J. NUTT.

Hat-Pouncing Rolls.

No. 168,175. Patented Sept. 28, 1875.

Fig. 1

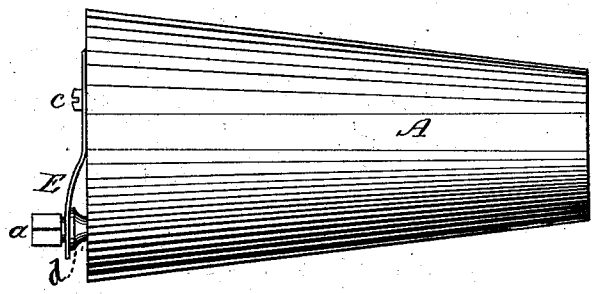


Fig. 2

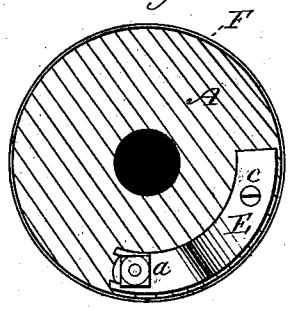


Fig. 3.

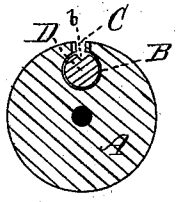
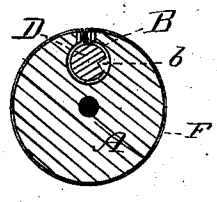


Fig. 4



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOSEPH NUTT, OF DANBURY, CONNECTICUT.

IMPROVEMENT IN HAT-POUNCING ROLLS.

Specification forming part of Letters Patent No. **168,175**, dated September 28, 1875; application filed September 9, 1875.

To all whom it may concern:

Be it known that I, JOSEPH NUTT, of Danbury, in the county of Fairfield and State of Connecticut, have invented a new and valuable Improvement in Hat-Pouncing Rolls; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a side elevation of my improved hat-pouncing machine. Fig. 2 is an end view of the same with the paper secured thereto. Fig. 3 is an end view, showing the key in position ready for the insertion of the paper; Fig. 4, an end view with the paper secured thereto.

This invention has relation to hat-pouncing machines for evening and equalizing the surface of felted hats; and the novelty consists in a conical-formed roll or cylinder having an elongated opening parallel with the outer surface and lengthwise of the conical cylinder, to receive a grooved key for securing the sand or emery paper to said conical cylinder, as will be hereinafter more fully set forth.

In the accompanying drawings, A represents a conical cylinder formed with a tapering opening, B, extending lengthwise and parallel with the outer surface of said cylinder; and C, an elongated opening or slit communicating with the opening B. At the smaller or lower end of the cylinder A the slit C is made flaring, as seen in Fig. 3 of the drawings, so that the ends of the sand or emery paper can be easily and readily inserted. D represents a tapering pin or key, with a square head, *a*, by which it may be turned by any suitable tool or wrench. This pin or key fits within the opening B, and is formed with a V-shape groove, *b*, extending its entire length, the purpose of which will be hereinafter described. E represents a spring-plate, secured to the upper end of the cone by a set-screw, *c*, and its free end being forked to pass around an annular groove or recess between the head *a* and collar or enlargement *d*, that forms the termination of the cylindrical key, the forked end of the spring-plate E pressing down upon the face of said collar or enlargement, and keeping the cylindrical key or pin D in place within the opening B.

To attach the sand or emery paper, (represented at F,) it is first cut to the required size—*i. e.*, a little larger than the circumference of the conical cylinder. The two lateral edges are then bent inwardly, forming a flange sufficiently wide to protrude through the opening or slit C into the groove of the key. The paper thus formed is drawn over the conical cylinder A, the flanges of the paper passing into the opening C, the key D being in position, as shown in Fig. 3. The key is then turned a short distance in either direction, tightly wedging and locking the free edges of the paper between and against the outer surface or periphery of the key and the surface of the opening B, as seen in Fig. 4, and at the same time drawing the paper closer to the surface of the conical cylinder A.

I wish it understood that I do not confine myself to the precise construction herein described, as the invention may be modified in many particulars without departing from the principle of my invention; as, for instance, the key may be formed straight instead of tapering, and the groove may be V shape or other form, as desired, and may run partially or wholly through the key, making in the latter construction a split key.

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

1. The conical cylinder A, formed with an opening, B, and slit C, in combination with a grooved or split key, D, substantially as and for the purpose set forth.

2. The combination of the conical cylinder A, having the opening B, slit C, key D, with groove *b*, and the spring-plate E, substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOSEPH NUTT.

Witnesses:

CHARLES H. WHITE,

LUMAN L. HUBBELL.