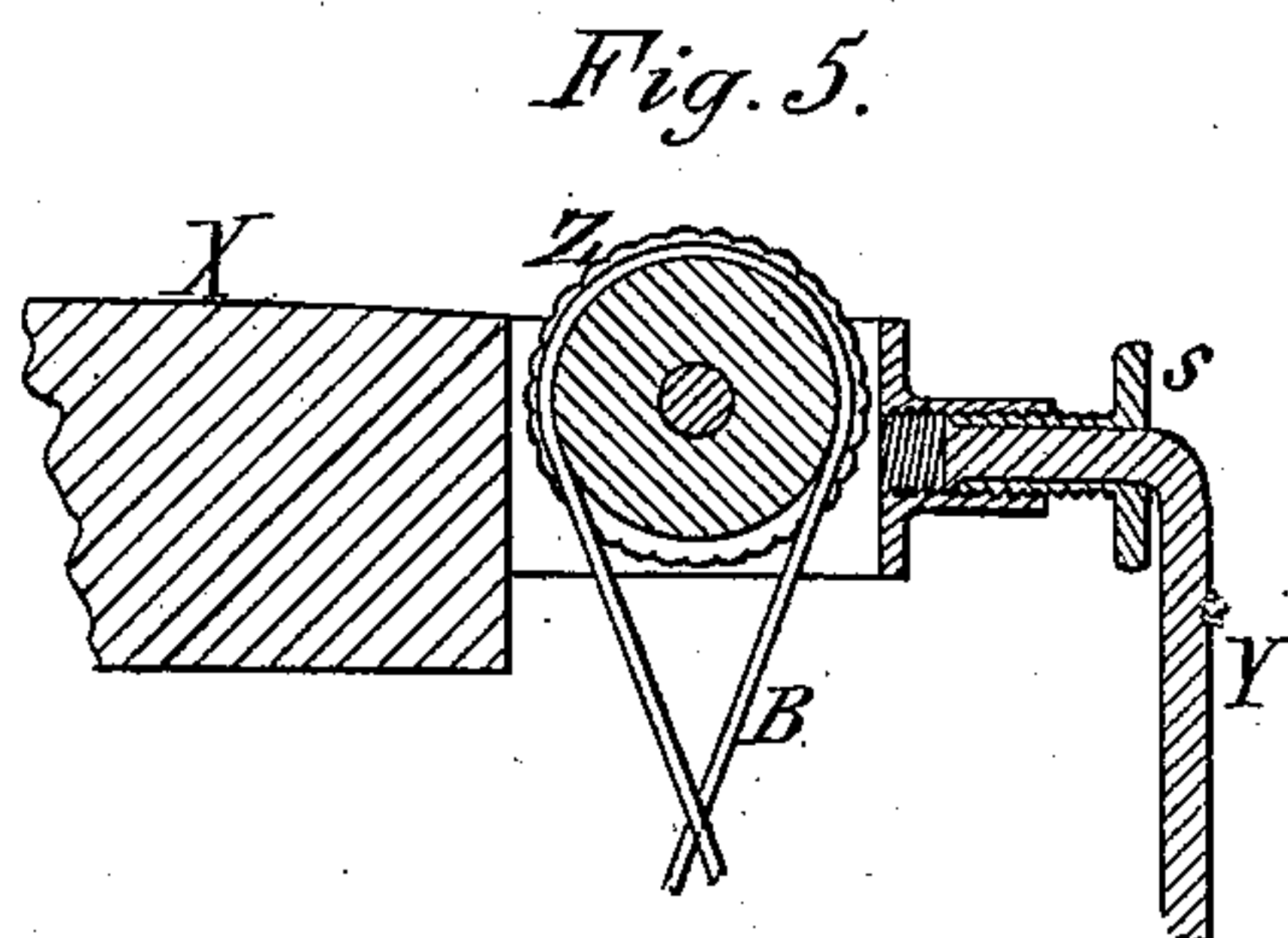
