

953,661.

H. HADIDA.  
STAMP AFFIXING MACHINE.  
APPLICATION FILED MAY 14, 1908.

Patented Mar. 29, 1910.

3 SHEETS—SHEET 1.

Fig 1

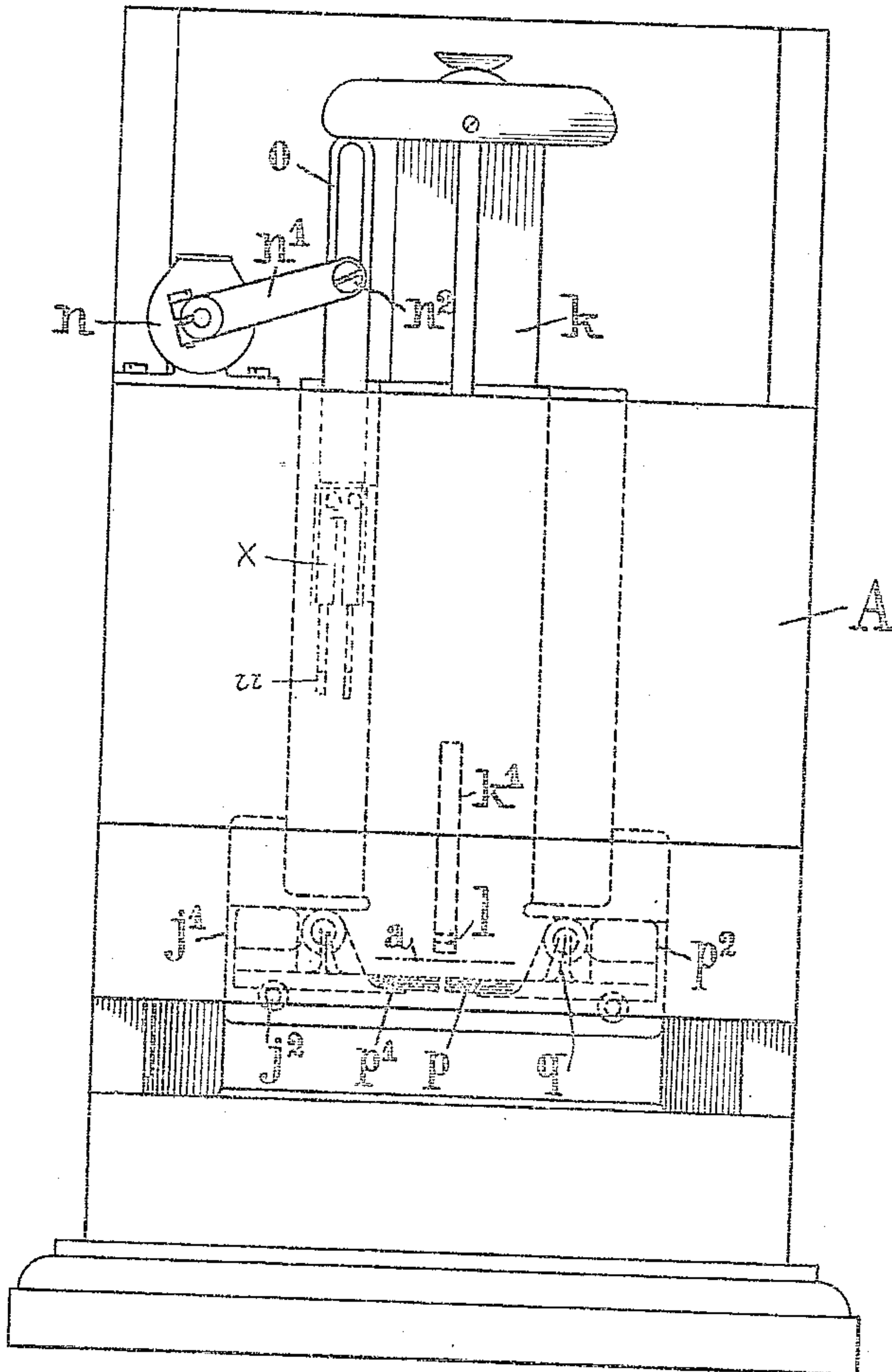
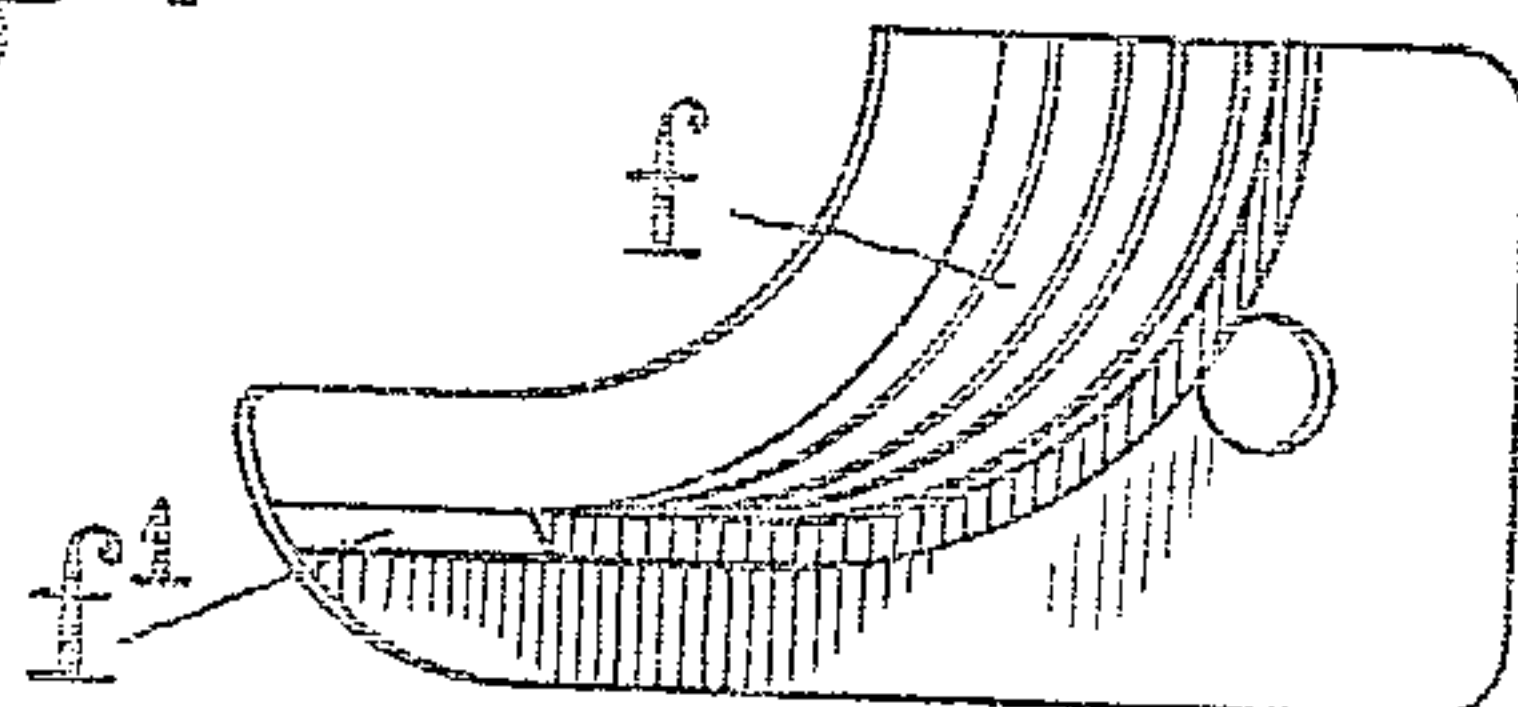


