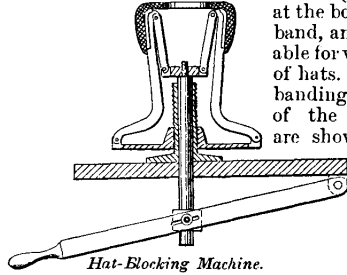


**Hat-block'ing Ma-chine'.** A machine for blocking hats, stretching out the crown by means of expansible framework, and stretching out the brim by clamps, which take hold of the brim, and are then raised from an inclined to a horizontal position. The expansible framework is raised and lowered by a screw stem, so as to adjust it to varying depths of hats. The ring serves several purposes, giving pressure to the clamps by means of springs, and forming a point of attachment for the inclined projections for giving the edge of the brim an extra

Fig. 2422.



Hat-Blocking Machine.

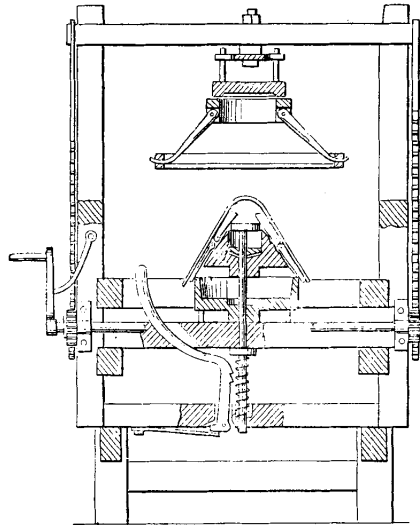
stretch to overcome the shrinkage. The rim *o* at the bottom *breaks* the band, and is changeable for varying sizes of hats. Fig. 2421, the banding-ring and a part of the stretching-arm are shown as laid over away from the cone; it is brought into operation upon the hat-body by swinging over,

bringing the stretchers *n n* between the part *g g* and the banding-ring *o*, upon the band of the hat.

Fig. 2422 shows the rubber over the crown stretchers to prevent undue corrugating of the body.

In Fig. 2423 the cone to form the body is placed upon the block *E*, which has two circumferential series of slanting ribs above it. When the carriage

Fig. 2423.



Boyden's Hat-Blocking Machine.

is raised so as to bring the cone within the hollow former above, the piston *D* expands the upper series of radial arms, distending the crown, which is thereby pressed against the sides of the block *T T*, and flattened against the crown-piece *H*; the crown and sides are then blocked. The brim is distended by the rising of the ring *L* against the inside edges of the lower and outer series of hinged arms, which are thus pressed against the under side of the brim and press the latter against and between the arms *V* of the former above.