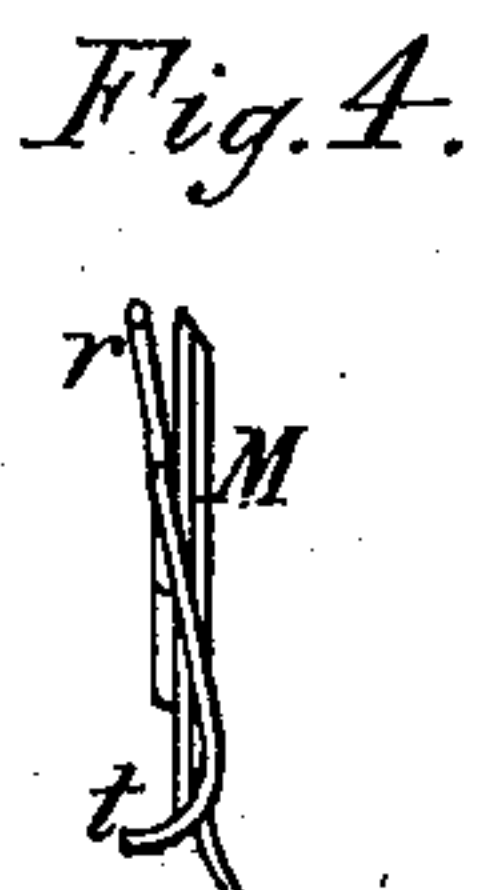
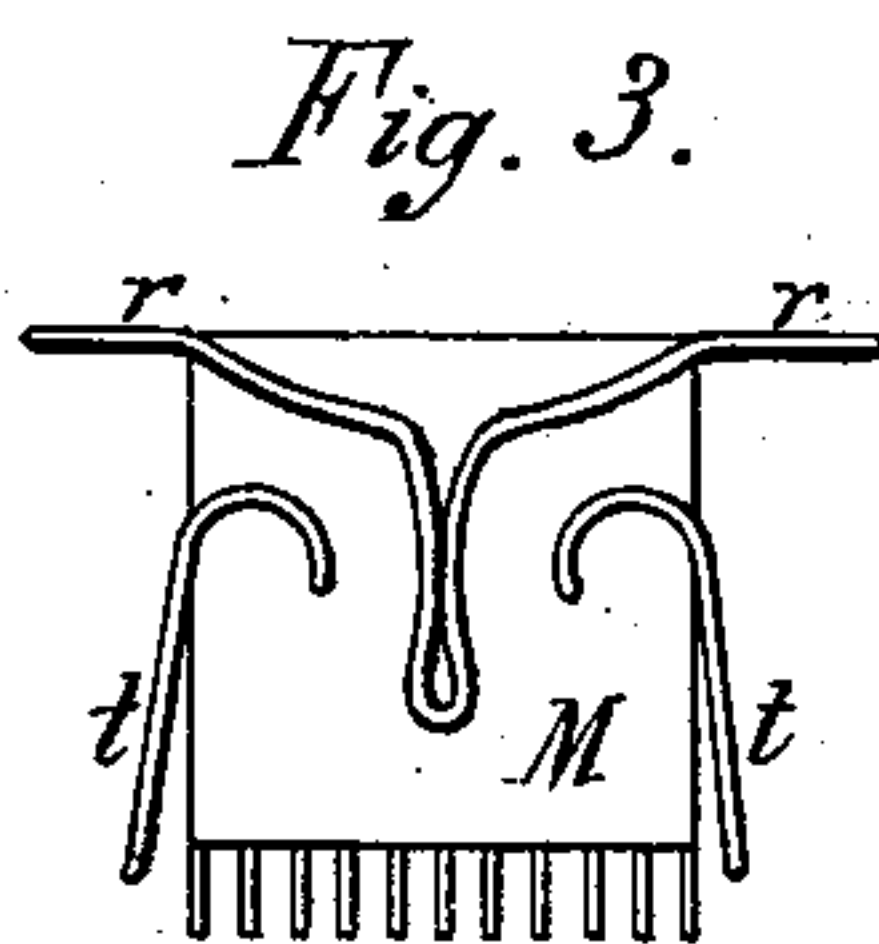