Fig 4



Witnesses:

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R. L. Stevens

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3 SHEETS—SHEET 2.

Fig. 2.

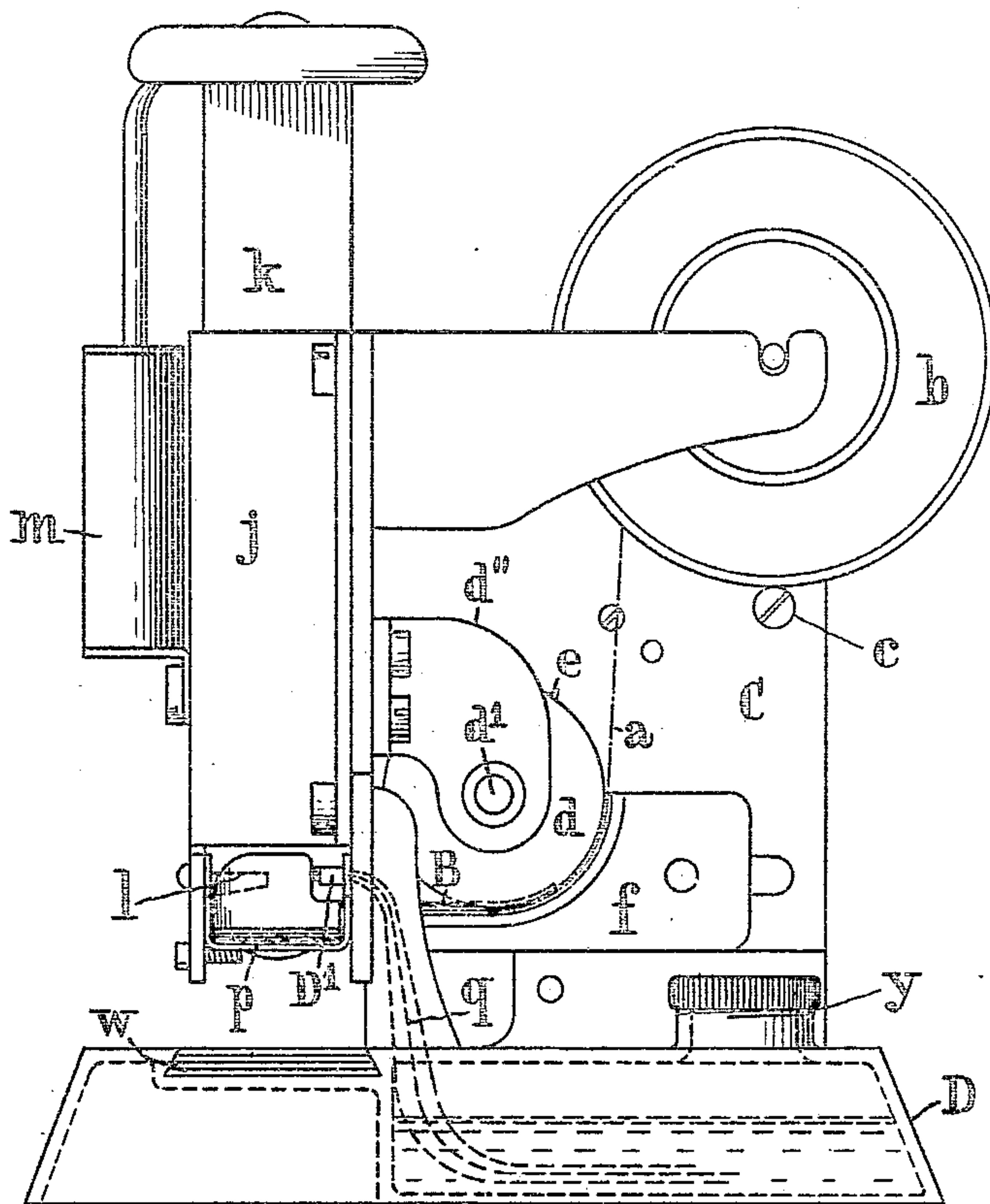


Fig. 8.

