2 Sheets—Sheet 1.

E. B. TAYLOR.

Hat-Pouncing Machine.

No. 205,009. **Patented June 18, 1878.**

Fig 1

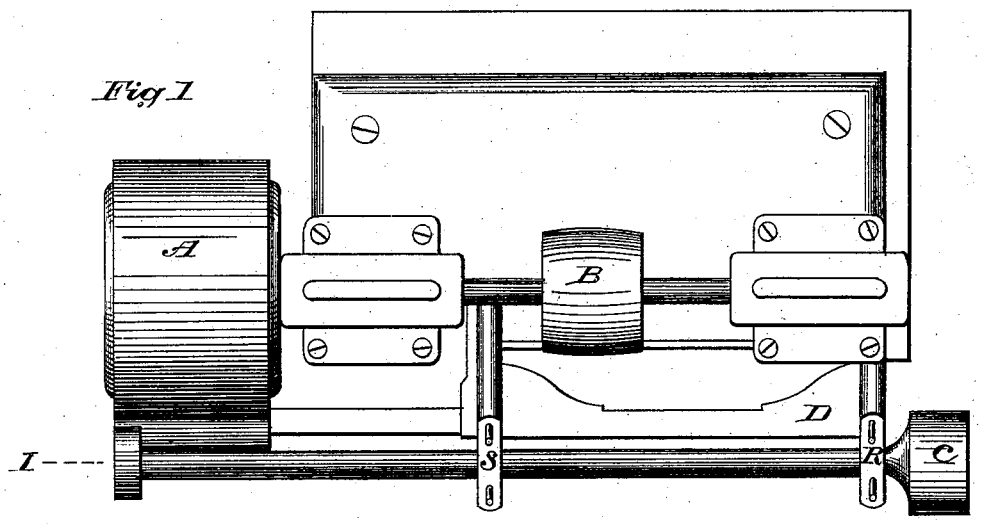


Fig 4

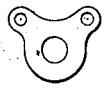


Fig 3

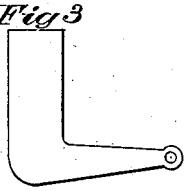
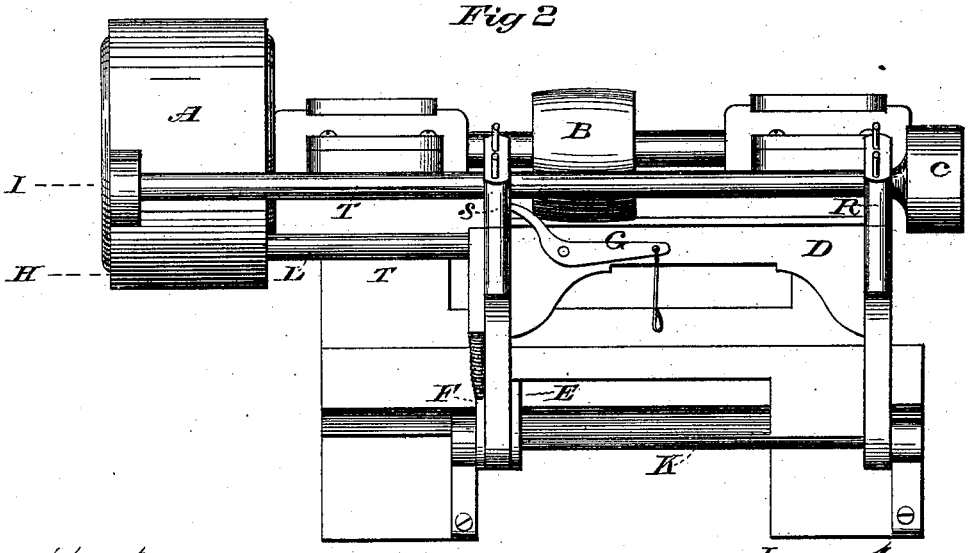


Fig 2



Attest:

Geo M Clark

Edmond Jewell

Inventon

Edmund B Taylor

E. B. TAYLOR.

Hat-Pouncing Machine.

