

H. D. FARQUHARSON.
Addressing-Machine.

No. 217,685.

Patented July 22, 1879.

Fig 1.

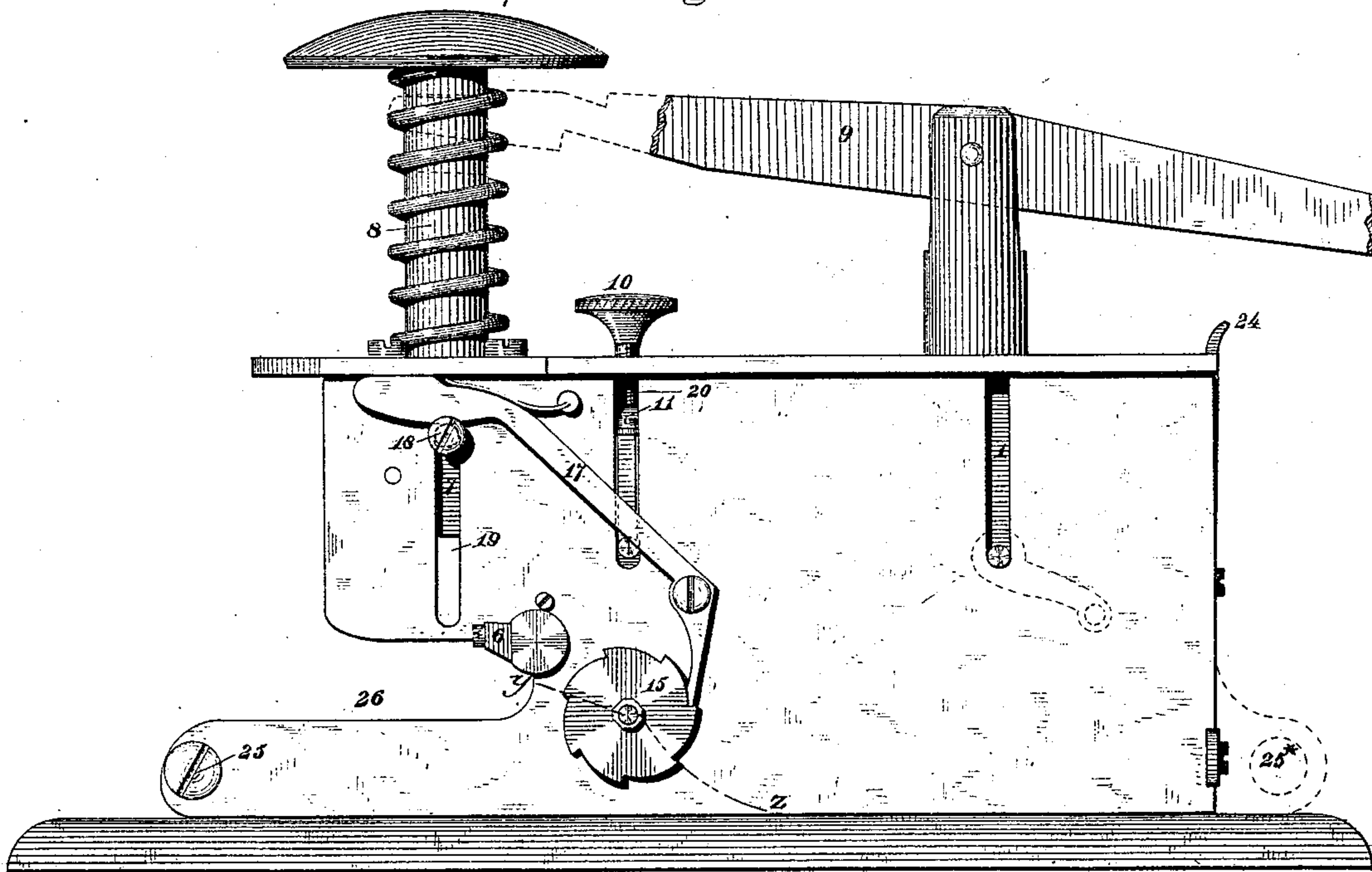
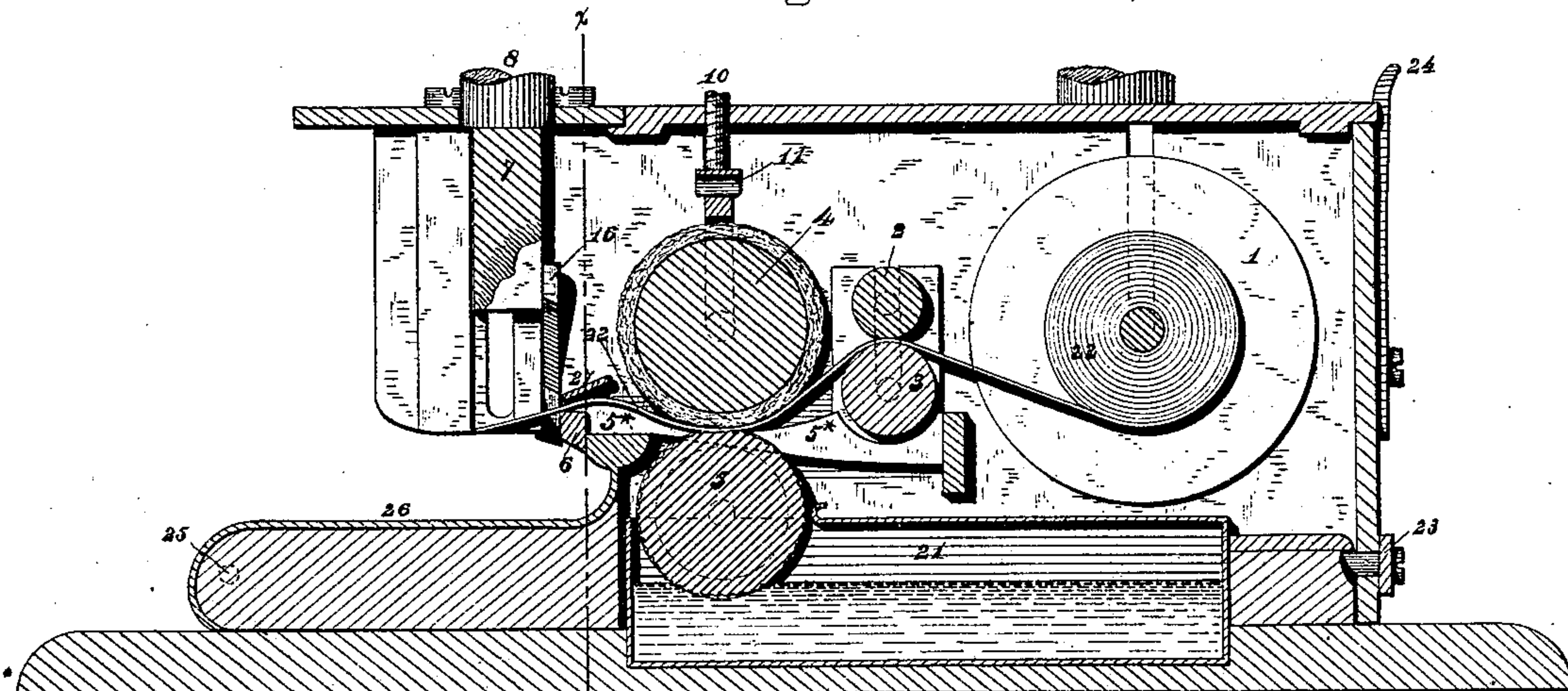