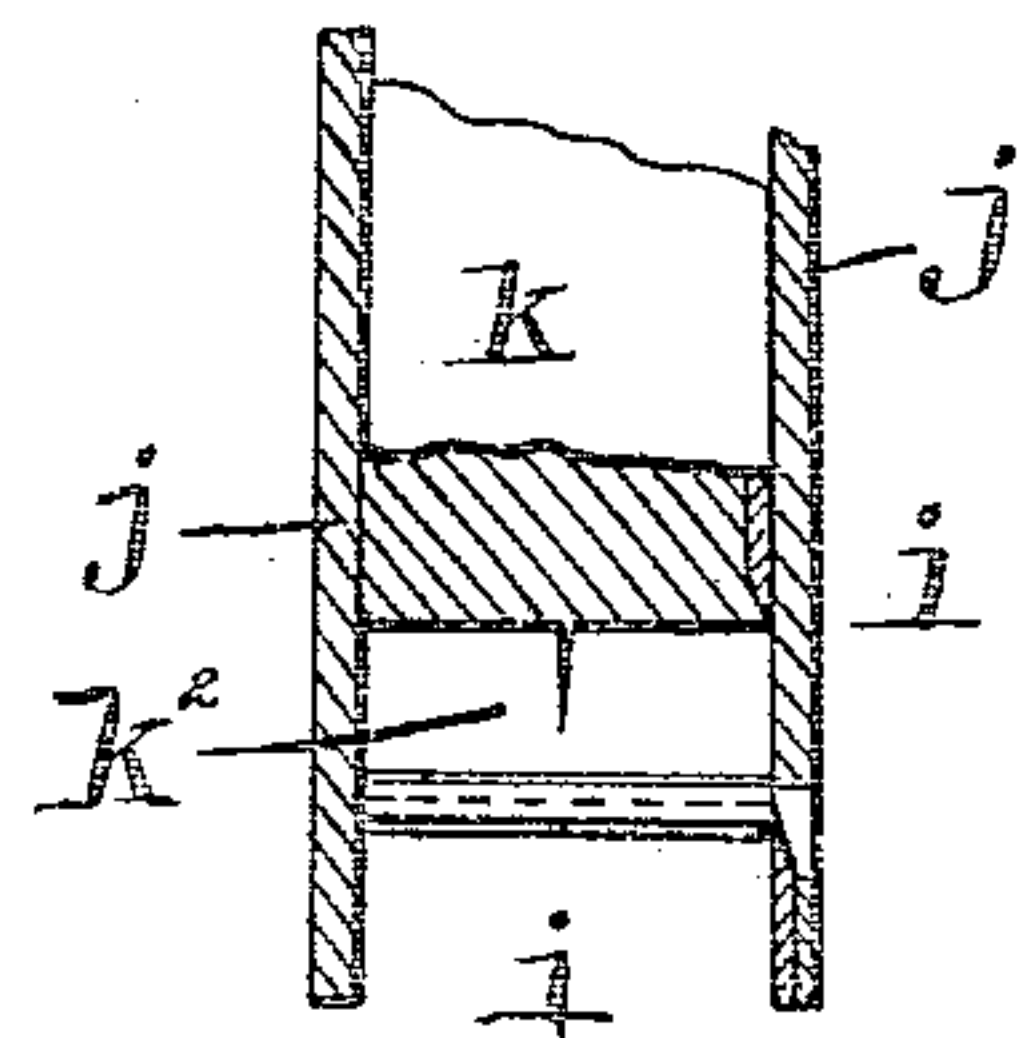
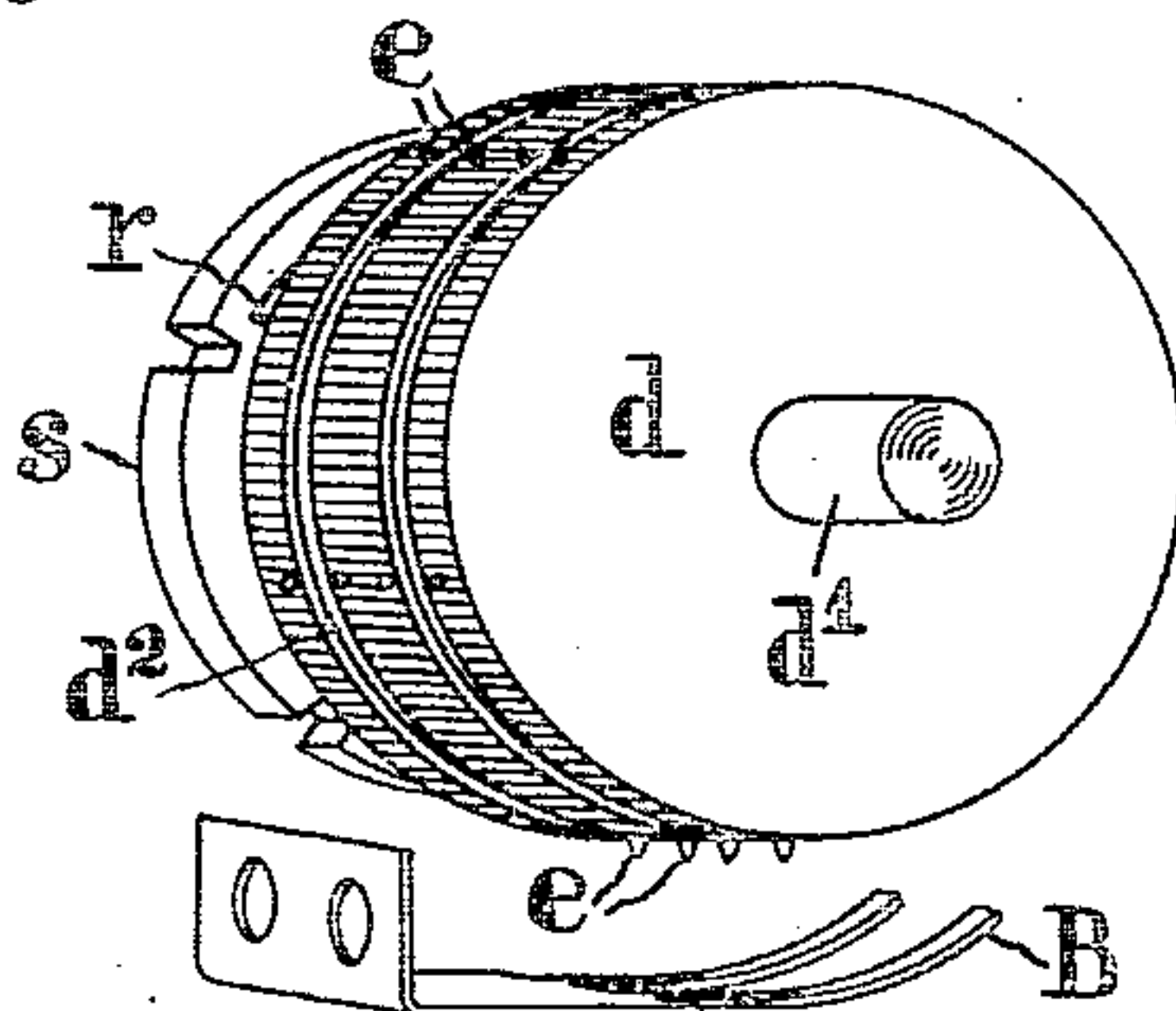


