C. LANKHUFF.

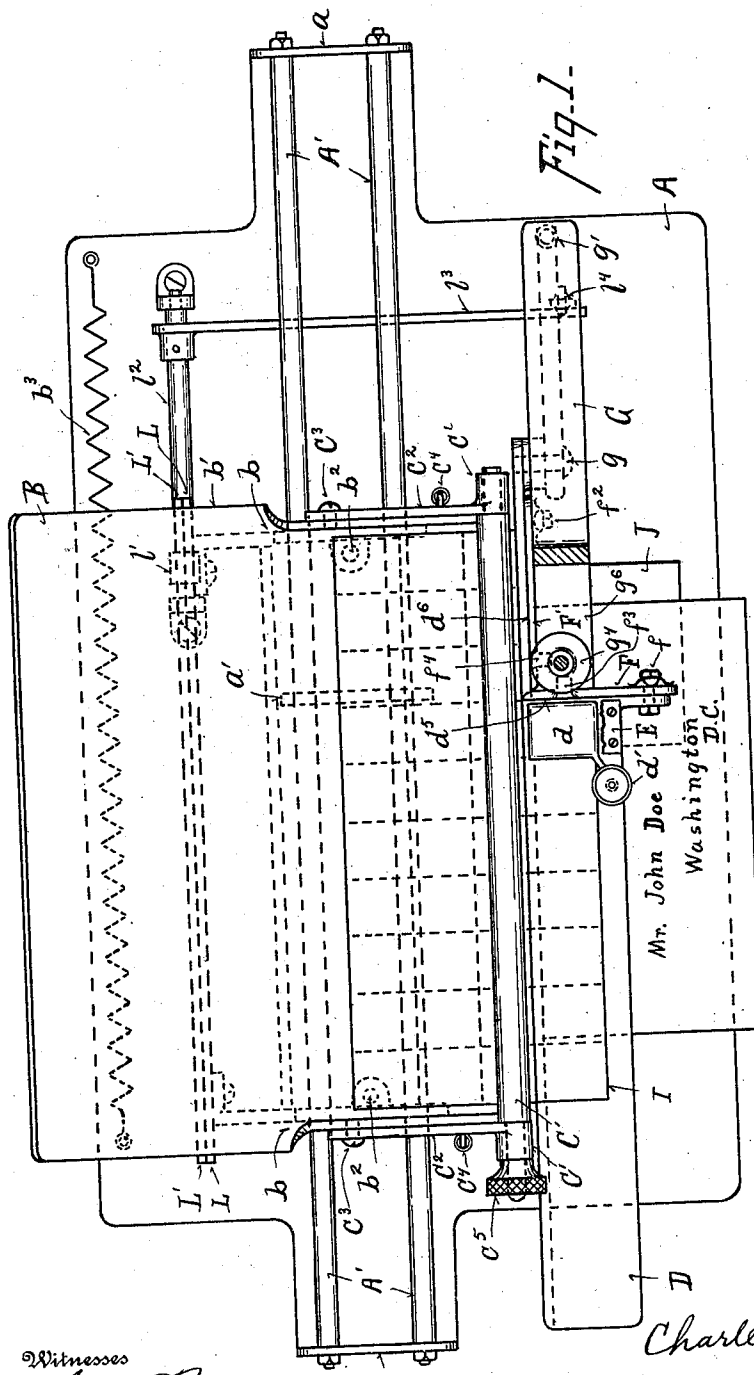
MAIL STAMPING MECHANISM.

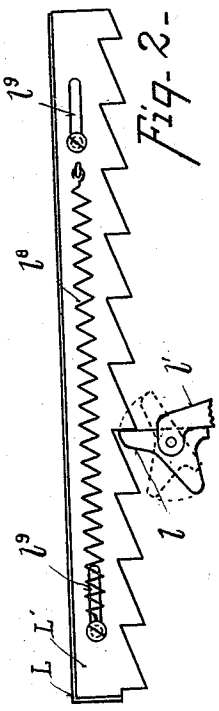
APPLICATION FILED MAY 11, 1908.

981,285.

Patented Jan. 10, 1911.

3 SHEETS—SHEET 1.





Witnesses

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3 SHEETS—SHEET 2.

Fig. 3.

