

(No Model.)

2 Sheets—Sheet 1.

H. GREEN.

APPARATUS FOR CANCELING POSTAL MARKS.

No. 574,414.

Patented Jan. 5, 1897.

Fig. 1.

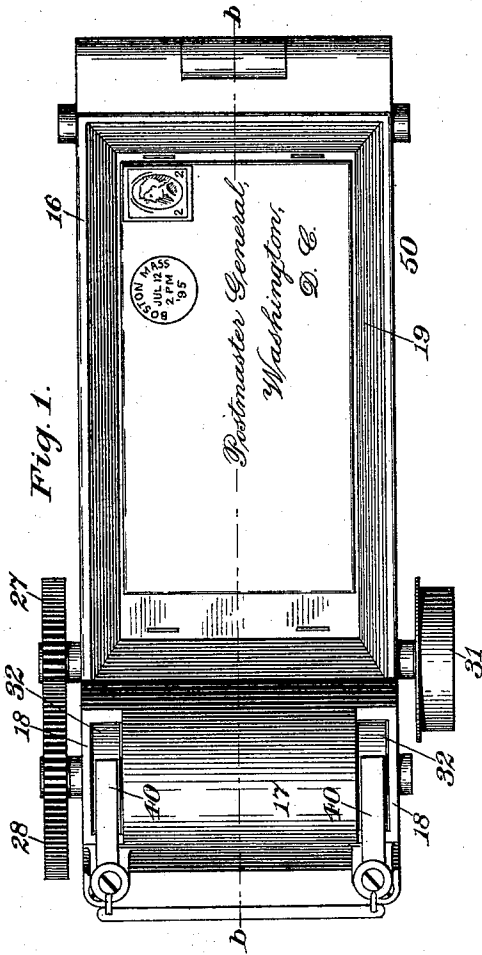


Fig. 2.

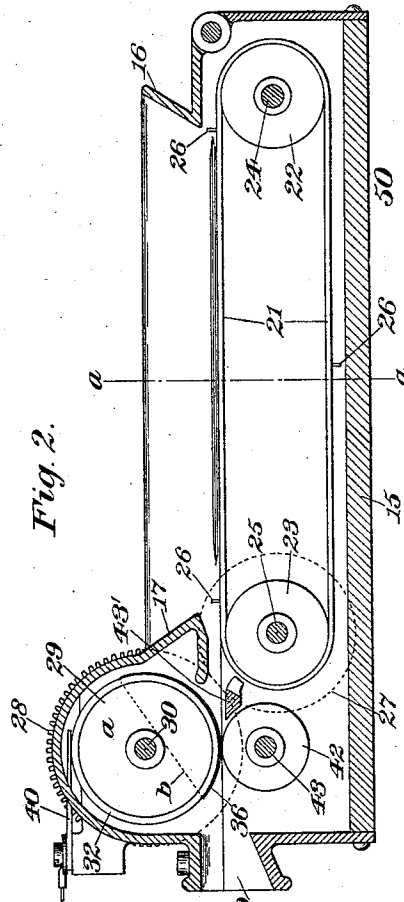


Fig. 4.

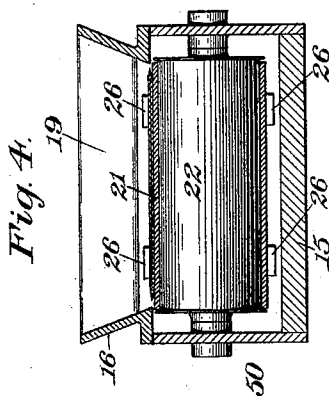
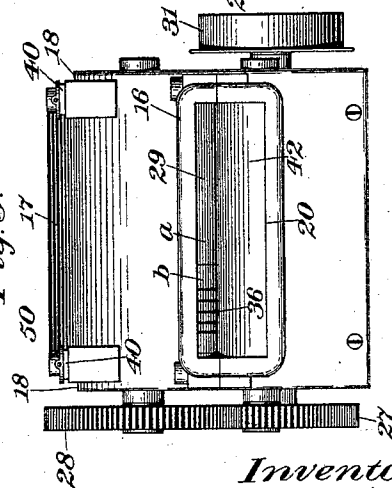


Fig. 3.



Witnesses:
J. L. Edwards, Jr.
Fred. J. Dole.

Inventor:
Henry Green.
By his Attorney,
F. A. Richards.

(No Model.)

2 Sheets—Sheet 2.

H. GREEN.

APPARATUS FOR CANCELING POSTAL MARKS.

No. 574,414.

Patented Jan. 5, 1897.