Fig. 5.



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3 SHEETS—SHEET 3.

Fig. 3

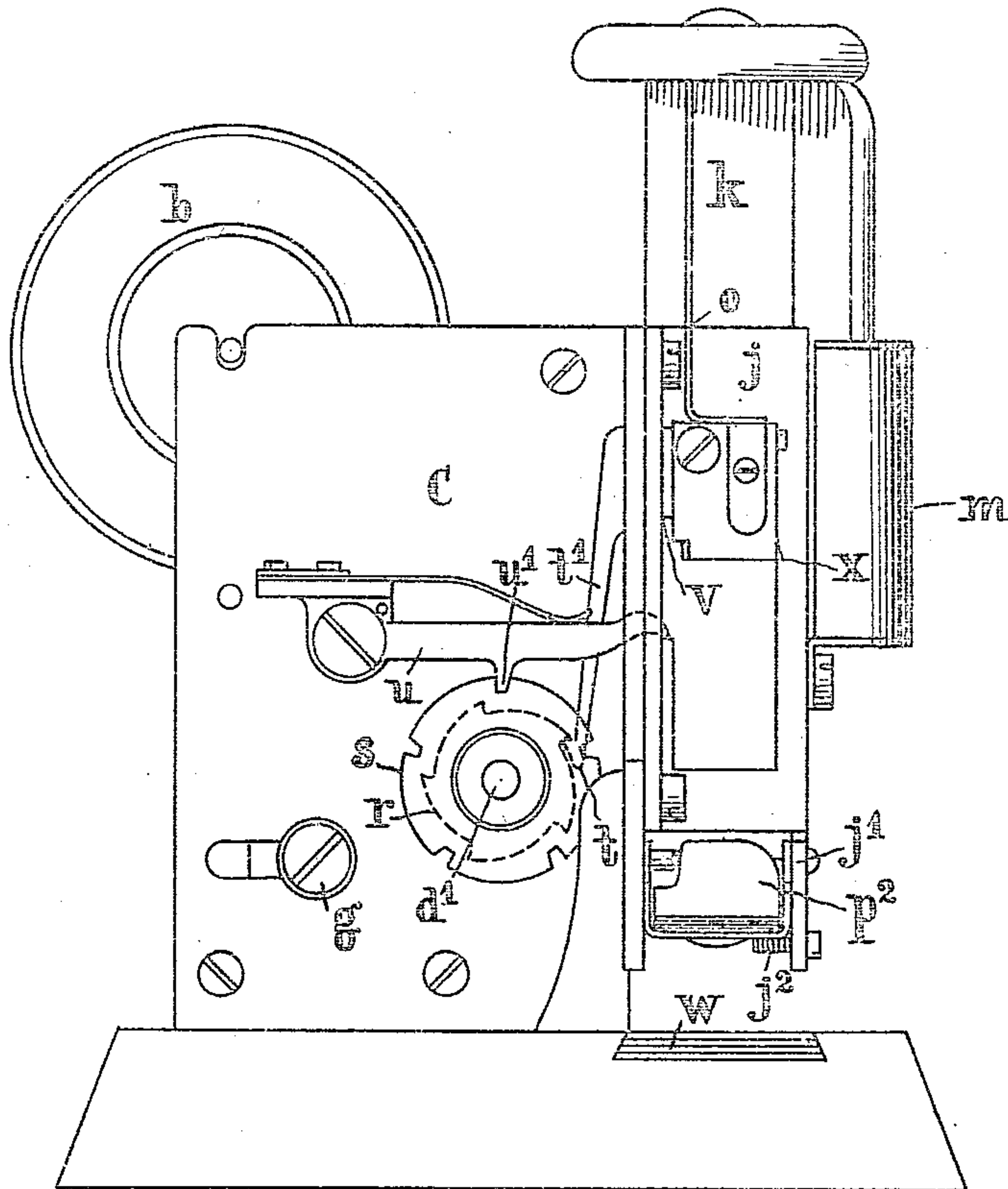
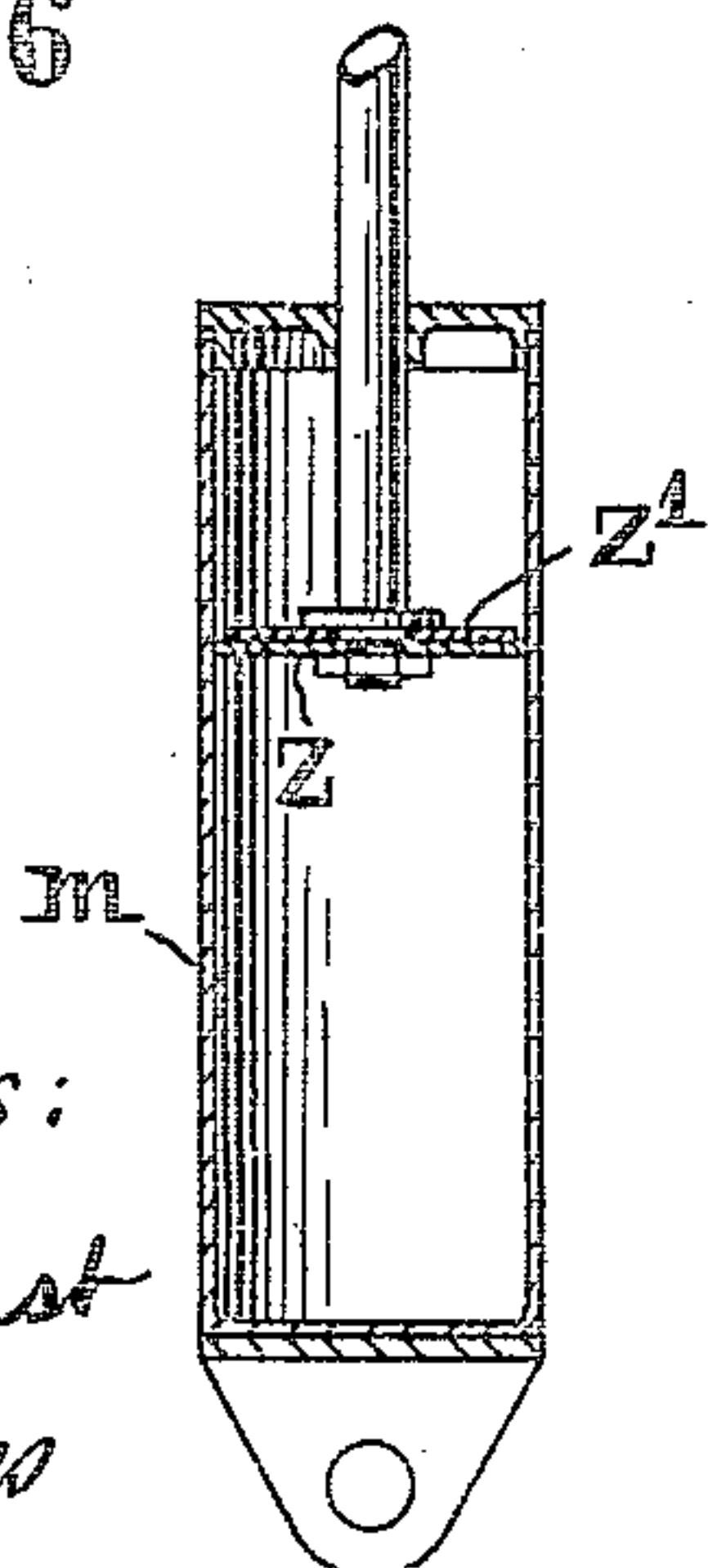
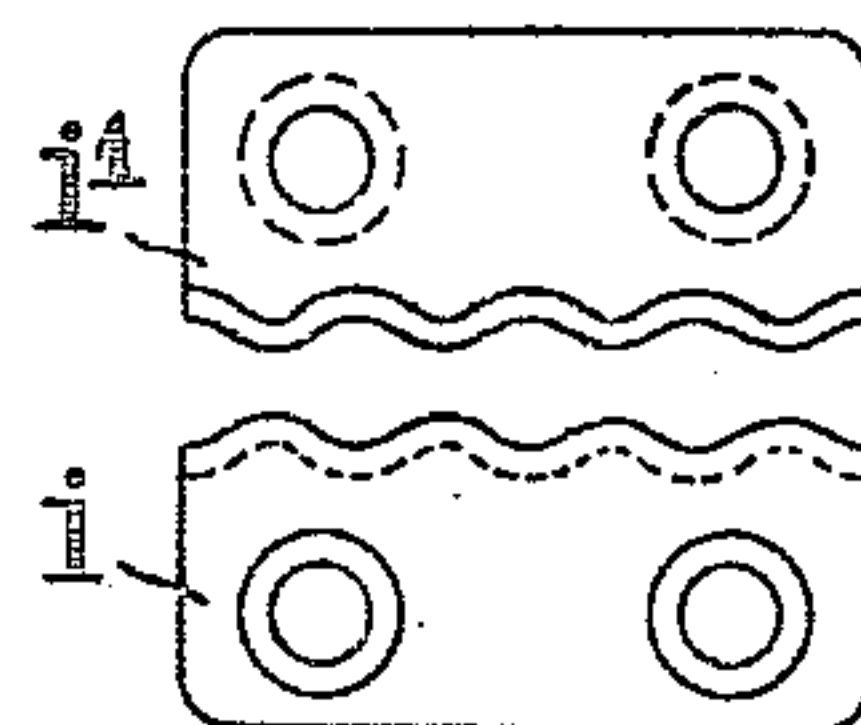


Fig. 6



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Fig. 7



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# UNITED STATES PATENT OFFICE.

HENRY HADIDA, OF LONDON, ENGLAND.

