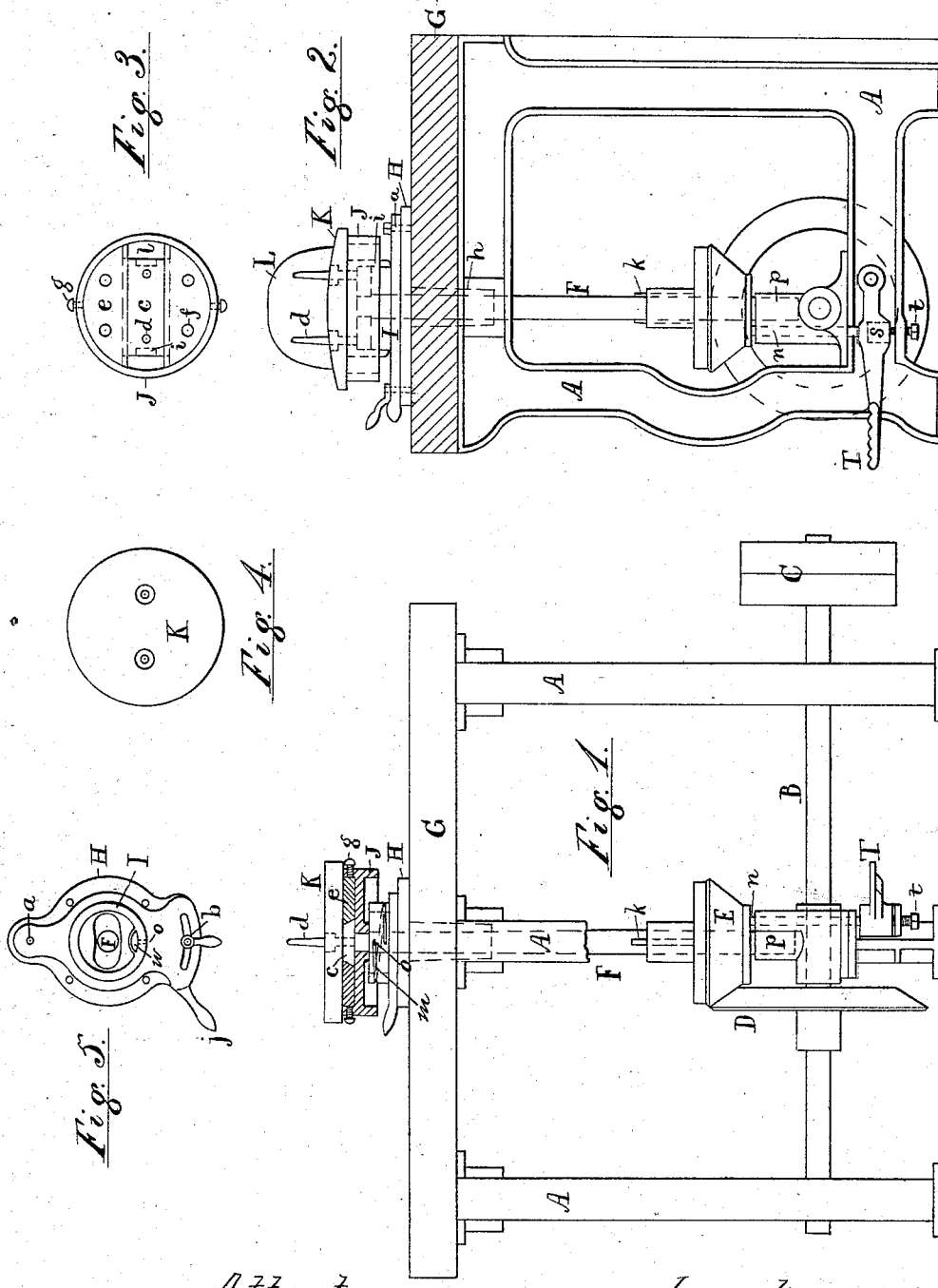


G. YULE.
Hat-Pressing Machine.

No. 219,560.

Patented Sept. 9, 1879.



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UNITED STATES PATENT OFFICE

GEORGE YULE, OF NEWARK, NEW JERSEY.

IMPROVEMENT IN HAT-POUNCING MACHINES.

Specification forming part of Letters Patent No. **219,560**, dated September 9, 1879; application filed April 14, 1879.

To all whom it may concern:

Be it known that I, GEORGE YULE, of Newark, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Hat-Pouncing Machines, of which the following is a specification.

My invention relates to an improved construction of pouncing-machines for hats; and consists in the adaptation of an oval chuck to such machines; in combining the machines with a work-bench to avoid supplying a separate frame to carry each machine; and in a particular construction of the devices for operating each machine independently.

Figure 1 of the drawings is a front elevation of a work-bench with one of my improved machines fitted upon it. Fig. 2 is an end view of the same; Fig. 3, a plan of the oval chuck; Fig. 4, a plan of the brim-plate, and Fig. 5 a plan of the adjustable eccentric guide.