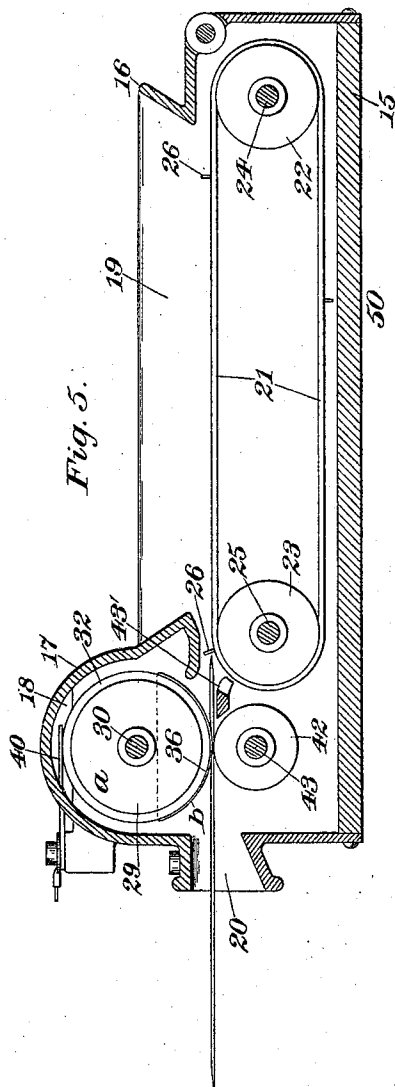


Fig. 5.

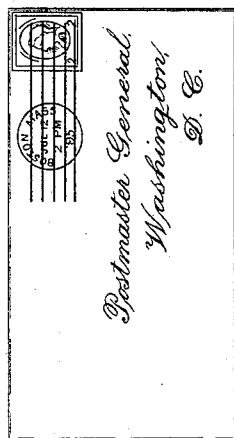


Fig. 10.

Fig. 7.

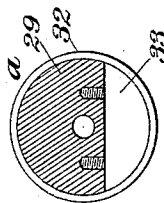


Fig. 9.

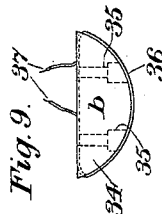


Fig. 6.

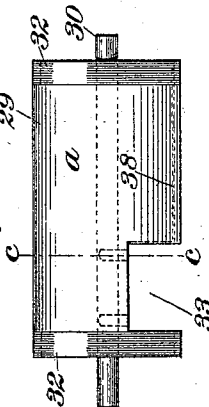
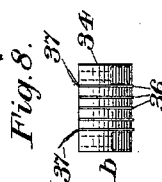


Fig. 8.



Witnesses:

H. L. Edwards Jr.
Fred. J. Dole.

Inventor:

Henry Green.
By his Attorney
F. H. Richards.

UNITED STATES PATENT OFFICE.

HENRY GREEN, OF HARTFORD, CONNECTICUT.

APPARATUS FOR CANCELING POSTAL MARKS.

SPECIFICATION forming part of Letters Patent No. 574,414, dated January 5, 1897.

Application filed July 13, 1895. Serial No. 555,821. (No model.)

To all whom it may concern:

Be it known that I, HENRY GREEN, a citizen of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Apparatus for Canceling Postal Marks, of which the following is a specification.

This invention relates to an apparatus for canceling postage-stamps and postal marks on postal cards or other matter transmitted through the mails; and the object of the invention is to provide an improved apparatus for canceling, without the use of ink, postage-stamps or postal marks on postal cards or matter transmitted through the mails whereby the reusing of the stamps or mail-mark is prevented; and another object of the invention is to provide an apparatus which will be simple and durable in construction, and which will thoroughly cancel a postage-stamp or postal mark without the use of ink, as heretofore.

In the drawings accompanying and forming part of this specification, Figure 1 is a top view of one form of apparatus for carrying out this invention and showing a letter with its stamp in place to be fed into engagement with the canceling device. Fig. 2 is a longitudinal sectional view thereof, taken in line *b b*, Fig. 1. Fig. 3 is an end view looking toward the right hand in Fig. 2. Fig. 4 is a vertical cross-sectional view taken in line *a a*, Fig. 2, and looking toward the right hand thereof. Fig. 5 is also a longitudinal sectional view taken in line *b b*, Fig. 1, showing a letter fed into position to have its postage-stamp canceled and then be ejected from the machine. Fig. 6 is a detail view of the rotary insulated cylinder comprising one member of the canceling device proper in this form of apparatus shown. Fig. 7 is a cross-sectional view thereof, taken in line *c c*, Fig. 6. Fig. 8 is a detail view of the canceler-carrying segment comprising the other member, in this form of apparatus shown, of the canceling device proper. Fig. 9 is an end view of Fig. 8. Fig. 10 is a letter after the same has passed through the machine and the stamp has been canceled.

