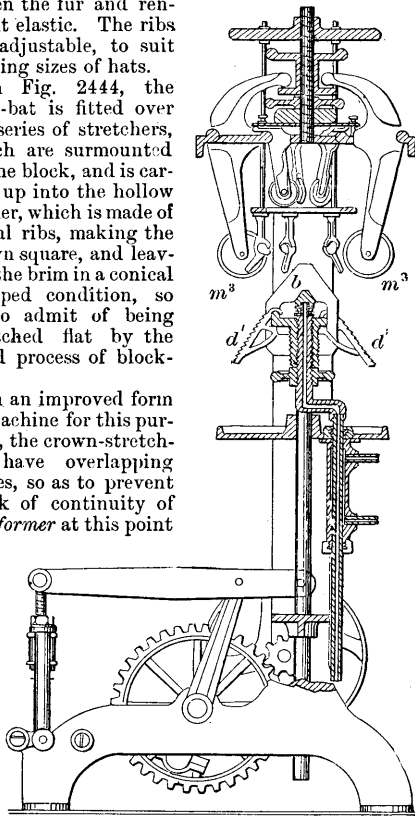
Hat-Stretching Machine.

brought into the hat form over a block. Jets of steam are introduced through the spindle to soften the fur and render it elastic. The ribs are adjustable, to suit varying sizes of hats.

In Fig. 2444, the cone-bat is fitted over the series of stretchers, which are surmounted by the block, and is carried up into the hollow former, which is made of radial ribs, making the crown square, and leaving the brim in a conical crimped condition, so as to admit of being stretched flat by the hand process of blocking.

In an improved form of machine for this purpose, the crown-stretchers have overlapping plates, so as to prevent break of continuity of the former at this point

Fig. 2443.



Hat-Stretching Machine.

when the parts are distended. This is also accomplished by an india-rubber cap. When the brim-stretchers clamp the brim on arriving at a horizontal plane, they expand radially, drawing the body against the banding-ring, stretching the brim cir-