Fig 2.



Witnesses.

Harry King
Geol. Hazelton

H. D. Farquharson Inventor.

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Fig 3.

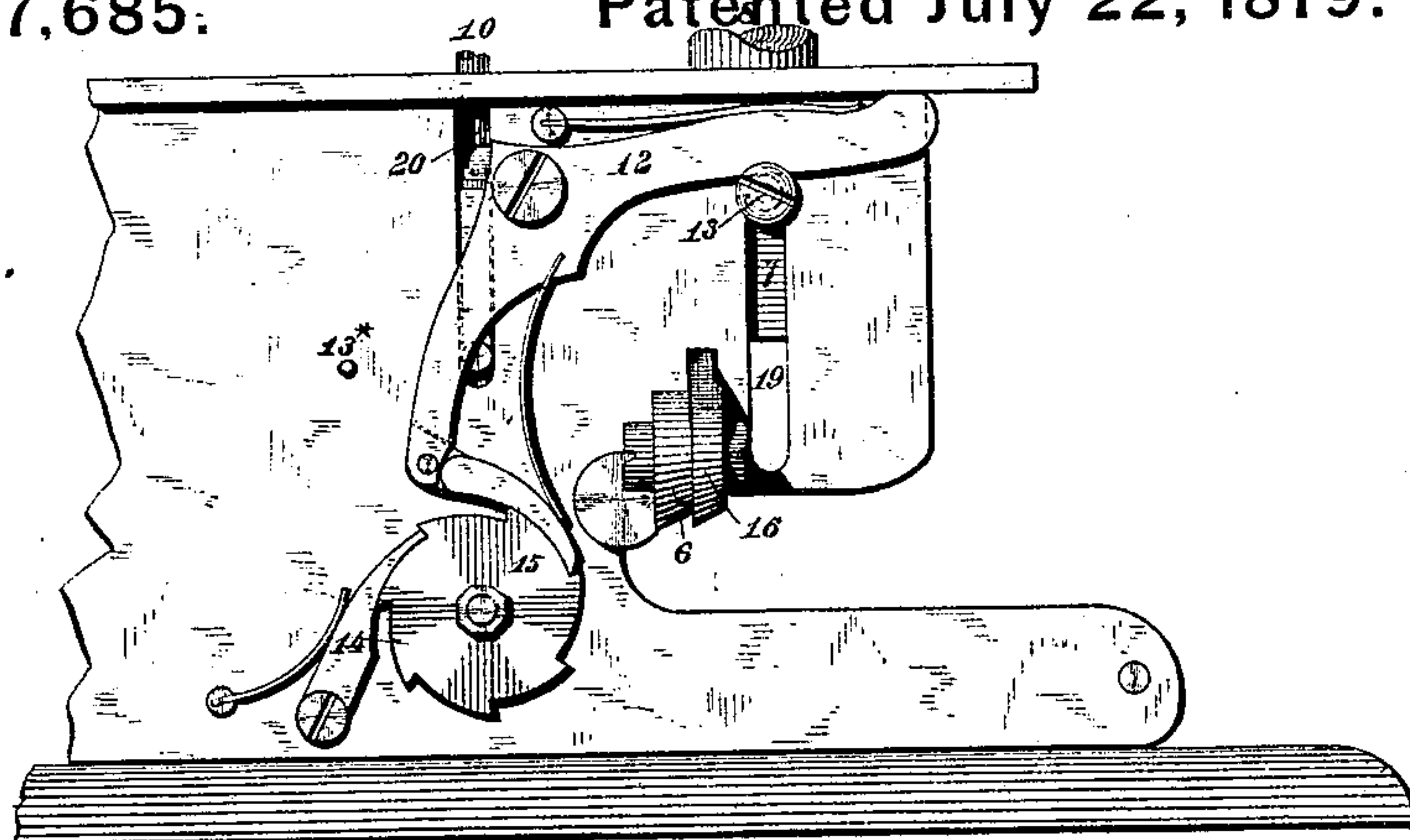


Fig 4.