## STAMP-AFFIXING MACHINE.

953,661.

Specification of Letters Patent. Patented Mar. 29, 1910.

Application filed May 14, 1908. Serial No. 432,833.

*To all whom it may concern:*

Be it known that I, HENRY HADIDA, a subject of the King of England, and resident of London, England, merchant, have invented a certain new and useful Stamp-Affixing Machine, of which the following is a full, clear, and exact description.

This invention has reference to an improved machine for affixing stamps, labels and the like.

The machine is of that kind especially intended for detaching and affixing a postage stamp to a letter or postal packet at one operation, and in which the operating device is a plunger which shears off from a strip, moistens and affixes the stamp on the downward stroke and on the upward stroke feeds forward the stamp strip so that a new stamp is in position to be sheared. Such a machine is described in prior patent specification No. 863169 dated August 13th 1907.

The present invention has reference to an improved construction of such a machine to render more certain its correct working and to provide features and combinations of parts which will hereinafter be set forth.

The invention is illustrated upon the accompanying drawings, in which:—

Figure 1 is a front elevation of the machine in its casing. Fig. 2 is an elevation of one side of the machine alone. Fig. 3 is an elevation of the other side. Figs. 4 and 5 are perspective views of the curved shield and the pin provided feed roller. Fig. 6 is a sectional elevation of the dashpot device. Fig. 7 is a view of the coacting shearing blades. Fig. 8 is a sectional detail of a part of the plunger *a* and its guide. Figs. 4, 5, 6, 7 and 8 are drawn to an enlarged scale.

The stamps *a* are wound in a continuous strip upon a drum *b* and are fed forward by a feed roller *d* mounted on a spindle *d'* on which are fixed a ratchet wheel *r* and a locking wheel *s*. The spindle *d'* is shown supported in brackets *d''* secured to a suitable upright of the machine. The stamps are impressed by the down stroke of a plunger *k* working in a socket *j*; the depression of this plunger serves to shear off the foremost stamp of the strip, to moisten the gummed side of the pad *w*. On the return stroke of the plunger a pawl *v* carried thereon lifts the lever *u* having a catch *u'* engaged in a notch in the locking wheel *s*, and

a second pawl *t* carried at the end of a long stem *t'* engages the ratchet wheel *r* to advance the stamp strip by the length of one stamp. The lever *u* is then released and the spindle *d'* locked in its new position by the engagement of the tooth *u'* in the next notch. The two pawls *t* *v* are pressed forward by a pair of flat springs *x*. The construction and working of these are more fully set forth in my prior patent specification No. 863169 dated August 13th 1907. The plunger *k* of the apparatus is provided with a dashpot device to retard the action of the return or feeding stroke of the operating plunger. This dashpot in the example illustrated takes the form of an air chamber *m* fitted with a piston *z* reciprocable therein and having a suitable valve *z'*. The piston is preferably connected to the depressible plunger *k* and the air chamber or cylinder *m* fitted to some fixed part of the apparatus such as the guide *j* for the plunger *k*.

The feed roller *d* which is rotatively operated by the return of the plunger *k* in the manner above described, is milled or knurled at its periphery and is grooved circumferentially with any desired number of plain grooves *d<sup>2</sup>*. This roller *d* is approximately of the width of the stamp strip *a* and it is provided with rows of pins *e* on its knurled periphery at distances apart corresponding with the perforations between the stamps. These pins *e* are preferably coned or pointed at their extremities, having plain or cylindrical shanks where they stand out radially from the feed roller *d*. Suitable flat or curved springs *B* are adapted to bear at their free ends within the plain grooves formed circumferentially in the feed roller *d*, the other ends of these springs being fixed to a stationary part of the apparatus such as the fixed blade of the shearing device, and these springs serve as guides to divert the foremost stamp or stamps from the roller *d* and to lead the foremost stamp to the shearing device.

The feed roller *d*, the plunger *k* or some other portion of the operating mechanism of the machine may be provided with a locking device to prevent the strip from being accidentally moved or jerked either backward or forward when the plunger is being depressed or operated; such a locking device would be afforded by a separate ratchet and pawl contrivance on the axle or periphery of the feed roller or an equivalent device on



the plunger. In the drawings I have shown a simple frictional rod or bearing pin *c* on which the periphery of the drum *b* rests, see Fig. 2. The weight of this drum is there-  
 5 fore supported by the pin *c* instead of at the axle bearing.

The shearing device which is operated in any ordinary manner consists of a blade *i* fixed on the socket *j* for the plunger *k* and  
 10 a blade *i'* secured on the plunger *k* and these blades are preferably curved or undulated to facilitate the shearing of the stamps, as shown in Fig. 7. A shield or guide *f* curved to the contour of the feed roller *d* is adjust-  
 15 ably mounted in position so as to maintain the stamp close against the feed roller, and this curved shield is grooved to correspond with the radial pins *e* on the roller. Where the stamp strip leaves the roller it passes be-  
 20 tween an extension *f'* from the shield *f* approximately tangential to the roller, and the aforesaid spring arms *B* lying in the roller grooves. This guide shield *f* may be held in a slide in the wall *C* of the apparatus  
 25 or, as shown, be fitted with a thumb-screw *g* traveling in a slot in said wall *C*.

The pads *p* for moistening the underside of the stamp are pivoted upon an extension *j'* from the plunger socket *j* or upon another  
 30 suitable part of the apparatus and are weighted on their outer ends so that the inner ends *p'* are approximately horizontal. Stops shown in the form of pins *j<sup>2</sup>* are provided to prevent their inner ends *p'* rising  
 35 above this horizontal position and these ends are furnished with flourishing flax or thread pads; these pads *p* are kept moistened by a wick or similar device *q* which by capillary attraction will supply water to the pads and  
 40 the wick or strands thereof is (or are) continued into the hollow base *D* of the apparatus. The wick or strands *q* may be incased in a tube *D'* between the pad *p* and the hollow base *D*. The base is provided  
 45 with a stopper or filling hole *y* through which it may be filled with water or the like.

