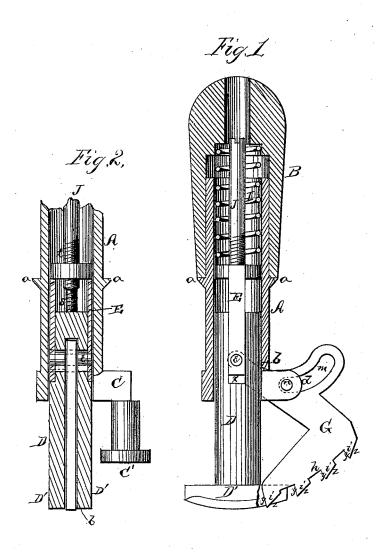
G. F. ALMY. PERFORATING STAMP CANCELER, AND POST-MARKER. No. 194.884. Patented Sept. 4, 1877.



Witnesses: M. M. arhu

C.L. Evert.

Inventor. Geo. F. Almy.

per,

UNITED STATES PATENT OFFICE.

GEORGE F. ALMY, OF DELPHOS, ASSIGNOR TO HIMSELF AND H. M. CLARK, OF TOLEDO, OHIO.

IMPROVEMENT IN PERFORATING STAMP-CANCELER AND POSTMARKER.

Specification forming part of Letters Patent No. 194,884, dated September 4, 1877; application filed July 13, 1877.

To all whom it may concern:

Be it known that I, GEO. F. ALMY, of Delphos, in the county of Van Wert and State of Ohio, have invented certain new and useful Improvements in Stamp Canceling Device; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

The nature of my invention consists in the construction and arrangement of a postmarking and stamp-canceling device, as will be

hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which-

Figure 1 is a central vertical section, and Fig. 2 a detail section, of my stamp-canceler.

A represents a metal tube or cylinder, open

at both ends, of any suitable dimensions, and having one end screwed or otherwise fastened in a handle, B, up to a circumferential shoulder, a, on said cylinder.

In the outer end of the cylinder A is a slot, b, with a projecting ear or lug, d, on each side thereof, and from one side of said cylinder, at the outer end, projects an L-shaped arm, C, carrying at its outer end a disk, C', in which the postmarking-type are to be held in the usual manner.

In the cylinder A is inserted a plunger, D, which is slotted longitudinally, as shown, and formed at its outer end with the curved guides

E is a stirrup, having its arms placed in grooves in the sides of the plunger at the inner end, and held thereto by a pin, e, passing through the parts, said pin, however, going through slots x in the plunger, as shown. This pin e pivots the cutter in the long slot of the plunger. This cutter G is made in L shape, with its outer edge h in the form of the are of a circle, and provided with the teeth i.

In the body of the cutter G is a curved slot,

m, through which is passed a pin or bolt, n, passing through the ears d on the cylinder, the cutter projecting through the slot b therein.

To sharpen the cutter G it is only necessary to file on the under side y of the teeth i, taking off just enough metal to produce a sharp point, the back or cutting edge z of the teeth being sloped back, only the point coming in contact with the stamp, thus preserving a sharp cutting edge to form a sharp point as they are filed away as described. This filing, of course, makes the teeth shorter each time, and, as it is necessary to have the points of the teeth a suitable distance below the surface of the guides D' D', which are on either side of them, the adjustment-screw J is applied in a peculiar manner to secure a very slow downward motion of the cutter by a rapid downward motion of the screw. This I accomplish by putting two screw-threads, s and t, both in the same direction on the same bolt, the lower one s coarser than the upper one t. The lower thread s enters a thread in the end of the plunger D, and the thread t enters a thread in the end of the stirrup or saddle E, to which the top end of the cutter is pivoted by the pin e.

By this arrangement, if the thread s is No. 18, and the upper thread t No. 24, the cutter is thrown down but one fourth the distance which the bolt descends. For instance, eighteen revolutions of the bolt would lower it one inch, and carry the cutter the same distance, were it not for the upper finer thread t, which has also made the eighteen revolutions, and in so doing has carried the saddle with the cutter up three-fourths of an inch, consequently the cutter has really descended but one-fourth of an inch. By varying the threads the result

can be changed to suit.

The bolt J is made to extend to near the top end of the handle B, so that a screwdriver may be inserted to adjust the same.

The motion is given to the cutter by the bolt n passing through the slot m therein, when the plunger is pressed upward, or, rather, the cylinder forced downward, and

the throw of the cutter can be made longer or shorter by suitably shaping the slot, making

it more or less curved.

A spiral spring, I, is placed around the adjusting screw J, for the purpose of bringing the cutter back to place after a stroke has been made; but this is not absolutely necessary, as the weight of the cutter and guards will accomplish this, though I prefer to use the spring.

The cutter can be made in one solid piece, as shown, or the teeth may be on a separate piece, and secured in any suitable manner; and I may use one or more, made in similar manner, in the same machine, either or all working from the same side, or they can be placed so as to work in opposite directions.

The bottoms of the guards D' are made circular both ways, so as to bring the cutter in contact with the stamp, even if the blow

should not be perfectly square.

The lower end of the cutter may be made in two pieces, so that a guard may be placed

between them as well as on the sides.

The manner of operating the tool is as follows: The disk C' is inked on a pad in the usual manner, and the tool then brought down upon the stamp to be canceled with sufficient force to bring the disk C' in contact with the letter or other article to be postmarked, care being taken to have the guides D' D' come in contact with the stamps to be canceled. The motion imparted to the cutter G by the stroke

or blow described effects a perfect cancellation of the stamp by cutting or removing a portion of the coloring from the face of the stamp, the guards preventing the cutter G from cutting more than the thickness of the stamp, the cutter being previously adjusted, as described.

Having thus fully described my invention, what I claim as new, and desire to secure by

Letters Patent, is-

1. In a stamp-canceler, a swinging cutter operating from a shifting fulcrum, and actuated by means of a sliding plunger, for the purposes herein set forth.

2. The combination of a swinging cutter, a sliding plunger carrying the same, and a stationary bolt or its equivalent passing through a slot in the cutter, as and for the purposes

herein set forth.

3. In a stamp-canceler, the combination of a plunger with guards, a swinging cutter, a sliding saddle or stirrup carrying the cutter within the plunger, and an adjusting-screw having two screw-threads of different pitch, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

GEORGE F. ALMY.

Witnesses:

B. J. BROTHERTON, W. P. GARRITT.