Similar characters designate like parts in all the figures of the drawings.

One form of apparatus for carrying out this invention in the preferred form thereof herein shown and described consists of a suitable receptacle or frame for the mechanism hereinafter described of any desired shape or construction adapted for the purpose and indicated in a general way by 50. This receptacle 50 comprises a box or base 15 and a hinged member 16, secured to one end of said base. This hinged member carries at one end thereof an inclosing case or cap 17, having a part 18 thereof cut away or recessed for the purpose hereinafter specified. The hinged member 16 is provided with a chute or opening 19, of any suitable construction, adapted to receive letters, postals, or mail-matter of any size in proportion to the machine. The receptacle has formed at one end thereof, preferably adjacent to the canceling device, a second chute or opening 20 for the mail-matter to be ejected therefrom.

A suitable feeding or carrying mechanism for the mail-matter is disposed within the receptacle and is herein shown consisting of a belt or other mail-matter carrying or feeding means supported on suitable rollers 22 and 23, having their shafts 24 and 25 journaled in the sides of the receptacle. This belt or other carrier 21 has suitable means secured thereto for carrying letters or other mail-matter, and is herein shown consisting of pins or studs 26, secured to the belt, between which the mail-matter rests.

The roller 23 has secured to one end of its shaft 25 a gear wheel or pinion 27, adapted to mesh with the gear-wheel 28 of the canceling device proper, hereinafter described.

A canceling device proper adapted to be heated for canceling postage-stamps or postal marks by partially searing, burning, or scorching the same, or a mark or a design thereon, in the preferred form thereof herein shown consists of two members forming a rotary insulated cylinder 29, preferably solid and secured for rotation within the cap or case 17 by means of a suitably-journaled shaft 30, which shaft carries a gear 28 in mesh with the pinion 27, and from which it receives motion, the shaft 25 having a pulley 31 on one end thereof opposite to its gear 27, to which power is applied by any suitable means.

The cylinder 29 as a whole is preferably

formed of insulated material, having electrical conductors in the shape of brass bands 32 secured to the ends thereof. This cylinder 29 is preferably cut out or recessed adjacent to one of its ends to a width slightly more than the length of a postage-stamp, and when so constructed forms one member *a* of the canceling device proper. In this cut-out or recessed portion 33 a segment 34, forming the other member *b* of the canceling device, is disposed and preferably has its periphery flush with the periphery of the member *a*, and is adjustably secured therein by means of a locking device or screws 35, which extend through the member *b* from the peripheral face thereof and enter threaded apertures 35' in the member *a*. This segment 34 may constitute the canceler, but is preferably shown carrying on its periphery a suitable canceler or canceling member which, in the preferred form thereof, consists of a wire or wires or a filament 36 of any desired size and adapted to project a slight distance from the periphery thereof, and owing to the relatively non-conducting surface of the cylinder the canceler will sear or mark only a certain determinate depth, whereby the paper or matter operated upon will not be burned through, and whereby also when the canceler is in engagement with the postal mark or mail-matter said matter will be engaged by the periphery of the cylinder, as the canceler, projecting only a slight distance from the periphery of said cylinder, embeds itself in the matter to be canceled a sufficient depth to sear or burn the same, and thereby also permitting the periphery of the cylinder to engage with the matter operated upon adjacent to the canceler and feed the same away from the canceler without the use of other feeding means and independently of the engagement of the canceler with the matter operated upon. The canceler, if desired, in order to have the same project only a slight distance from the periphery of the cylinder or segment thereof may be embedded a certain part of its diameter in said segment or cylinder. When a series of parallel wires are used as the canceler, the periphery of the cylinder will engage the matter operated upon intermediate of said wires as well as adjacent to the outer sides thereof.

I have found in practice that the best results are obtained by the use of wires or filaments about five one-thousandths or six one-thousandths of an inch thick.

The wires or filaments may be disposed in any desired way to represent any desired mark, character, or design. For instance, the wires might be arranged to represent the flag of the United States; but in the form shown I have simply arranged the wires in parallels on the periphery of the segment. The ends 37 of the wires are connected to the conductors 32, one of said wires extending through an aperture 38, formed in the cylinder. It is obvious, however, that the segment might be disposed in any other part of

the cylinder adjacent to the periphery thereof and the wires connected in a similar manner by means of an aperture with both conductors or connected therewith in any other suitable way.

Secured to the receptacle 50 at any suitable place thereon are electric conductors 40, composed of any suitable material, having the ends thereof extending into the cut-out or recessed portions 18 of the cap or case 17 and into contact with the conductors or brass bands 32. Through these conductors the electricity is conducted to and away from wires on the segment.