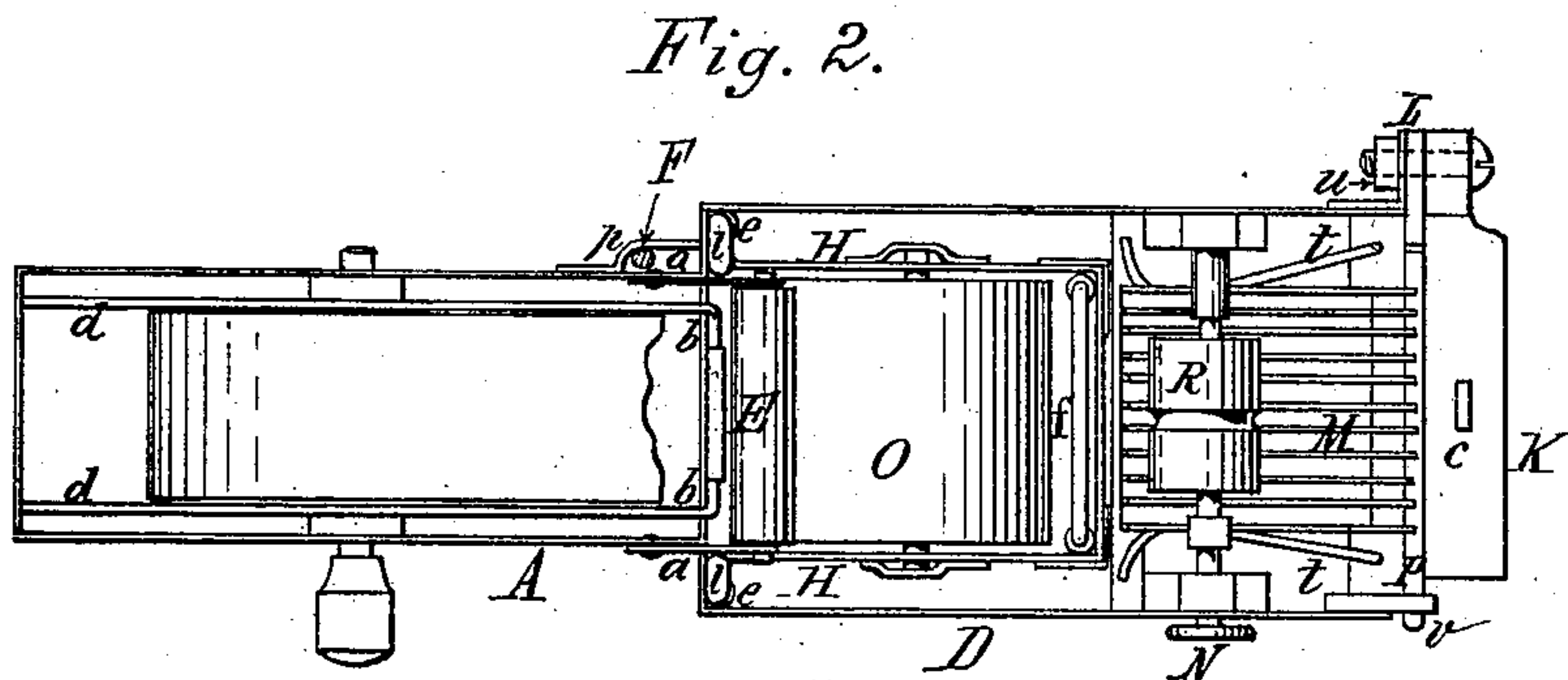