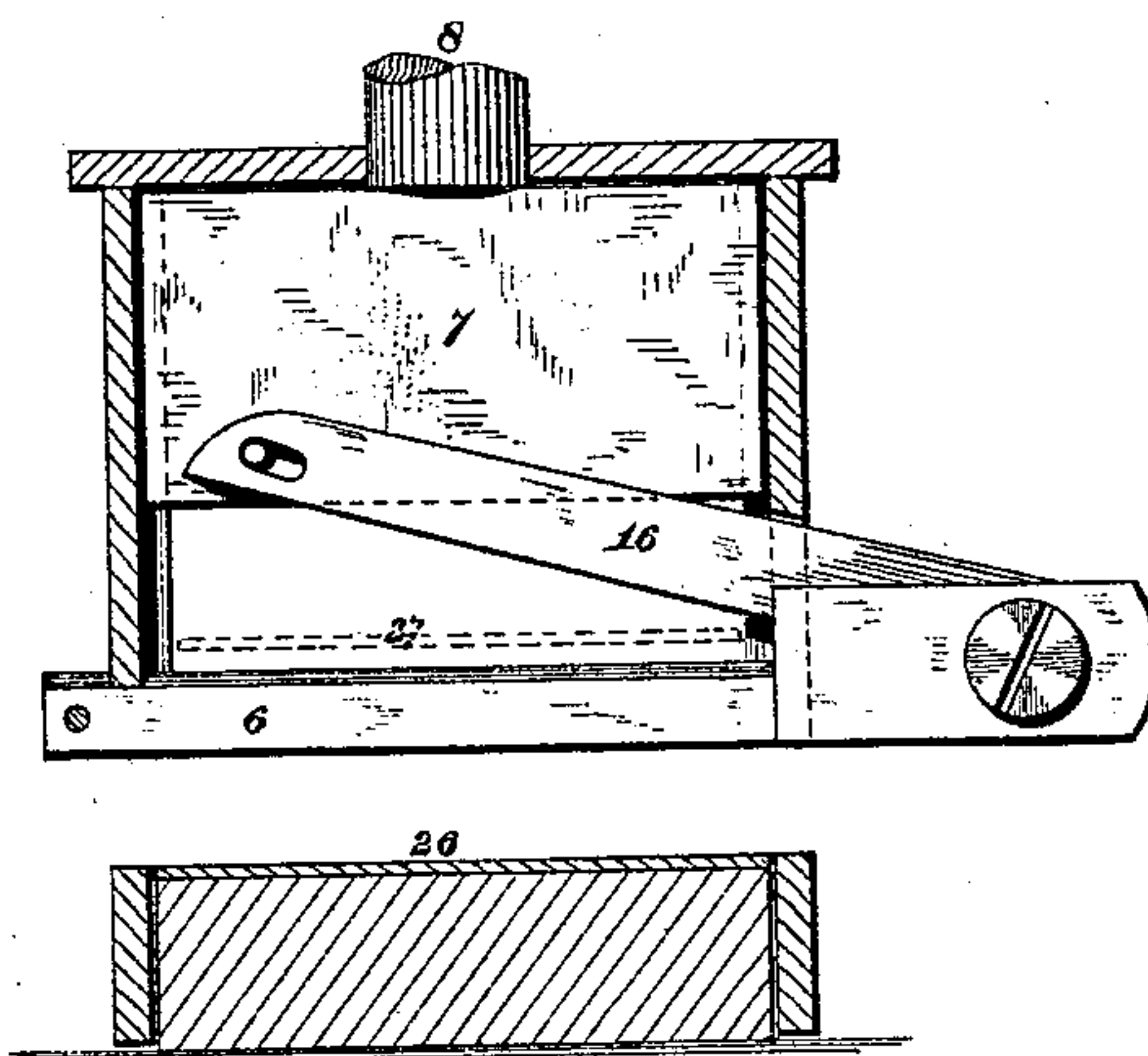
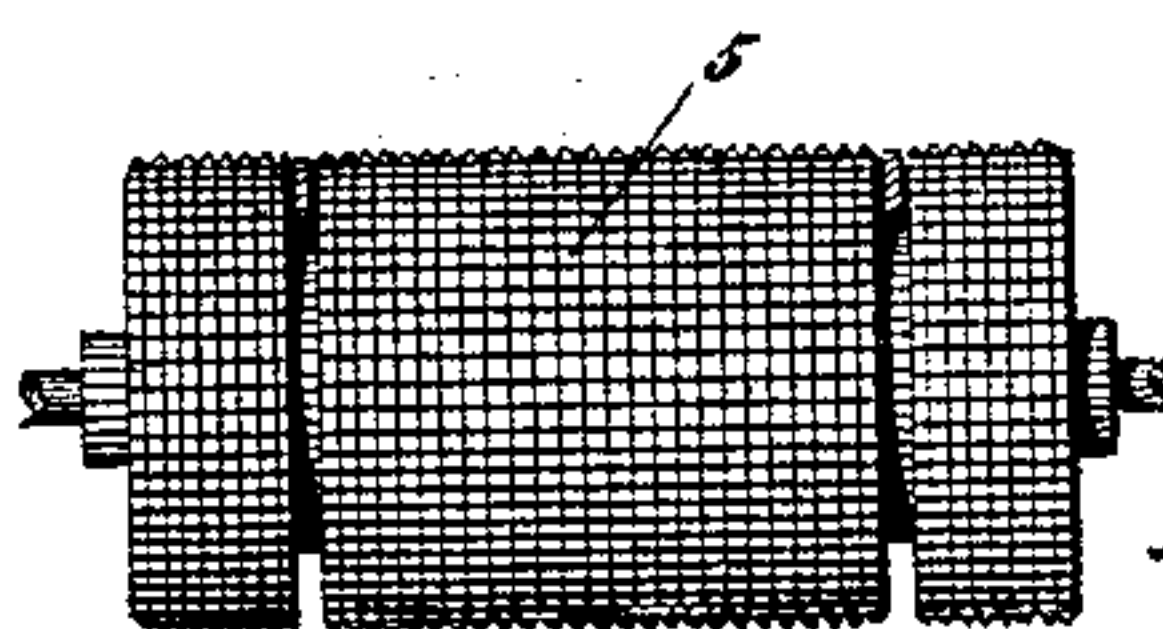


Fig 5.



