

(No Model.)

3 Sheets—Sheet 1.

J. BURROWS.

DEVICE FOR AFFIXING NAMES AND ADDRESSES UPON NEWSPAPERS, &c.

No. 534,782.

Patented Feb. 26, 1895.

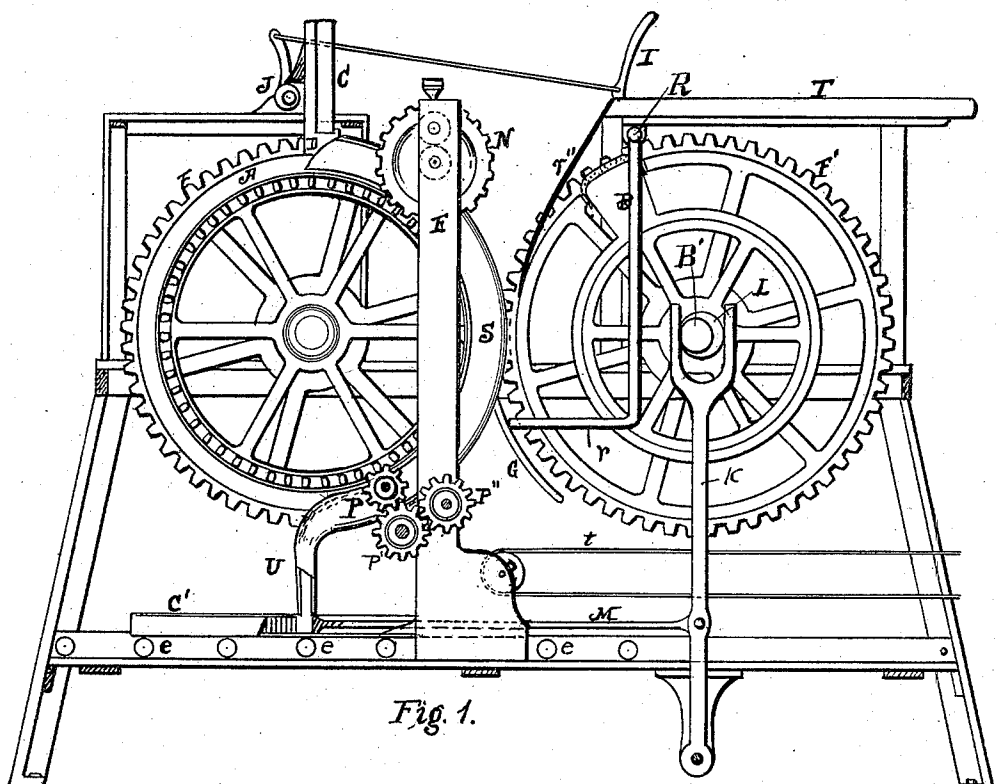


Fig. 1.

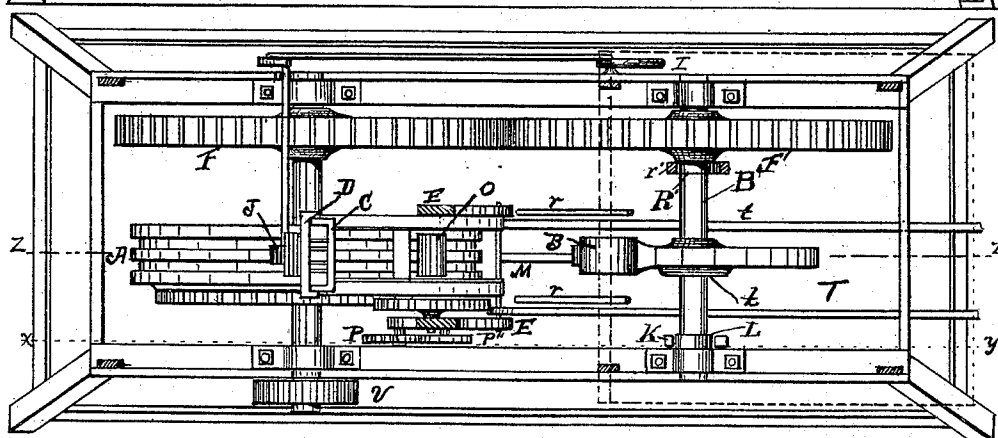


Fig. 2

Witnesses.
J. M. Swigart.
V. Z. Snell.