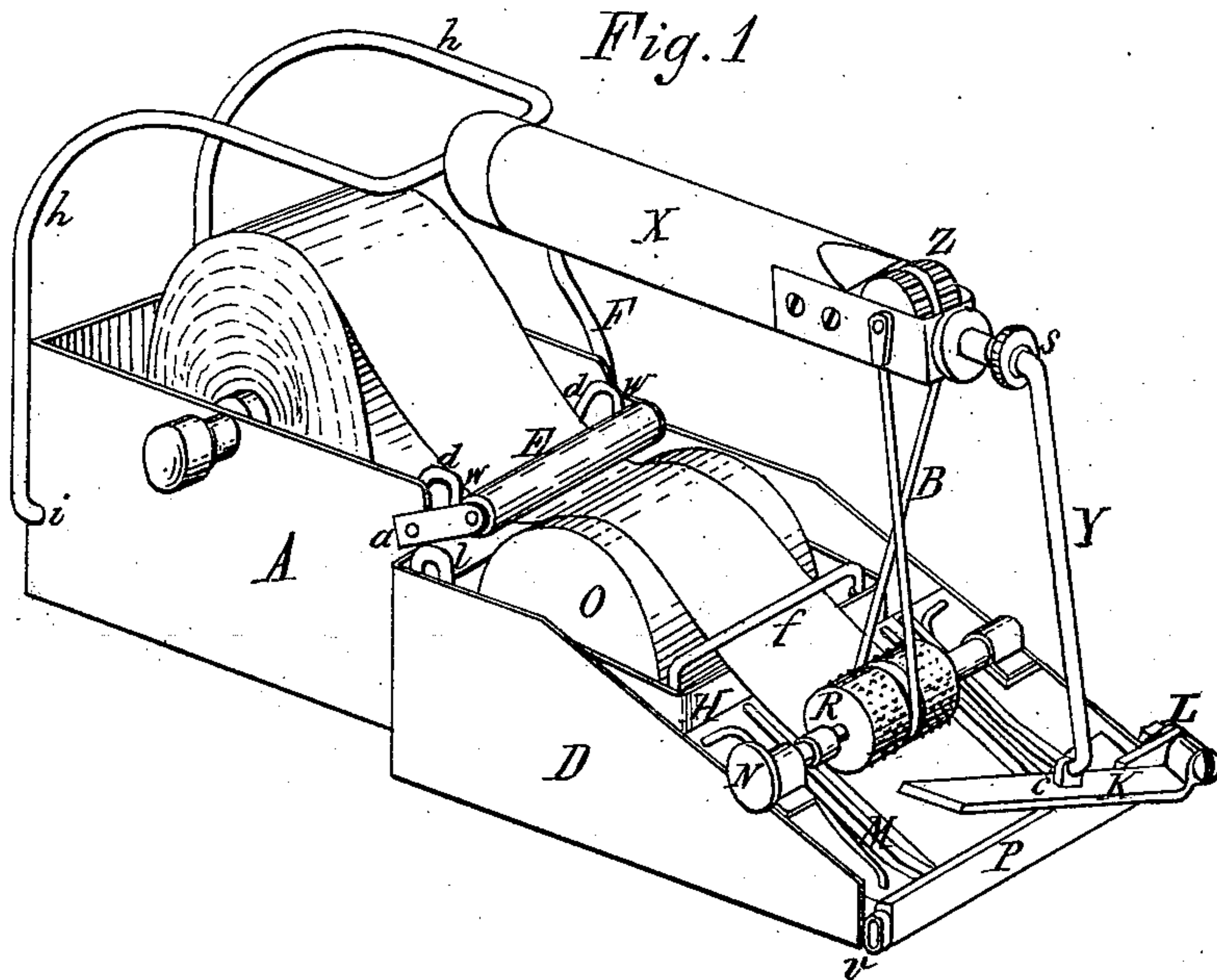