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Witnesses

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UNITED STATES PATENT OFFICE.

HIVELL D. FARQUHARSON, OF BOSCOBEL, WISCONSIN.

IMPROVEMENT IN ADDRESSING-MACHINES.

Specification forming part of Letters Patent No. **217,685**, dated July 22, 1879; application filed June 4, 1879.

To all whom it may concern:

Be it known that I, HIVELL D. FARQUHARSON, of Boscobel, in the county of Grant, in the State of Wisconsin, have invented a new and useful Improvement in Addressing-Machines, of which the following is a specification.

My invention relates to machinery for addressing newspapers, letters, and all printed or written matter to be sent through the mails, and is so constructed as to accomplish the running out of the paper coil containing the names and post-office address, gumming, cutting, and stamping the same on the paper or mail-matter to be addressed, and automatically resetting itself for the next name and address, as aforesaid, all being done with one motion, as will hereinafter be more fully described, reference being had to the accompanying drawings, in which—

Figure 1 is an elevation of the left side of my improved addresser. Fig. 2 is a vertical longitudinal section of the same. Fig. 3 is an elevation of the front portion of the right side of the same. Fig. 4 is a vertical transverse section of the same, cut through line *x* of Fig. 2; and Fig. 5 is a rear elevation of milled pasting-roller with runways in vertical section.

The numeral 1 is a reel containing coil of paper, on which are printed or written names and post-office address of persons. 2 and 3 are guide-rolls for guiding paper to paste and friction rollers. 4 is a friction or feed roller milled or covered with cloth or other pliable material. 5 is a paste-roller milled and slotted to admit runways for carrying paper over lower knife, 6. 5* are the runways. 6 is the lower blade of knife. 7 is a stamp, to which one end of the upper blade of knife is attached by pivot working in a slot in the blade. 8 is the shank to the stamp, around which is wound a resetting coil-spring. 9 is a walking-beam, and may be attached to foot or any other motive power for operating said machine. 10 is a thumb-screw for regulating friction-spring 11. 11 is the friction-spring. 12 is a lever and ratchet, which is worked by bolt 13 in stamp 7, running in a slot, 19, in the right face of the machine. 13 is the bolt referred to. 13* is a stop which limits the sweep of the

ratchet end of the lever 12 in such a manner as to hold the feeding mechanism in a state of rest until the stamp carrying the knife has nearly completed its ascent. 14 is a dog which keeps the roll from running back. 15 are ratchet-wheels on paste-roller. 16 is the upper blade of knife. 17 represents a check-dog, worked by bolt 18 in the stamp 7. 19 are slots in which bolts 13 and 18 work. 20 are slots in which the friction-spring standards rest. 21 is a covered paste-box provided with an aperture in its top, through which the paste is fed to roller 5. 22 is a paper strip containing addresses. 23 is a spring-latch for holding machine and base together. 24 is a spring-latch for holding the top of machine in place. 25 is a pivot-bolt upon which the machine is hinged in the front. 25* is a pivot-bolt upon which, as a substitute, the machine may be hinged in the rear. 26 is the mouth of the machine. 27 is an apron over the lower knife-blade, to prevent the paper from following the stamp on its upward motion.

The operation of my machine is as follows: Upon reel 1 is wound a paper strip containing names and post-office addresses, which paper strip passes between guide-rollers, then between friction and paste rollers, onto the runways to the knife. By placing the hand on the top of the stamp and forcing the same down, the knives cut off one name and address, and the same, being gummed or pasted on its lower surface, as hereinafter described, is affixed to the newspaper or other matter to be mailed, as such mail-matter is placed by hand in the mouth of the machine or fed through it by machinery. At the same time the ratchet, which is pivoted to lever 12, takes into the ratchet-wheel on the paste-roller, so that upon lifting the hand from the stamp the spiral spring forces the same back into position, the ratchet advancing the ratchet-wheel, gumming or pasting the paper strip, carrying it forward to the knife, and resetting the machine for a new operation. At the same time the check-dog 17 takes into the ratchet-wheel on the paste-roller on the opposite side of the machine to limit the motion of said roller.