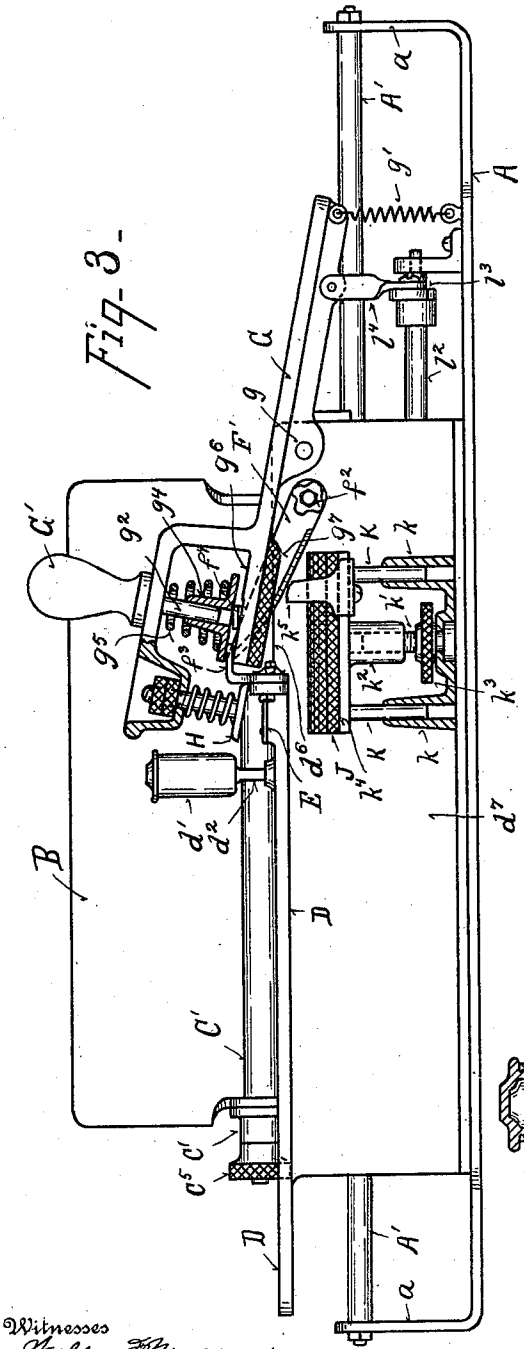


Fig. 4.

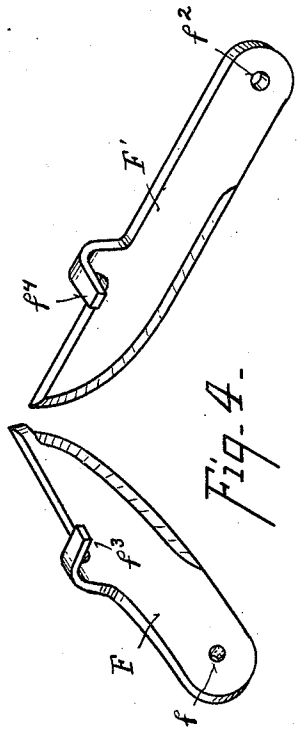
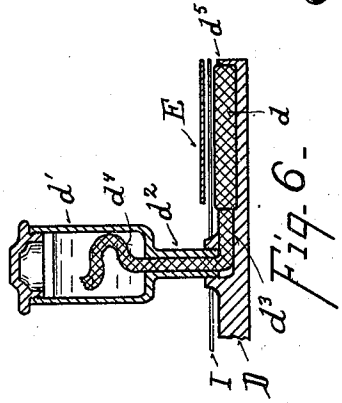


Fig. 5.

Fig. 6.



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3 SHEETS—SHEET 3.

Fig. 9.