A. DICK.
ADDRESSING-MACHINES.

No. 195,209.

Patented Sept. 18, 1877.



Edward Wilhelm
George H. Lykes. *Witnesses*

Alexander Dick Invention.

UNITED STATES PATENT OFFICE.

ALEXANDER DICK, OF BUFFALO, NEW YORK.

IMPROVEMENT IN ADDRESSING-MACHINES.

Specification forming part of Letters Patent No. **195,209**, dated September 18, 1877; application filed May 12, 1877.

To all whom it may concern:

Be it known that I, ALEXANDER DICK, of Buffalo, in the county of Erie and State of New York, have invented a new and useful Improvement in Addressing-Machines, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

This invention relates to that class of mailing-machines which cuts off the addresses from a web of the same, and affixes them to newspapers or other articles. Its object is to supply a mailer that may be worked by either hand, having its handle placed over its center of gravity; in which, also, by means of new devices, the feeding, cutting, and stamping processes are more sure and easy than heretofore found in mailers.

Figure 1 is a perspective view of my improved machine. Fig. 2 is a top plan view with the handle removed. Fig. 3 is a bottom view of the slideway. Fig. 4 is an edge view thereof. Fig. 3 is a fragmentary section of the front portion of the handle.

The body of the machine A D, Fig. 1, may be ten inches in length; and for its various uses I employ and recommend the following form: The rear half A is rectangular, five inches long, two inches wide, and two and one-half inches high. This part is to hold the reeled web of addresses, as shown in figure, and in its rear part has a connection with the handle of the machine.

The front half of the machine D is three inches wide; for an inch or two in the rear it is two inches high, and then lowers to about half an inch in front, where the cutters attach to it, as seen in the figure. In this part is the usual paste-box.

The roller O supplies the paste to the web. I suspend it in bearings in a frame, H, Fig. 2, which I place in a fixed position in the paste-box by means of the brackets *l l* resting in bearings *e e*, so as to be easily removed at pleasure. I also so construct this frame that the under surface of the web, as it passes off from the roller O, will touch its upper front edge, and so be freed from superabundant paste. The same thing may be done by an attachment having similar position. The quantity of paste on the web is further regulated

by the adjustable wire *f*, Fig. 1, crossing the web on its upper surface at or near the same point.

In this machine the handle X, Fig. 1, with its attachments, performs various and important functions. It is so placed and attached that its forward end has a motion in a vertical plane centrally over the front of the machine, and two or three inches above it, as seen in the figure. To the handle proper there is a prolongation in the rear, which I prefer to have divided into two parts, *h h*, as shown in Fig. 1. It is conveniently made of hard brass wire. The two parts should branch out from the handle at a point a little in the rear of the central part of the machine; then, when two inches apart, let them extend back and curve downwardly until their ends, bent inwardly at right angles, are sprung into bearings *i i*, about one inch from the bottom of the rear end of the machine, on each side of the same, as shown in the figure. Thus formed and placed, the double-wired attachment *h h* to the handle X allows the bobbin, with a full quota of web-addresses reeled thereon, to be placed in position with facility, and affords the necessary protection to the same during the process of addressing. It also supplies the necessary spring, in connection with the pitman, yet to be described, for the cutting-pressure to the stamping-blade of the cutters, and pivoted in *i i* it permits the motion of the handle before referred to.

The pitman Y, Figs. 1 and 5, is secured in a socket in the front end of the handle X in such manner as to have a motion transverse to the direction of the handle, and not longitudinal thereto. The other end is bent inwardly at right angles, and sprung into an eye or bearing, *c*, that is attached to the stamping-blade K at or near its center, as shown in Figs. 1 and 2. It is now evident that by raising the handle X the stamping-blade K will be raised, and vice versa; and with a proper adjustment of the parts the stamping-blade will have the proper cutting-pressure. But to afford increased facility for regulating this pressure, I add the thumb-screws, which carries the socket of the pitman inwardly, or withdraws it, on the end of the handle, as shown in Fig. 5.

To the front end of the handle, just behind

the pitman, I also attach a propelling-wheel, Z, Figs. 1 and 5, which is moved by the thumb of the hand that grasps the handle. From this wheel, by means of the endless cord or belt B, rotation is communicated to the feeding-roller R, Figs. 1 and 2, that is placed over and across the slideway of the web. This roller is pivoted at both ends, with a groove in the center for the cord to turn in as it communicates rotation.

It is well to have the surface of this feeding-roller metallic on each side of the groove, and covered with little points or spurs, that shall lay hold of the web while feeding it into the cutters.

To permit the roller R to be removed and replaced at pleasure, the thumb-screw N advances or retires one of its bearings.

It is necessary, in order to a proper feeding of the web by the feeding-roller, that it be pressed somewhat and steadily against it. To secure this condition I make the slideway M movable, with a spring or springs under its rear end, by which the necessary constant pressure is given to the web against the feeding-roller.

The front end of the slideway rests on the edge of the stationary blade P, and is held in position by attached wires on each side, that dip into sockets. Figs. 3 and 4 show these springs and wires as attached to the slideway, where they are marked, respectively, *r r* and *t t*. When in position, the slideway rests its springs upon the front plate of the paste-box. The kind and form of spring, however, or even its exact position, is not important, if only the necessary result is secured. It is also possible to construct a slideway that should have the necessary spring in itself.