A A are legs to support the work-bench G and carry the driving-shaft B. D E are friction-wheels secured upon the shaft B and the upright spindle F of the pouncing-machine. H is a bed-plate fitted upon the bench, and carrying a bearing, *h*, for the upper end of the spindle F, and having secured to it by swivel-bolt *a* and clamp-screw *b* the eccentric guide I for the oval chuck J, which is secured to the top of the spindle F. This chuck is formed of a round plate recessed out on the top to receive a slide, *c*, to which the brim-plate K is secured by the collar screw-bolt *d*, having conical upper ends to receive a hat-block, L, thereby dispensing with the center chuck of the ordinary hat-block, and at a great saving of time and improvement in the perfection of the operation, bringing the block upon the chuck in a perfect oval position in every instance.

The slide is formed with beveled parallel edges, to which are fitted gibs *e*, held to the top of the chuck by screws *f*, and adjusted to the slide *c* by set-screws *g*.

The slide is provided with two dogs, *i*, which extend through openings *l* in the body of the chuck to embrace the eccentric I, and the eccentric movement of the chuck can thus be varied, even when the machine is operating, by applying one hand to the handle *j* on the eccentric guide I.

The clamp-screw *b* is adapted to tighten the

eccentric just so much that it will not move of itself, but may be moved by the hand of the operator.

The eccentric I is provided with special means for lubrication, consisting of the oil-well *w*, formed in the interior of the eccentric, and having an outlet, *o*, communicating with a groove, *m*, cut upon the periphery of the eccentric. The oil is thus distributed over the whole circumference of the eccentric, and the dogs *i* are prevented from heating and wearing injuriously.

The friction-wheel E upon the upright spindle is constructed to slide up and down upon the feathers *k*, (or pins and slots may serve the same purpose,) and is lifted, when the machine is not in use, by a pin, *n*, fitted into the bearing *p*, arranged upon the frame A for the foot of the spindle F.

The pin is fitted loosely into an upright socket, and is controlled by a treadle, T, kept up by a spiral spring, *s*.

A set-screw, *t*, is shown applied beneath the spring to regulate its force, and the treadle T, pin *n*, and wheel E are thus kept lifted until the foot of the operator is applied to start the machine, when the depression of the treadle permits the wheel E to fall, and its contact with the revolving wheel D sets the spindle and chuck in motion. The rapid motion required for pouncing is thus gained without any jar, and is under the instantaneous control of the operator.

The application of the oval chuck to a pouncing-machine and the adjustability of the eccentric I, which enables the operator to set the chuck to agree perfectly with various patterns of hat-blocks L, secure a much better quality of work than is possible with the common revolving block, and as the operation of the chuck would be the same if mounted upon a horizontal spindle, I do not limit myself to the position of the machine; but the oval chuck above the table, on the top of a vertical spindle, enables the operator to see his work as it progresses, and for other reasons, also, is preferable. Neither do I confine myself to the particular method set forth for securing an adjustable oval hat-pouncer, for it may be gained by other devices accomplishing the same results; but

What I claim as my invention, and desire to secure by Letters Patent, is—

1. An adjustable oval pouncing-chuck provided with suitable operating devices, with which it is to be adjusted by the operator without interruption while running to make a round or oval, for the purpose specified.

2. The combination, with a hat-finishing bench, of one or more upright oval hat-pouncing chucks, operated by a horizontal shaft below the bench, making a connection by suitable separate mechanism with each chuck, substantially as and for the purpose set forth.

3. The sliding friction-wheel E, moving on the spindle F, and kept from a rotary motion on the spindle by the feathers *k*, and held out of gear with the wheel D by the pin *n*, pushed up by the treadle T, supported by the spiral *s*.

4. In combination with the sliding friction-wheel E, arranged and operated as above set forth, the horizontal shaft B, made to operate the oval pouncing-machine above the table G.

5. In combination with the sliding friction-wheel E, wheel D, and shaft B, the foot-lever or treadle T, made to stop, start, or regulate the speed of the spindle F, operating a hat-pouncing machine, substantially as specified.

6. The combination of a vertical spindle, F, with the oval chuck J, carrying the slide-plate *c*, and having the replenishing-gibs *e*, adjusted by the set-screws *g*, substantially as specified.

7. In combination with the spindle F and chuck J, the eccentric guide I, provided with the adjustable screws *b* and handle *j*, substantially as set forth.

8. In combination with the eccentric I, the chuck J, having the slide *c*, and the dogs *i*, substantially as and for the purpose named.

9. In combination with the chuck J, slide *c*, and dogs *i*, the brim-plate K, substantially as specified.

10. The brim-plate K, provided with conical shoulder-pieces *d* passing through it, connecting the slide *c* with the hat-block I, substantially as and for the purpose set forth.

11. The oil-well *n* in the eccentric I, having the outlet *o* communicating with the groove *m*, substantially as and for the purpose specified.

GEORGE YULE.

Witnesses:

HORACE HARRIS,
P. PEIFFER.