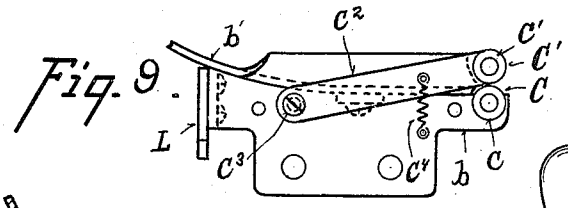
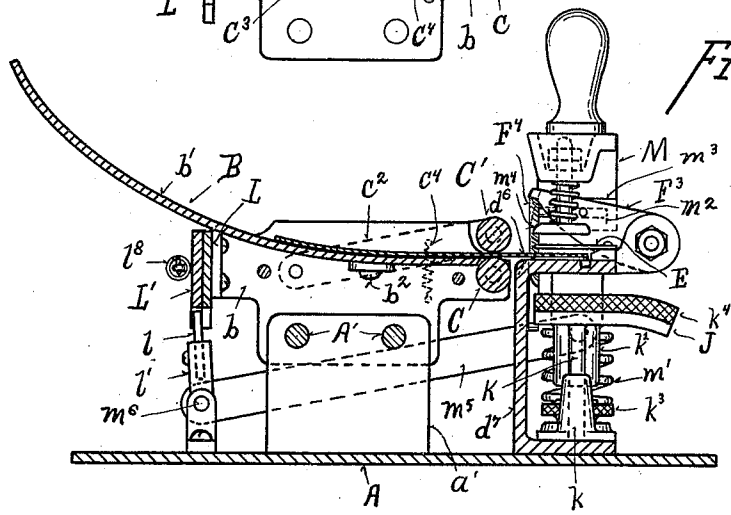


Fig. 7.



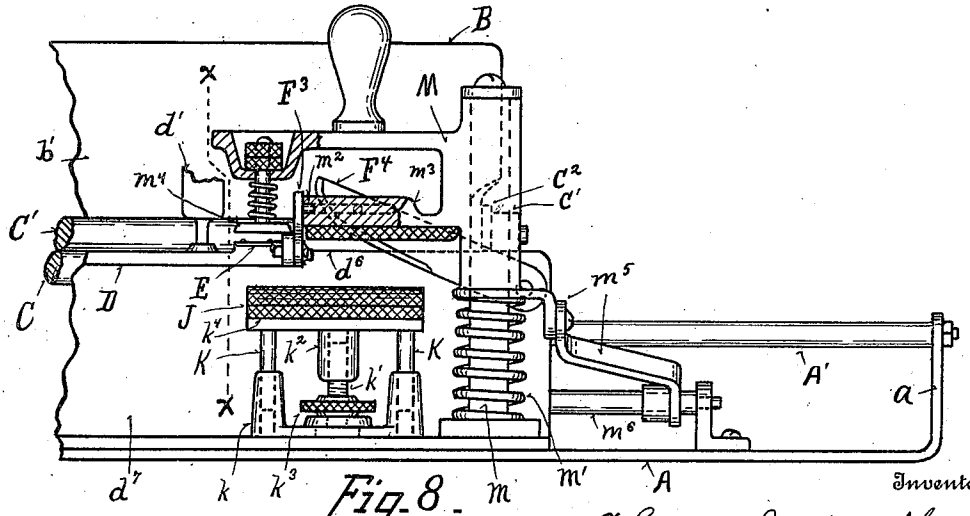


Fig. 8.

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UNITED STATES PATENT OFFICE.

CHARLES LANKHUFF, OF CINCINNATI, OHIO.

MAIL-STAMPING MECHANISM.

981,285. Specification of Letters Patent. **Patented Jan. 10, 1911.**

Application filed May 11, 1908. Serial No. 432,217.

To all whom it may concern:

Be it known that I, CHARLES LANKHUFF, citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Mail-Stamping Mechanism, of which the following is a specification.

My invention relates to improved mechanism for separating and affixing postage stamps.

One of its objects is to provide improved mechanism for feeding the stamps in the sheet, and separating the stamps therefrom.

Another object is to provide improved mechanism for moistening the stamps.

Another object is to provide improved mechanism for affixing the stamps to envelops or packages.

Another object is to provide simple, reliable and efficient means for successively carrying out the several steps of the operation.

It further consists in certain details of form, combination and arrangement, all of which will be more fully set forth in the description of the accompanying drawings, in which:

Figure 1 is a top plan view of my impoved mechanism. Fig. 2 is a detail of the carriage feed mechanism. Fig. 3 is a front elevation of Fig. 1. Fig. 4 is a perspective view of the knives or shear-blades which serve to sever the stamps successively from the sheet. Fig. 5 is a plan view of a spring washer employed to hold the knives tight against the stationary blades. Fig. 6 is a detail sectional view of the stamp moistening mechanism. Fig. 7 is a section on line X X of Fig. 8 and illustrating a modification of the mechanism shown in Figs. 1 and 3. Fig. 8 is a view similar to Fig. 3 of said modification. Fig. 9 is a detail view of one end of the carriage.