No. 205,009. Patented June 18, 1878.

Fig 6

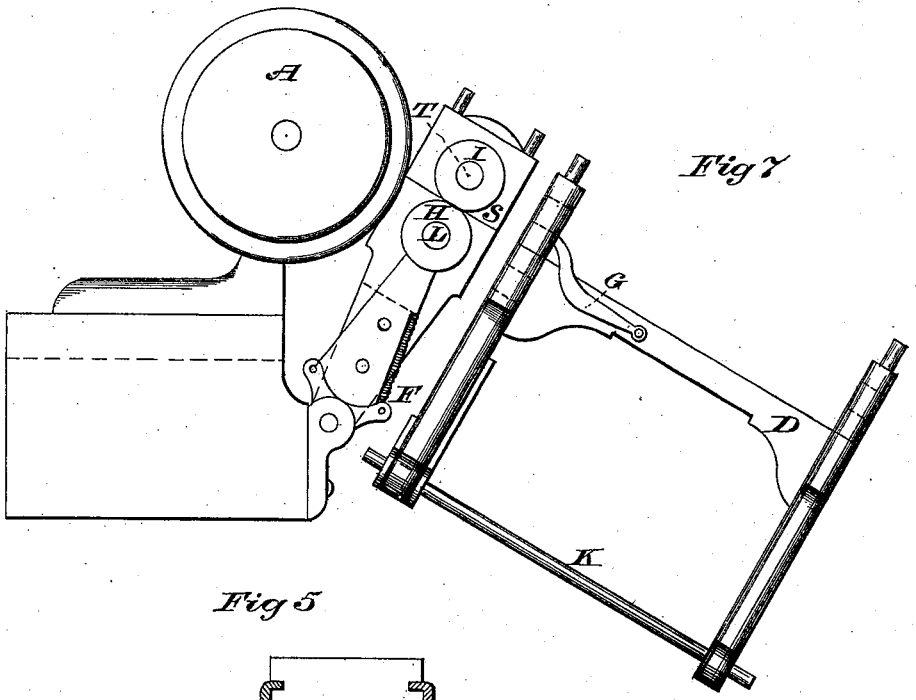
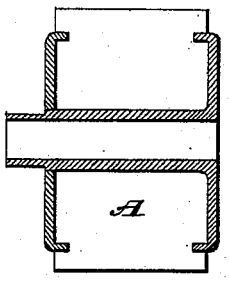


Fig 7

Fig 5



Attest:

George M. Clark
Edmond J. Lovell

Inventor:

Edmund B. Taylor

UNITED STATES PATENT OFFICE.

EDMUND B. TAYLOR, OF PORTLAND, MAINE, ASSIGNOR OF THREE-FOURTHS HIS RIGHT TO ROBINSON WILLIAMS AND JOHN W. DEERING, OF SAME PLACE.

IMPROVEMENT IN HAT-POUNCING MACHINES.

Specification forming part of Letters Patent No. **205,009**, dated June 18, 1878; application filed March 4, 1878.

To all whom it may concern:

Be it known that I, EDMUND B. TAYLOR, of Portland, in the county of Cumberland and State of Maine, have invented a new and useful Improvement in Pouncing Hats, which is fully set forth in the accompanying specification, reference being had to the accompanying drawings.

Figure 1 is a top view of the machine. Fig. 2 is a side view of the machine. Fig. 3 is the lever of the movable frame. Fig. 4 is an ear, to which is fastened the ends of the friction-strap. Fig. 5 is a sectional view of the pouncing-cylinder. Fig. 6 is an end view of the machine. Fig. 7 is a side view of the movable frame which carries the hat-block.

The object of my invention is to pounce the whole hat upon one block or roll without removing it, thus rendering the process simpler, cheaper, and more economical, and also to provide a machine of less cost than others of the same power and capacity.