The use of dog 14 is to hold the paste-roller

while the ratchet is lifted by the downward motion of the stamp. The ratchet, dog, and check-dog are held to the work by a spring.

By means of thumb-screw 10 bearing upon tension-spring 11, the distance between the friction or feed roller 4 and paste-roller 5 is regulated and uniformity of speed secured. The box 21, having a top provided with an aperture in which the paste-roller revolves, may be supplied with paste, gum, or other adhesive substance; and in order to supply the same with gum or paste, press back spring 23, when the whole machine may be lifted from its base upon the front pivot, 25, fully exposing box 21.

In order to admit of free access to the paste-roller for the purpose of readily detaching the same from its bearings for cleansing, the frame can be pivoted at its rear end, as shown in dotted lines 25* in Fig. 1, and bisected in the plane represented by dotted lines $y z$.

The top of the machine is removable by releasing spring 24. A locking-shoulder is formed upon the front end of the detachable top, which rests under the rigid cross-head, through which the stamp-shank passes. This detachable top, in conjunction with the slotted or open seats to the journals of the reel and friction and feed rollers, facilitates the removal of said reel and rollers.

For the purpose of placing the paper strip in proper position, and replenishing the same from time to time, remove the top, lift out the upper guide-roller, the tension-spring, and the friction or feed roller, pass the end of the paper strip between the apron and the lower knife, and attach the same to the reel; then replace these several parts and reel the paper strip by means of a small crank attached to the reel, and shown in dotted lines in Fig. 1. When said machine is used by hand the walking-beam 9 is detached. When using other motive power than the hand, the top of the stamp and the spiral spring should be taken off and the walking-beam attached, as shown by dotted lines in the drawings. To this walking-beam any motive power may be attached.

Paste-roller 5 is slotted or ground circumferentially about one-fourth of an inch from each end to about the depth of an eighth of an inch, though these grooves or slots may be deeper or shallower, or at other distance from the ends, without departing from the spirit of my invention. In these slots or grooves are placed runways 5*, made of sheet

metal, which pass from a bar crossing the machine in front of the reel forward to and rest on the lower knife. The object of these runways is to carry the paper free from the knife.

The stamp is held up in its proper position by means of a spiral spring, which presses at its upper end against a knob on the shank 8, and at its lower end against the top of the machine.

I claim—

1. In an addressing-machine, the milled paste-roller 5, the yielding-surfaced feed-roller 4, and yielding adjustable spring-tension mechanism 10 and 11, all operating in the manner substantially as described.

2. In combination with stamp 7, provided with lugs 13 and 18, the spring-actuated ratchet-lever 12, ratchet-wheels 15 15, stop-dog 14, stop 13*, and check-ratchet lever 17, all constructed and arranged to operate as described, whereby a regular limited and fixed feed is imparted to the feeding mechanism, substantially as set forth.

3. In an addressing-machine, the detachable top, provided at its forward end with a locking-shoulder, and locked in position by spring-latch 24, operating at the rear, in combination with slotted journals cut in the sides of the frame, substantially as shown and described, whereby the various rollers forming the feeding mechanism are easily detached, as set forth.

4. In combination with the stamp 7, the reel 1, friction or feed roller 4, milled and slotted paste-roller 5, friction-spring 11, thumb-screw 10, knives 6 and 16, dog 14, lever and ratchet 12, check-dog 17, and ratchet-wheels 15, all operating substantially as and for the purposes described.

5. In combination with the stamp 7, the reel 1, guide-rollers 2 and 3, friction or feed roller 4, milled and slotted paste-roller 5, friction-spring 11, thumb-screw 10, knives 6 and 16, dog 14, lever and ratchet 12, check-dog 17, and ratchet-wheels, all operating substantially as and for the purposes described.

6. In an addressing-machine, substantially as described, the frame pivoted in the rear, and bisected in a plane which passes through the journals of the pasting-roller, in the manner and for the purpose set forth.

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Witnesses:

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