Inventor.
Jay Burrows

(No Model.)

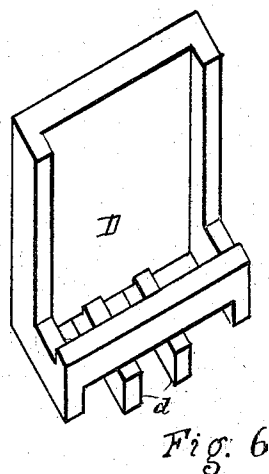
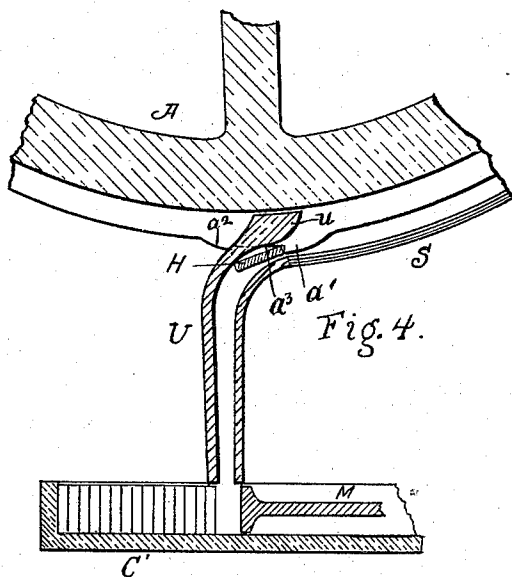
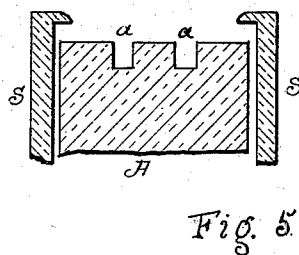
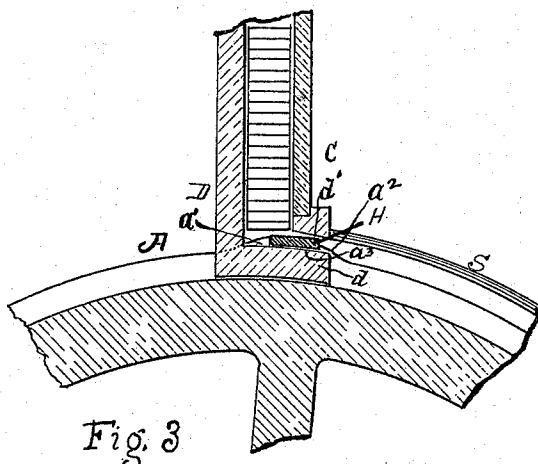
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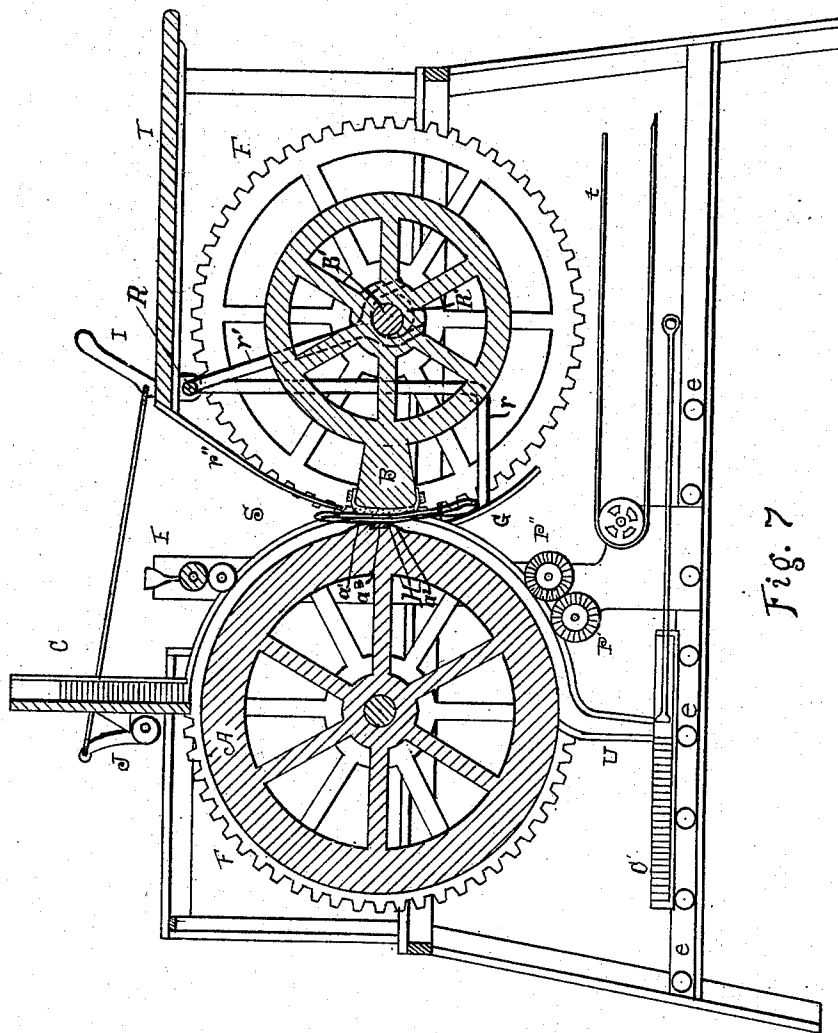
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J. BURROWS.

