F. C. TAYLOR.

Machine for Stretching the Tips of Hat-Bodies.

No. 161,992. Patented April 13, 1875.

Fig. 1.

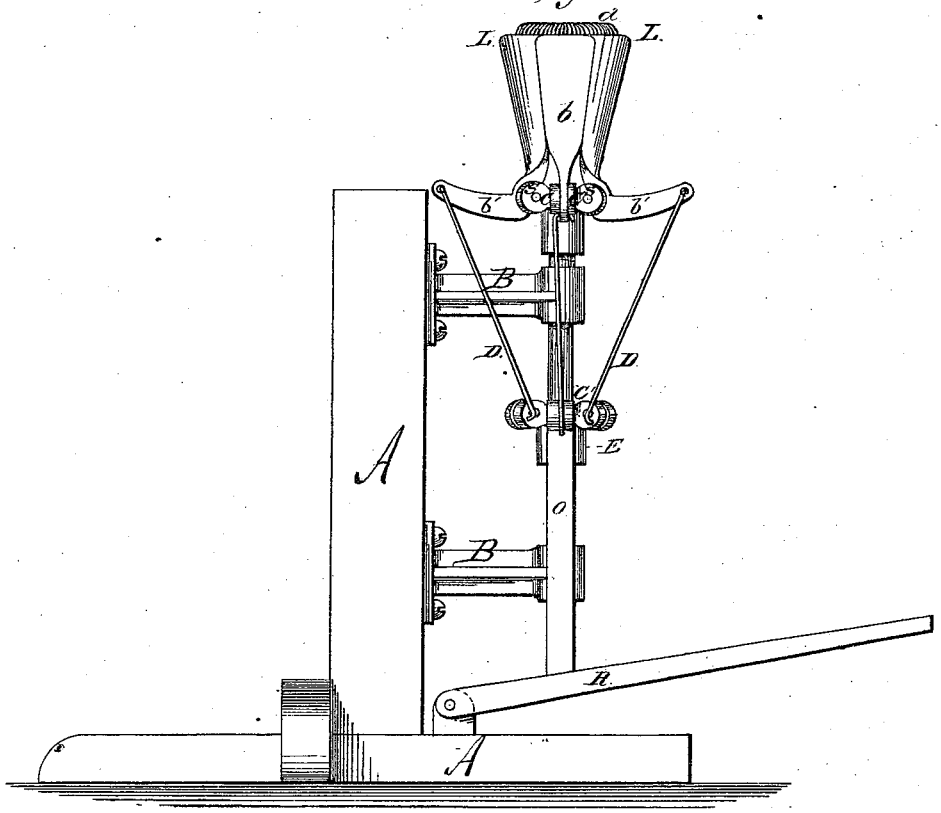


Fig. 3

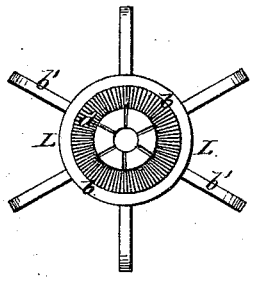
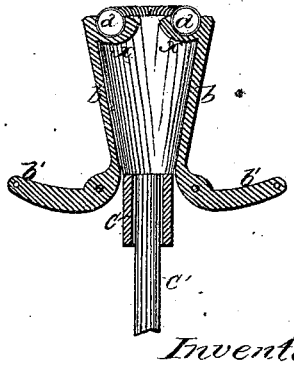


Fig. 2



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UNITED STATES PATENT OFFICE.

FRANCIS C. TAYLOR, OF DANBURY, CONNECTICUT.

IMPROVEMENT IN MACHINES FOR STRETCHING THE TIPS OF HAT-BODIES.

Specification forming part of Letters Patent No. **161,992**, dated April 13, 1875; application filed January 5, 1875.

To all whom it may concern:

Be it known that I, FRANCIS C. TAYLOR, of Danbury, county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Machinery for Stretching the Tips of Hat-Bodies; and I do hereby declare the following to be a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, and to the figures and letters of reference marked thereon, making a part of this specification.

The object of my invention is to provide an arrangement for uniformly stretching the tips and squares of hat-bodies preparatory to stretching them over the hat-block in the processes of blocking.

The nature of my invention consists of a series of expanding jaws with appropriate levers and connections, in connection with an endless coiled spring, by means of which the hat-body is stretched from a point near the extreme tip outward in a direction toward the square of the hat.

To enable others skilled in the arts to make and use my invention, I will proceed to describe its construction and operation.

Figure 1 represents a side elevation of my invention; Fig. 2, a vertical section through the expanding jaws; Fig. 3, a plan view of the stretching mechanism.

In the drawings, A represents the frame of the machine, of any suitable material, to which is firmly attached the hangers or supports B B. C represents a support with sockets S S, and is rigidly secured to the hanger C′. To this support is hinged a series of expanding jaws, *b b*, the same having recess *x*, to form a seat for the coiled spring *d*. These expanding jaws *b b* have shoulders L L, and are provided with arms *b′ b′*, projecting out at right angles thereto, and to which are connected rods D, the lower ends of the same being secured to the sliding support E. To this support are rigidly connected rods O, their lower ends secured to the hinged foot-lever R.

The operation of my invention is as follows: A hat is first placed over the jaws *b b* and held firmly in its place. The action of the foot or other power applied to the lever R forces it down. The motion caused thereby, acting through the various connections, forces open or expands the jaws *b b* against the inner surface of the hat, which forces the corresponding section of the hat in a circular and longitudinal direction. At the same time the ring is expanded against a corresponding section of the hat nearest the tip, stretching and forcing that portion of the hat also in an outward direction toward the square of the hat, as the spaces between the rings are opened or expanded, thus operating and stretching all portions of the tip and square of the hat at one operation. The hat is removed from the machine by releasing the pressure upon the lever R, by which means the machine returns to its negative position, ready for the next operation.

Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The expanding jaws *b*, provided with recesses *x*, and spring *d*, and arms *b′*, the same being pivoted to the support C, and connected to the sliding support E by rods D, the hangers B B, rods O, and foot-lever R, combined to operate substantially as specified.

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Witnesses:
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