My improved mechanism is designed to hold a sheet of stamps, and to successively moisten, detach and affix the respective stamps to letters or packages.

In the accompanying drawings, A represents the base or frame of the machine, A′ represents rods carried by the upturned ends a of the frame A. The rods A′ are also preferably centrally supported by a bracket a' projecting up from frame A. A carriage B is composed of end sections b and a bed b' which are secured together at b^2. The carriage B is supported upon and adapted to slide along the rods A′, being actuated by spring b^3 attached at one end to the carriage and at the opposite end to frame A. A roller C is loosely journaled in journal boxes c carried by the end sections b.

C′ represents a roller journaled in boxes c' which are carried by arms c^2 which are pivoted at c^3 to the ends b and are provided with springs c^4 to press the roller C′ against roller C. A knurl c^5 on the end of roller C′ permits the roller C′ to be readily turned by hand to feed the sheet of stamps I (Fig. 1) forward from the bed b' between rolls C C′ and over a shelf or table D. Located in a depression in the top of table D is a moistening pad d, preferably of felt, but may be of other textile or like substance. A small reservoir d' serves to hold a supply of water to moisten the pad d', the water being fed from the reservoir d' through a tube d^2 and channel d^3 by means of a wick d^4. Above the pad d and normally out of contact therewith is a flexible sheet metal plate E which is adapted to be pressed upon the face of pad d.

The end d^5 of the shelf D has a sharp edge and serves the purpose of a stationary shear blade against which to sever one edge of the stamps. A movable knife or shear blade F pivoted at f and held against the end of the shelf D by a spring washer f' acts in conjunction with blade d^5 in severing the stamp. The edge d^6 of the upright web d^7 of shelf D also serves as a stationary blade at right angles to blade d^5, and in conjunction with a movable blade F′ pivoted at f^2 and held against web d^7 by a flexible washer, serves to sever the stamps from the sheet along the opposite angle.

As shown in Figs. 1 and 3, the movable blades F F′ are actuated by a lever G pivoted at g and normally held in the position Fig. 3 by means of a spring g'. The lever G carries an actuating handle G′ and has a stud g^2 to which is fitted a plunger g^4 actuated by a spring g^5. The blades F F′ are provided with ears f^3 f^4 which engage between the flange of plunger g^4 and the platen g^6 so as to cause the knives F F′ to move in unison with lever G. The lever G also carries a spring actuated plunger H which serves to press the metal plate E down upon the pad d, the attachment of plunger H being such that it can accommodate itself to different angles relative to

lever G, and thus press evenly upon all parts of plate E. The platen g^6 has its under face covered with a facing or pad g^7, preferably of felt, which serves to press the severed stamp upon the letter or package. J represents a table or support for the letter or package. Table J is vertically adjustable by means of pins K which telescope into a support k, and is adjustable to the desired height by means of a screw threaded rod k' which is journaled at its lower end in the support k and with its upper end tapping a sleeve k^2 of the table J; a knurled head k^3 serving to turn screw k' to adjust the height of table J. The top of table J is preferably faced with a felt pad k^4. A gage k^5 attached to the edge of table J serves to guide or limit the position of the letter or package in receiving the stamp. The carriage B is automatically fed forward one step, equal to the width of a stamp, at each operation of the lever G by means of a rack bar L carried stationarily relative to the carriage and a rack bar L′ which is attached to and movable relative to bar L the distance equal to the width of a stamp, by means of spring l^8 and slots l^9. A pawl is carried by and pivotally attached to an arm l' carried by a rock-bar l^2, which is rocked by means of an arm l^3 connected at its free end by a link l^4 with lever G. The movement of rock-bar l^2 causes the pawl l to move from engagement with rack-bar L′ into engagement with rack-bar L when lever G is depressed, and to return to engagement with the next tooth of bar L when lever G rises, thus advancing the carriage step by step. When the carriage is returned by hand the pawl l assumes the position shown in dotted lines Fig. 2. Bar L′ may be attached to either side of bar L so that rocking of bar l^2 in either direction at the depression of lever G will effect the desired movement of the carriage.