DEVICE FOR AFFIXING NAMES AND ADDRESSES UPON NEWSPAPERS, &c.

No. 534,782.

Patented Feb. 26, 1895.



Witnesses.

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UNITED STATES PATENT OFFICE.

JAY BURROWS, OF LINCOLN, NEBRASKA.

DEVICE FOR AFFIXING NAMES AND ADDRESSES UPON NEWSPAPERS, &c.

SPECIFICATION forming part of Letters Patent No. 534,782, dated February 26, 1895.

Application filed May 26, 1894. Serial No. 512,532. (No model.)

To all whom it may concern:

Be it known that I, JAY BURROWS, a citizen of the United States, residing at Lincoln, in the county of Lancaster and State of Nebraska, have invented a new and useful Device for Affixing Names and Addresses upon Newspapers, &c., of which the following is a specification.

This invention is a device for affixing names and post office addresses upon newspapers, wrapped or unwrapped, magazines, letters or any other matter. These addresses are printed upon said matter from detached movable plates upon which the addresses are fixed. These plates may be made of metal, wood, rubber, gutta-percha, or any other substance found desirable for that purpose.

The addresses may be fixed upon the plates in any manner found most convenient, but preferably the plate will consist of type metal upon which the addresses will be stamped with steel dies. This plate would print upon the paper a ground of the color of the inking pigment used, leaving the addresses the color of the paper upon which the die was impressed.

The machine may be of different sizes and the plates may be of any desired thickness and size adapted to the machine. After being prepared ready for use the plates are placed on edge in galleys convenient to the machine. The plates, if containing the subscription list of a newspaper or magazine, will be arranged according to post offices, and upon a strip attached to the rack holding the galleys will be written or printed the name of the post office opposite the plates containing the names of subscribers at that office. Promiscuous lists may be arranged alphabetically, these arrangements being to facilitate access to any part of the list for the purpose of corrections or additions. These plates are fed automatically into the machine in the order in which they are arranged in the galleys; and by it, after being impressed upon the article to be addressed, deposited in a duplicate galley in precisely the same order as received by the machine, and are then returned to the racks in their original order, this process being repeated until the contents of all the galleys are fed through the machine.

The accompanying drawings represent the devices which I employ in the accomplishment of the above purpose, in which—

Figure 1 is a sectional view made on the line $x y$, as shown in Fig. 2. Fig. 2 is a plan view, showing the machine with a portion of the top removed. Fig. 3 is a section of a portion of the main wheel, A, showing in detail the device for automatically taking the plates from the galley. Fig. 4 is a sectional view of a portion of the bottom of the wheel A showing the manner in which the plates are automatically taken from the wheel and placed in a second galley C' in the same order as they came from the first one. Fig. 5 is a cross section of a portion of the periphery of the wheel A, showing the form of its surface, and also the shields which serve to retain the plate upon the wheel during a portion of a revolution. Fig. 6 shows a perspective view of the bottom of the chute holding the plates, with the bars which rest in the grooves, and the opening in the front of said chute out of which the plates pass as they are caught by the lugs on the wheel. Fig. 7 is a section on line $z-z$, Fig. 2.