In all machines with rotary cutters now in use the hat is fed to the cutting-surface by revolving feed-rolls, which give the hat a positive rotary motion reversely to the motion of the cutter. In this machine no feed-rolls are used, and the motion of the hat is produced by the friction of the pouncing-cylinder, which draws the hat after it, and can at any time be increased or lessened by the operator. This power of regulating the speed is a valuable property of the machine. This machine also differs from all other rapidly-operating machines in pouncing the entire hat on one block and by one operation; whereas, in all other machines, the different parts of the hat must be pounced by different machines, or by different parts of the same machine.

The description of my machine is as follows: The metallic hat-block or supporting-roll H is placed upon a shaft, L, projecting from a frame hinged upon the pivot K, so as to be tipped by the pressure upon the treadle which connects with the lever E. The shaft is so arranged that the block H can be moved by the friction of the pouncing-cylinder upon the hat. This can be accomplished by hanging the shaft L in boxes, so as to permit it to revolve; but a better way is to make the shaft stationary and cover it with a sleeve, upon which the block is hung. A friction-belt with a spiral spring passes over the sleeve or shaft and retards its motion.

The pouncing-cylinder A is a wheel of a large diameter as compared with the hat-block, and is driven at a high rate of speed by the means of the gearing shown in the drawing at B, or in any other convenient manner.

A friction wheel or spring, I, is carried on a shaft hung in boxes R and S, and is driven by the pulley C, or in any other suitable manner, and is used solely for the purpose of keeping the hat upon the block while the tips are being pounced. The boxes R and S are raised by the foot of the operator upon a treadle connecting with the lever G, so that when not in use they are disconnected from the hat-block.

In use, the hat is placed on the block H, and kept in place by one hand of the operator at the end of the block and the other hand inside of the hat. The frame is tipped so as to bring the hat against the pouncing-cylinder, which, being revolved at a high rate of speed, draws the hat after it around the hat-block.

The hat-block is generally stationary; but when a bunch or inequality in the hat is brought in contact with the pouncing-cylinder it (the hat-block) is moved sufficiently to enable the hat to pass without tearing. When the pressure on the treadle is withdrawn the hat-block and frame tip back from the pouncing-roll, the motion of the hat ceases, and the hat can be examined without being removed from the roll. The speed with which the hat is drawn around the block is more or less rapid as the block is pressed more or less closely against the cylinder, thus being regulated by the foot of the operator upon the treadle. When the tip is to be pounced the friction-wheel is lowered so as to come in contact with the hat, the hands of the operator are withdrawn, and the hat spins around on its tip till it is disconnected from the pouncing-cylinder. The purpose of the friction-wheel is to keep the hat from flying off from the roll while the tip is being pounced, and it can be accomplished by

a spring in the place of the wheel; but the wheel is better for practical work.

I find it necessary to the operation of this machine to use a hat-block of some hard, unyielding substance, so as to obtain more friction on the hat.

The different parts of the machine are designated by the same letter in all the accompanying drawings.

A represents the pouncing-cylinder; B, the drawing-pulley of the cylinder; C, the drawing-pulley of the friction-wheel; D, the movable frame; E, the lever of the movable frame; F, the ear on the end of the pivotal shaft K, to which ends of friction-belt are attached; G, the lever of the blocks R and S; H, the hat-block or supporting-roll; I, the friction-wheel; K, the pivot; L, the hat-block shaft; R and S, the boxes of friction-wheel shaft; T, the friction-wheel shaft.

I claim as new and desire to secure by Letters Patent—

1. The combination of the friction-wheel with the shaft, boxes, and lever for operating it, substantially as described.

2. The combination of the friction-wheel, friction-wheel shaft, boxes, and lever with the hat-block, sleeve, and friction-belt, and the frame for supporting and tipping it, substantially as described.

3. The combination of the hat-block H with the friction-belt, for regulating its motion.

4. The combination of sleeve, friction-strap, hat-block, and pouncing-cylinder, substantially as described.

5. The combination of the rapidly-rotating pouncing-cylinder A with the hat-block H and frame for supporting and tipping it, the friction-belt, and the friction-wheel, and machinery for driving and disconnecting it, substantially as described.

EDMUND B. TAYLOR.

Attest:
GEO. M. CLARK,
EDMOND JEWELL.