In the path of the plunger *k* and adapted to register with a longitudinal slot *k'* there-  
 50 in is a smooth and slightly tapered tongue *l* a little above the cutting blades *i i'* and opposite thereto, the object of which is to prevent the foremost stamp from curling upward. The base of the plunger adjacent to the cutting blade carried thereby is provided  
 55 with the usual needles or pins *k<sup>2</sup>* which serve to impale the stamp and subsequently withdraw into the plunger before the stamp is actually impressed on the letter laid on the pad *w*.

60 A counting or recording device *n* is shown fitted to the apparatus adjacent to the plunger *k*. This counter is provided with a suitable crank arm *n'* secured to the operative spindle of the counter and the lifting of  
 65 this crank arm *n'* increases the total shown

on the counter by one. In the example illustrated I have represented at *n* a counter of the "Veeder" type, but other suitable forms of counter may be employed. A pin projecting from this crank arm engages in  
 70 a slotted link *o* connected with the plunger *j* so that on the return of the plunger the arm *n'* is raised and the recorded number increased by one unit. The pin engaging the slotted link *o* is shown as a screw *n<sup>2</sup>*.  
 75

The improved apparatus is shown in Fig. 1 inclosed in a box or casing *A* which may be of any suitable character.

I have described the invention as carried out for postage stamp strips supplied to the  
 80 feed roller from a charged reel or spool; but the invention may also be used for labels, perforated or otherwise, or for strips of material which it is desired to affix or impress upon articles placed below the plun-  
 85 ger.

Having thus described my invention, what I claim as such and desire to secure by Letters Patent is:—

1. A machine for affixing stamps, labels  
 90 and the like, comprising a closed base forming a water reservoir, a depressible plunger, a guide for said plunger, means for shearing off the foremost stamp from a strip of stamps, means for moistening and affixing  
 95 the sheared stamp, said moistening means including pads and wicks leading thereto from the reservoir in said base, means for feeding forward the stamp strip, said means operated by the forward and return move-  
 100 ments of the depressible plunger, and a dash-pot device to retard the action of the return stroke of said plunger.

2. A machine for affixing stamps, labels  
 105 and the like, comprising a closed base forming a water reservoir, a depressible plunger, a guide for said plunger, means for shearing off the foremost stamp from a strip of stamps, means for moistening and affixing  
 110 the sheared stamp, said moistening means including pads and wicks leading thereto from the reservoir in said base, means for feeding forward the stamp strip, said means operated by the forward and return move-  
 115 ments of the depressible plunger, an air cylinder secured to the plunger guide, and a piston reciprocable in said air chamber, said piston having a rod connected to the depressible plunger.

3. A machine for affixing stamps, labels  
 120 and the like, comprising an operative plunger, a guide for said plunger, a strip of stamps wound on a drum, means for guiding said stamp-strip and insuring its register, means for diverting the foremost stamp  
 125 of the strip, means for shearing off the foremost stamp of said strip, said shearing means operated by the forward motion of the plunger, a device for moistening the underside of the stamp, a base inclosing a  
 130



water reservoir and moisture feeding means leading from said reservoir into said moistening devices, said stamp being affixed by the continued forward stroke of the plunger and means for feeding forward the stamp strip, said feeding means operated by the return stroke of the plunger.

4. A machine for affixing stamps, labels and the like, comprising a plunger, a guide for said plunger, said guide mounted on the base of the machine, a revoluble drum, a feed roller, registering devices provided on said feed roller, adapted to engage said stamp strip, means for guiding and diverting the foremost of said stamps, a shearing device operated by the plunger, a reservoir for liquid in the base of the machine, damping pads pivoted upon the machine in the path of the plunger, means for supplying said pads with liquid from said reservoir, and means for feeding forward the stamp strip.

5. A machine for affixing stamps, labels and the like, comprising an operative plunger, a guide for said plunger, a revoluble drum, a feed-roller, said roller having registering devices adapted to engage said stamp strip, said roller operated by the return motion of the plunger, a shearing device operated by the plunger, means for moistening the underside of the stamp, a tongue projecting from said guide immediately above the shearing device so as to prevent the foremost stamp from curling upward, and means for feeding forward the stamp strip.

6. In a machine of the class described, the combination of a plunger, of a guide for said plunger, of a feed roller having a milled periphery and grooved circumferentially, said roller also having pins projecting radially from its periphery and engaging the stamp strip to insure its register, springs bearing at one end in the grooves in said roller, the other end of said springs being fixed to a stationary part of the machine, said springs serving as guides to divert the foremost strip, and said feed roller being actuated by the return stroke of the plunger.

7. In a machine of the class described, the combination of a plunger, a guide for said plunger, said guide being mounted on the base of the machine, a feed roller having pins engaging with and registering a stamp strip, a shield curved to and opposite to said feed roller, said shield being grooved to correspond with said roller pins, stamp moistening devices, means for detaching the foremost stamp from the strip, and means for preventing the foremost stamp from curling upward by reason of its projecting over the moistening devices.

8. In a machine of the class described, the combination of an operative plunger, a guide for said plunger, means for feeding forward a stamp strip, a shearing device operated by the plunger and adapted to cut off the fore-

most of said stamps, damping pads pivoted on the plunger guide and in the path of the plunger, said pads being prevented from rising above the horizontal at their facing inner ends, a liquid reservoir in the base of the machine and means including wicks leading from said reservoir to said pads for automatically damping said pads by capillary attraction from said reservoir.

