G. YULE.
Machine for Pouncing Hats.

No. 200,118. **Patented Feb. 5, 1878.**

Fig. 1.

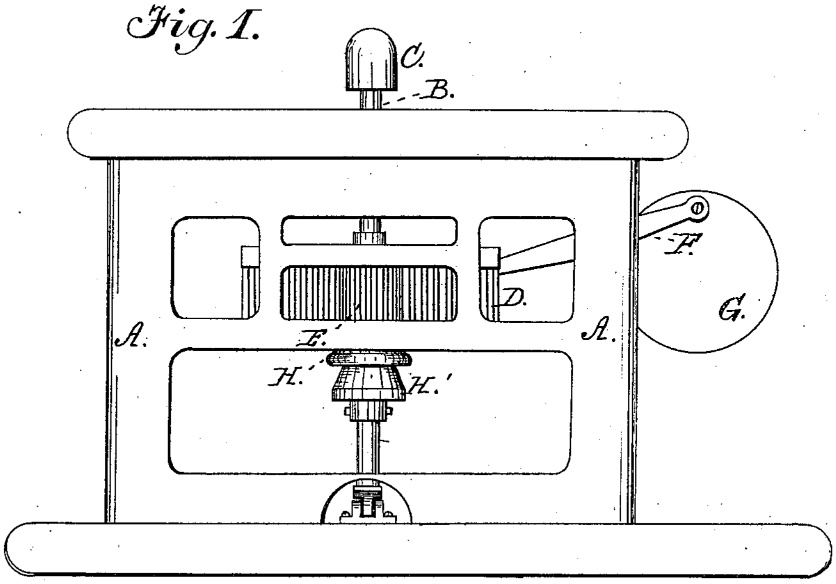
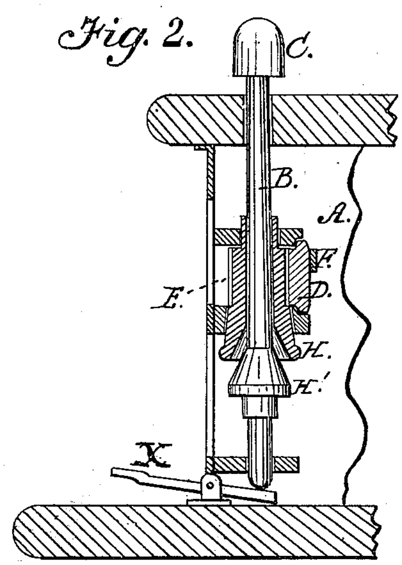


Fig. 2.



WITNESSES
Parker H. Sweet Jr.
Wm. Smith.

INVENTOR
George Yule
Jno. D. Dane Jr.
ATTORNEY

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

GEORGE YULE, OF NEWARK, NEW JERSEY.

IMPROVEMENT IN MACHINES FOR POUNCING HATS.

Specification forming part of Letters Patent No. **200,118**, dated February 5, 1878; application filed March 8, 1877.

To all whom it may concern:

Be it known that I, GEORGE YULE, of the city of Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Machines for Pouncing Hats; and I do hereby declare that the following specification, taken in connection with the drawings furnished, is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same.

My invention consists in the construction of a machine for pouncing hats in such a manner as to enable the operator to control the motion of the block without the assistance of the hands, whether it be for the purpose of increasing or decreasing the speed, or otherwise, so that the workman may have full and complete control over his work; the object of which is to secure the best finish to the hat without the usual liability to reduce the material at points where the body of the hat may be thin, which is usually caused by the process of sizing and forming. It also enables the operator to examine his work, and thereby guard against too much application of the finishing material to one part and not enough at another. It also avoids the sudden jars incident to such machines when the driving mechanism is stopped entirely, as is usual in machines of the ordinary style of construction. Machines of the latter class, owing to the great speed required in practice, when frequently stopped, as becomes necessary in the operation of finishing, wear very rapidly, and are not only apt to become broken by the sudden starting, but require much more power to start the same than is needed for machines employing my improvement.

Referring to the drawings, Figure 1 represents a front view of my machine. Fig. 2 represents a section of my improvement.

A represents the frame. B is a vertical shaft, upon which the block C is supported and revolved. D is a rack, horizontally arranged, which is supported and guided in ways, which rack is operated by rod F through the medium of crank-wheel G, which unites with a pinion, E, by which means the block is partially revolved back and forth. H and H′ represent my friction-clutch for operating the same, application and formation of which will be readily understood upon reference to the drawings.

The operation of my improvement may be described as follows: It will be observed that a foot-lever, X, is arranged at or near the bottom of the vertical shaft B. This lever is arranged to elevate the vertical shaft, which is represented as being capable of sliding vertically in its bearings. The male part of the clutch, being fast upon the shaft, rises with it and engages the counterpart above, which counterpart is secured to the pinion, which is in continual motion. The engagement with the pinion causes the vertical shaft, with its block, to revolve with a greater or less rapidity, according to the pressure applied to the foot-lever below. For a slow motion a slight pressure only will be required, which may be varied according to the seeming requirements of the operator.

Having thus set forth my invention, what I claim as new, and desire to secure by Letters Patent of the United States of America, is—

1. In a machine for pouncing hats, the combination of a longitudinally-movable block-carrying rod with a friction-clutch and operating mechanism, substantially as and for the purposes set forth.

2. In a machine for pouncing hats, the combination of a sliding friction-clutch and block-carrying rod with a treadle for throwing said clutch into gear, substantially as set forth.

3. In a machine for pouncing hats, the combination, with its vertical shaft, block, and clutch, of the reverse operating mechanism, substantially as described, whereby the block is moved in two directions while being operated upon, substantially as set forth.

GEORGE YULE.

Witnesses:

JOHN DANE, Jr.,

JOSEPH M. CRANE.