In the modification Figs. 7 and 8 I have shown a vertically moving member M corresponding in function to the pivoted lever G of Figs. 1 and 3. The member M is supported and adapted to move vertically upon a polygonal column m, and is normally held in the elevated position by spring m'. The knives F^3 F^4 are actuated by means of pins or studs engaging horizontal slots m^2 in the edge of platen m^3. m^4 represents the spring plunger working above the plate E, and m^5 an arm to rock the rock-bar m^6 to feed the carriage forward. In other respects the mechanism is the same in Figs. 1 and 3 and 7 and 8.

In practice, a sheet of stamps I is placed upon the bed of carriage B and fed forward between rollers C C′ until one row of stamps overhangs table D with the first stamp between the pad d and plate E. The handle G′ being depressed, the first stamp is pressed upon pad d and moistened; when handle G′ is released and rises, the carriage feeds forward carrying the first stamp between the knives and the second stamp over the pad d. A letter or package being placed upon table J, and table J adjusted to height, handle G′ is again depressed, the knives F F′ sever the first stamp, and platen g^6 presses it upon the letter, and at the same time the second stamp is moistened; with each succeeding operation a stamp is detached until the first row is exhausted, when the carriage is moved to the left by hand and a second row of stamps is fed between rolls C C′. The plate E serves as a stripper to hold the stamp in place on the pad d, and prevent knife F as it rises turning up the edge of the stamp over the pad d.

The mechanism herein illustrated and described is capable of considerable modification without departing from the principle of my invention.

Having described my invention, what I claim is:

1. In a mechanism of the character indicated, a carriage having a step-by-step movement, stamp-feeding rolls carried by said carriage, a stationary shelf in front of said rolls, a moistening pad carried by said shelf, stationary shear blades arranged at right angles to each other and carried by said shelf, a reciprocating platen, independent pivotally supported movable shear blades acting in conjunction with the stationary blades on said shelf and actuated by the movements of said platen, and a table to support the article to which the stamp is to be affixed.

2. In a mechanism of the character indicated, a movable carriage, stamp-feeding rolls carried by said carriage, a stationary shelf in front of said rolls, a moistening pad carried by said shelf, stationary shear blades arranged at substantially right angles to each other, a reciprocating platen, and independent movable shear blades acting in conjunction with said stationary blades and actuated in unison with the movements of said platen.

3. In a mechanism of the character indicated, a movable carriage, a moistening pad stationarily located in front of said carriage, a stationary blade at one side of said pad, a stationary blade at right angles to said last named blade, a reciprocating platen, a pair of movable blades acting in conjunction with said stationary blades to separate the stamps, a plate above said pad, and between which and the pad the stamps pass, and a plunger actuated in unison with said platen to press said plate upon a stamp and thus force the stamp in contact with the pad.

4. In a mechanism of the character indicated, a movable carriage, a stationary shelf in front of said carriage, a stamp moisten-

ing pad carried by said shelf, a reservoir containing a supply of water to moisten said pad, and a wick leading from said reservoir to said pad, a movable platen adjacent to said pad to affix the moistened stamp, shear blades actuated by the movements of said platen to sever the moistened stamp from the stamp sheet, and a yielding platen carried by said stamp affixing platen to press the stamps successively into contact with said moistening pad.

5. In a mechanism of the character indicated, a movable carriage, a moistening pad stationarily located in front of said carriage, a stationary blade at one side of said pad, a support for the article to which stamps are to be affixed, a reciprocating platen, a movable blade acting in conjunction with said stationary blade to separate the stamps, a plate above said pad, and between which and the pad the stamps pass, and a plunger actuated in unison with said platen to press said plate upon a stamp and thus force the stamp in contact with the pad.

6. In a mechanism of the character indicated, a movable carriage, a moistening pad stationarily located in front of said carriage, a stationary blade at one side of said pad, a support for the article to which stamps are to be affixed, a reciprocating platen, a movable blade acting in conjunction with said stationary blade and moving in unison with said platen, a flexible plate above said pad between which and the pad the stamps pass, and a spring actuated plunger carried by said platen to press said flexible plate upon said pad.

In testimony whereof I have affixed my signature in presence of two witnesses.

CHARLES LANKHUFF.

Witnesses:
C. W. Miles,
A. McCormack.