9. In a machine of the class described, the combination of an operative plunger, a guide for said plunger, a shearing device actuated by said plunger, means for feeding forward a stamp strip, displaceable moistening pads on which the foremost stamp is impressed by the plunger, and means for preventing the foremost stamp from curling upward by reason of its projecting over a moist surface.

10. In a machine of the class described, the combination of an operative plunger, a guide for said plunger, a revoluble drum on which a stamp strip is wound, a feed roller having radial pins adapted to engage and insure the register of said stamp strip, said roller having peripheral grooves, spring arms bearing in said grooves, said roller being operated by the return stroke of the plunger, and a locking or braking device for preventing the accidental movement of the revoluble drum.

11. In a machine of the character described, the combination of a depressible plunger, a guide therefor, said guide being mounted on the base of the machine, a revoluble drum, a feed roller having devices to engage a stamp strip, said roller being operated by the return motion of the plunger, and an air cylinder secured to said guide, a piston connected to said plunger and operating in said cylinder, said piston having an opening through it and a valve controlling said opening, and said piston affording a dash-pot action for the return movement of the plunger.

12. In a machine of the class described, the combination of a depressible plunger, a guide for said plunger, said guide carried by the base of the machine, a revoluble drum mounted on said machine, a feed roller having radial pins, said roller operated by the return stroke of the plunger, an undulated shearing blade operated by said plunger, a fixed undulated blade co-acting with the first-named blade and a brake device for preventing the accidental jerking of said revoluble drum.

13. In a machine of the class described, the combination of a plunger, a guide for said plunger, a drum whereon a stamp strip is wound, a feed roller, radial pins on the periphery of said roller to engage said stamp strip, peripheral grooves in said roller, spring arms bearing in said grooves and projecting from a stationary part of the machine, a curved shield arranged about



said roller periphery, a movable shearing blade of undulated shape, mechanism for operating said blade actuated by said plunger, a fixed undulated blade co-acting with  
 5 the movable blade, and means for partly rotating the feed roller by the return movement of the plunger.

14. In a machine of the class described, the combination of a plunger, a guide for  
 10 said plunger, a drum whereon a stamp strip is wound, a feed roller, radial pins on the periphery of said roller to engage said stamp strip, peripheral grooves in said roller,  
 15 spring arms bearing in said grooves and projecting from a fixed part of the machine, a curved shield to hold the stamp strip against the roller, said shield being adjustable as to position, said spring arms serving  
 20 afterward to divert the said strip from said roller, a shearing device operated by the plunger, means for intermittently rotating the feed roller on the return of the plunger, displaceable damping pads arranged in the  
 25 path of the plunger below the shearing device, said pads pivoted in the plunger guide and adapted to remain normally in a horizontal position, a hollow base to the machine, a reservoir for liquid in said base,  
 30 and communication between said reservoir and said damping pads.

15. In a machine of the class described, the combination of a plunger, a guide for  
 said plunger, a drum whereon a stamp strip is wound, a feed roller, radial pins on the  
 35 periphery of said roller to engage said stamp strip, peripheral grooves in said roller, spring arms bearing in said grooves and projecting from a fixed part of the machine, a curved shield to hold the stamp  
 40 strip against the roller, said shield being adjustable as to position, said spring arms serving afterward to divert the said strip from said roller, a shearing device operated by the plunger, means for intermittently ro-  
 45 tating the feed roller on the return of the plunger, displaceable damping pads arranged in the path of the plunger below the shearing device, said pads pivoted in the plunger guide and adapted to remain nor-  
 50 mally in a horizontal position, a hollow base to the machine, a reservoir for liquid in said base, a wick between said reservoir and said pads, and a brake device bearing upon the periphery of said drum to prevent the acci-  
 55 dental movement of the drum and stamp strip.

16. In a machine of the class described, the combination of a plunger, a guide for  
 said plunger, a drum whereon a stamp strip  
 60 is wound, a feed roller, radial pins on the

periphery of said roller to engage said stamp strip, peripheral grooves in said roller, spring arms bearing in said grooves and projecting from a fixed part of the machine, a curved shield to hold the stamp  
 65 strip against the roller, said shield being adjustable as to position, said spring arms serving afterward to divert the said strip from said roller, a shearing device operated by the plunger, means for intermittently ro-  
 70 tating the feed roller on the return of the plunger, displaceable damping pads arranged in the path of the plunger below the shearing device, said pads pivoted in the plunger guide and adapted to remain nor-  
 75 mally in a horizontal position, a hollow base to the machine, a reservoir for liquid in said base, a wick between said reservoir and said pads, a brake device bearing against the periphery of the said drum, and a dash-  
 80 pot device to retard the return stroke of the plunger.

17. In a machine of the class described, the combination of a plunger, a guide for  
 said plunger, a drum whereon a stamp strip  
 85 is wound, a feed roller, radial pins on the periphery of said roller to engage said stamp strip, peripheral grooves in said roller, spring arms bearing in said grooves and projecting from a fixed part of the ma-  
 90 chine, a curved shield to hold the stamp strip against the roller, said shield being adjustable as to position, said spring arms serving afterward to divert the said strip from said roller, a shearing device operated  
 95 by the plunger, means for intermittently rotating the feed roller on the return of the plunger, displaceable damping pads arranged in the path of the plunger below the shearing device, said pads pivoted in the  
 100 plunger guide and adapted to remain normally in a horizontal position, a hollow base to the machine, a reservoir for liquid in said base, a wick between said reservoir and said pads, a brake device bearing against the  
 105 periphery of the said drum, a dashpot device to retard the return stroke of the plunger, and a tongue projecting from the plunger guide into a slot in the plunger, said tongue standing normally above the dis-  
 110 placeable damping pads and adapted to prevent the foremost stamp of the strip from curling upward.

In witness whereof I have hereunto set my hand in presence of two witnesses.

HENRY HADIDA.

Witnesses:

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 CYRIL J. FEENY.