In Fig. 1 a portion of the receiving galley C' and the tube U through which the plates H are returned to the galley is removed to show more clearly the construction of the same, and the use of the follower M, which is actuated by the lever K, and serves to push the plates and galley forward as the plates are deposited.

This machine consists of a wheel A keyed to an axle turning in journals fastened to any suitable table, legs or supporters, the surface of the periphery of which corresponds in width to the length of the plates to be used upon it.

The wheel A may be of any desired diameter, to carry only one plate, or any number of plates, according to the use for which it may be adapted, (either for addressing newspapers, magazines, &c., or smaller sized matter, such as envelopes,) and according to the speed of work desired.

Beginning at a point near the top of the wheel A and extending to a point near its bottom are two shields SS, one on each side of and turned about one fourth of an inch over the face of the wheel. These shields

are not attached to the wheel A, but are held in place by connections with standards E E; but the face of that portion of the wheel A which carries the plates H runs as close to the shields which are turned over the sides of said face as it can run with unimpeded movement.

To the axle may be attached a crank or pulley V, to which may be affixed hand or other motive power, as may be desired.

Contiguous to the wheel A and upon each side of it, are two or more standards, E E, for the support of parts of the machine. Upon one side of the wheel A is attached a spur wheel Z which in conjunction with pinion wheels, operates inking rollers O for inking the plates, and a series of revolving brushes $p p'$ which are operated by the pinions P P' P'', which, by the use of naphtha or other suitable material, cleanse the plates after the impression has been taken and as they pass for deposit to the galley C below the machine.

On the side of the impression wheel B is an eccentric L which is connected with the lever K by which through the medium of followers M the galley receiving the plates is moved rearward the thickness of one plate directly after the plate has been deposited in it.

Upon the axle of the wheel A is also keyed a cogged wheel F the use of which will be hereinafter described.

In the surface of the periphery of the wheel A are two grooves $a a$, each about one-fourth of an inch in width and the same in depth.

Upon the surface of the periphery of the wheel A, and across it, are raised lugs $a' a^2$, the faces of which are at right angles with the face of the wheel A, their rear being sloping. These lugs are cut by the grooves the same as the rest of the surface of the wheel A. These lugs are raised to the exact height of the thickness of the plates which are fed upon the wheel. Their number on the wheel A corresponds with the number of plates which are to be fed upon said wheel at one revolution; which may be one or more, according to the character and rapidity of the work desired. Between these raised lugs is formed a recess of the exact width of the plates to be used, and of a depth corresponding exactly with the thickness of said plate.

Keyed to a shaft B' turning in journals fixed to the same table or supports as the shaft of the wheel A, and exactly level with its axis, is a revolving impression segment B, which is actuated from the cog wheel F keyed upon the main shaft, before named, by means of cog-wheel F' keyed to the shaft B' of said segment the periphery of which platen moves at exactly the same speed as the periphery of the wheel A.

The impression segment impinges against the surface of the wheel A at each revolution it makes. This impression segment and the gears actuating it may be so constructed as to make only one revolution to each revolu-

tion of the wheel A, or it may make as many as desired, according to the number of plates fed at one revolution of the wheel A, the said revolving impression segment making one impression from a plate at each revolution it makes.

Nearly upon the perpendicular of the wheel A is placed a galley holder D, into which the galley containing the plates as above named is placed in a perpendicular position, the holder D forming one side of the box in which the plates are now inclosed, and also having at the bottom two bars $d d$ which are attached to the back side of the galley C, while an opening d' is cut out above them in front through which the plates H can be pushed out.