The cutters I employ are new and improved, as is also the manner of their attachment to the machine. I make the blades of thin steel, about one-eighth of an inch thick, and for the stamping-blade five-eighths of an inch wide, and for the stationary blade half an inch wide. I turn up about half the width of the stamping-blade at one end into an eye suitable to receive the bolt by which it is screwed to the other blade, as shown in Figs. 1 and 2. I make the stationary blade a little longer than the stamping-blade, and, to secure attachment to the machine, I fit a socket thereto, *v*, Fig. 1, into which the end of the stationary blade is slipped.

On the other side of the machine I attach an ear of thin metal, L, Fig. 2, through which the end of the shear-bolt is passed, and a nut, *u*, screwed thereon holds the cutters firmly in position. This nut at the same time performs the function of a set-screw to hold the bolt immovably, while the machine is operated, in the stationary blade P.

The roller E keeps the web down upon the paste-roller O, and that it may be adjustable thereto its bearings are pivoted, with some rigidity, at the points *a a*, as shown in Figs. 1 and 2.

The reel-gage wires *d d* are formed and held in manner as follows: A tube their exact size is soldered along the edge of the middle plate of the machine in rear of roller E. Into this tube the ends of the wires, turned at right angles, are inserted, as seen at *b b*, Fig. 2. Thence looped parts W W, Fig. 1, rise up just behind roller E on each side the web of addresses, to which they are guides as it passes under roller E. Thence they pass back just under the spool of the reeled web, and their ends rest in sockets under the upper edge of the plate that forms the rear end of the machine.

By this construction and arrangement these gage-wires are readily adjusted to different widths of web, and nicely fill the twofold function indicated.

F, Fig. 1, is a wire attached firmly to the handle X. Its lower end dips into an elongated socket on the side of the machine *p*, Fig. 2, and its use is to steady the handle when operated by an unsteady hand.

The extent of elevation of the stamping-blade, while working, is regulated by the relative lengths of the pitman Y and the belt B. If it be desired to have greater facility in regulating this matter, then the pitman may be made adjustable as to length in any of the common ways known to mechanics.

A vertical motion of the handle X may be secured by its arrangement in vertical slideways; but for all purposes I prefer the plan heretofore described.

The operation of this machine is readily understood: The paste-box being supplied with paste and everything in position, as shown in Fig. 1, then let the handle X be grasped by either hand, and raised till the weight of the front end of the machine gives tension to the belt B. At the same time the stamping-blade K is raised by the action of the pitman Y. Now, let the propelling-wheel Z be turned forward by the thumb that rests over it, and, the belt B being in reverse position, rotation is communicated to the feeding-roller R, and the web moves forward into the cutters one address, under the eye and according to the will of the operator. Then, by depressing the handle, by the action of the pitman upon the stamping-blade, the address is cut off and impressed upon the article beneath to be addressed, and so continuously.

I claim as my invention—

1. A mailing-machine formed by the combination of the body A D, and the inserted and attached parts, viz.: reel-gage and web-guides *d d*, web-depressing roller C, paste-roller O, slideway M, with springs *r* and brackets *t*, feeding-roller R with central groove and metallic spurs, belt B, propelling-roller Z, handle X with pivoted double-wire reel-guard *h h*, pitman Y with thumb-screw S, stamping-cutter K, and fixed cutter P, when the construction and combination of all the various parts, singly and relatively, are in the manner shown and described herein.

2. The gage-wires *d d*, having the loops W

W mounted by inserting their ends in a transverse tube at one end of the part A, and in bearings at the other end of the same, as set forth and described.

3. The combination, in a mailing-machine, of the roller E, having pivoted bearings, with the gage-wires *d d* and paste-roller O, as shown and described.

4. In combination with the feeding-roller R, the slideway M having the spring *r*, and brackets *t*, substantially as set forth and described.

5. In combination with the reel-receptacle A, the pivoted double-wire reel-guards *h h*, attached to handle X, as shown and described.

6. In combination with the pitman Y, cut-

ter-stamp K, and blade P, the swiveled thumb-screw S.

7. In combination with the belt B, feeding-roller R, and slideway M, the propelling-wheel Z, journaled in open chamber attached to handle X, as shown and described.

8. In combination with the belt B and slideway M, the feeding-roller R, formed with a central groove and metallic spurs, as shown and described.

ALEXANDER DICK.

Witnesses :

EDWARD WILHELM,
HENRY MONTGOMERY.