In the use of this improved apparatus herein described when it is desired to cancel a stamp or other postal or mail mark the letter is placed in the chute 19 and falls onto the belt 21 and is fed forward over a suitable guide-plate 43' and beneath the cylinder 29 and is held in contact therewith by means of a suitable presser-roll 42, carried on an auxiliary shaft 43, journaled in the receptacle. The circuit in this form of apparatus having been made, the letter is fed beneath the canceling-roll, and the heated wires comprising the design, mark, or character on the segment partially sear, burn, or scorch the stamp or postal mark corresponding to such design, mark, or character, as the case may be, and thereby indicate at a glance that the same has been canceled. The letter is then fed out through the chute or opening 20 by the continued rotation of the cylinder 29, and another takes its place, and so on. Moreover, I do not confine myself to the use of wires as comprising the canceler and as a means for retaining the heat, as any other suitable device adapted to be heated by electricity and to sear, burn, or scorch a stamp or postal mark might be used. It will also be evident that the canceler may consist of any design, character, or mark formed upon the segment or the cylinder when the segment is not used.

From the foregoing it will be seen that the postage-stamps or other postal or mail mark will be seared, burned, or scorched corresponding with the design or character of the canceler and at those places only where the canceler touches such stamp, postal, or mail mark, and will be thoroughly canceled by such searing or burning to sufficiently indicate at a glance that the same has been canceled by the postal authorities, and whereby the reusing of the postage-stamp, stamped envelop, postal card, or other matter containing mail, stamp, or postal marks thoroughly prevented, so that by the use of this improved apparatus it is absolutely impossible to reuse such a postage-stamp or postal mark again, as it is impossible for the seared or burned mark to be repaired or removed, as is sometimes the case with the canceling methods now in use in which ink is used, as the inks can be removed by chemicals sufficiently from the stamps to permit their reusal.

The mechanisms of the apparatus are so

adjusted and timed that the segment carrying the canceler will always strike that part of the letter or other matter containing the stamp or mail-mark when the stamp is placed in its usual place.

This apparatus might be constructed, if desired, to cancel other than the postal marks and stamps of mail-matter—for instance, the stamps of such matters that do not go through the mails—such as internal revenue stamps and the like.

Having thus described my invention, I claim—

1. In an apparatus of the class specified, the combination with feed mechanism for the matter to be canceled; a rotary insulated cylinder having a recess in its periphery, and an aperture extending longitudinally through said cylinder and intersecting said recess; electric conductors encircling the ends of said cylinder; a segment disposed in said recess, and having a canceler on its periphery consisting of a wire or filament, one end thereof extending through the aperture in the cylinder and connecting with one of the conductors, and the other end thereof connecting with the other conductor; and means for actuating said cylinder and feeding mechanism, whereby the canceler will sear, burn, or scorch a mark, character, or design upon the matter to be canceled.

2. In an apparatus of the class specified, the combination with feed mechanism for the matter to be canceled; a rotary member having a recess in its periphery; electric conductors connected to said member; a segment disposed in said recess and having its peripheral face flush with the periphery of the rotary member, whereby said segment and rotary member form a cylinder having a relatively non-conducting surface and an electric canceler on said segment and connected with said conductors; and means for actuating said feeding mechanism and cylinder, whereby the canceler will sear, burn, or scorch a mark,

character, or design a certain determinate depth, limited by the relatively non-conducting surface of the cylinder, upon the matter to be canceled.

3. In an apparatus of the class specified, the combination with a receptacle having a receiving-chute and an ejecting-chute, and having an inclosing cap having recesses therein; a rotary cylinder carried within said cap, and having electric conductors secured thereto adjacent to the recesses in said cap; electric conductors secured to the receptacle adjacent to the recesses in the cap and in contact with the conductors on the cylinder; an electrically-heated canceler carried by said cylinder, and having its ends in contact with the conductors secured to the cylinder; means for feeding the matter to be canceled into contact with the canceler; and mechanism for actuating said feeding means and cylinder, whereby the canceler will sear, burn, or scorch a mark, character, or design upon the matter to be canceled.

4. In an apparatus for canceling or marking mail-matter, the combination with a receptacle having a receiving-chute and an ejecting-chute, and having an inclosing cap; a rotary insulated cylinder carried by a rotary shaft within said cap of the receptacle, and having electric conductors secured to the ends thereof, and also having a recess in its periphery; a segment adapted to be secured in said recess, and carrying an electrically-heated wire, having its ends in contact with the conductors secured to the ends of said rotary cylinder; a carrying-belt supported on rollers in said receptacle for feeding the mail-matter, one of said rollers carrying a pinion; and a gear carried by the shaft of the rotary insulated cylinder and adapted to mesh with the pinion.

HENRY GREEN.

Witnesses:

FRED. J. DOLE,
F. N. CHASE.