It will now be seen that as the wheel A is rotated forward the raised lug which has a front face at right angles with the wheel, and is raised to the exact height of the thickness of one plate, will catch one plate H and force it forward out of the opening at the bottom of the box, each raised lug doing the same, if more than one: The ends of the plate will immediately pass under the shields S, which project over the outer corners of the wheel and be pressed by these shields into the recess cut out to the depth of its thickness and the width of its width, and by those shields be held from being thrown off from the wheel by centrifugal force. The plates will now pass under the inking apparatus held by the standards E E before named, and be covered with a coloring pigment. As it reaches the point exactly opposite the longitudinal axis of the wheel A, the paper, wrapper, magazine, envelope, or other matter to be addressed, will be pushed against it by the revolving impression plate B above described, the periphery of which is moving at exactly the same speed as the periphery of the wheel A, thus imprinting upon the paper or other matter, while it is in motion, the device stamped upon or affixed to the plate. After the impression has been made the plate, moving continuously with the wheel A, passes under a series of rapidly revolving circular brushes, before named, for cleaning. Coming now to the bottom of the wheel A, and the end of the shields described, the plate is deposited in the galley before named, being guided to the same by fingers u on the tube U, the ends of which reach into the grooves on the under side of the wheel A, at that point arresting the forward motion of the plates. As the plates in the perpendicular galley are exhausted another galley of plates is placed in position, and the just emptied galley placed below to receive them.

Opposite and in front of the wheel A, and over the shaft carrying the revolving impression plate, is a table T, of convenient size and form, before which the operator stands, and from which the papers or other matter to be addressed are dropped to the point at which the impressions from the platen are begun. At this point the papers are arrested by rests

actuated by a cam from the shaft of the revolving platen, which withdraws the rests at the instant the paper is caught between the impression segment and the movable plate carrying the address to be printed. This rest consists of fingers *r r* mounted on a cross-shaft R, suitably mounted under the feed board T. This shaft R is rocked to move the fingers *r, r* away from the guide G and out of the path of the papers, by an arm *r'* secured thereto, which arm *r'* is provided with a bifurcated end engaging the arm R' on shaft B' of the impression segment. When released by the printing couple the paper or other matter drops upon moving tapes *t t*, and is carried any convenient distance to a mailing table.

To suddenly arrest the operation of the machine a lever, I, is arranged so that by means of an eccentric J the holder D is raised up to the height of the thickness of one plate, when the raised lugs of the wheel A will pass under without catching a plate. Thus the machine may continue in motion but no plates or papers be fed into it. This lever corresponds to a "throw off" of a printing press.

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

1. In an addressing machine, a grooved plate-carrying wheel provided with plate-engaging lugs, combined with an upright feeding chute, provided with a bottom consisting of bars which rest in the grooves of said plate-carrying wheel, and provided with an opening at one side over the bars through which the lower plate is passed as it is engaged by the lugs, and combined with inking and cleansing mechanism, substantially as described.

2. In an addressing machine, a grooved plate-carrying wheel provided with plate-engaging lugs, combined with a feeding chute having a bottom consisting of bars which normally rest in the grooves of said plate-carrying wheel, and provided with an opening at one side over said bars through which the lower plate is passed as it is engaged by the

lugs, and means for shifting the relative position of said bars and grooves to arrest the feeding of the plates when desired, substantially as described.

3. In an addressing machine, a grooved plate-carrying wheel provided with plate-engaging lugs, combined with an upright feeding chute provided with a bottom consisting of bars which rest in the grooves of said plate-carrying wheel, and provided with an opening at one side over the bars through which the lower plate is passed as it is engaged by the lugs, and a receiving tube having fingers which reach into the grooves of the plate-carrying wheel, and a receiving galley for the plates, substantially as described.

4. In an addressing machine, a grooved plate-carrying wheel provided with plate-engaging lugs, combined with a feeding chute provided with a bottom consisting of bars which rest in the grooves of said plate-carrying wheel, and provided with an opening at one side over the bars through which the lower plate is passed as it is engaged by the lugs, a delivery tube, two shields, one on each side of said plate-carrying wheel arranged between the feeding chute and delivery tube, said shields having flanges extending over each side of the face of the wheel and designed to retain the plates thereon, substantially as described.

5. In an addressing machine, the combination of a plate-carrying wheel, provided with lugs for engaging and recesses for receiving plates, a revolving impression segment, a plate-feeding chute, a plate-receiving tube, a receiving galley, means for moving the same as the plates are deposited therein, inking mechanism, cleansing mechanism, and a device for carrying papers or articles addressed to a mailing table, substantially as described.

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Witnesses:

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