D. M. COOPER.

Stamp-Canceler.

No. 165,308. Patented July 6, 1875.

Fig. 1.

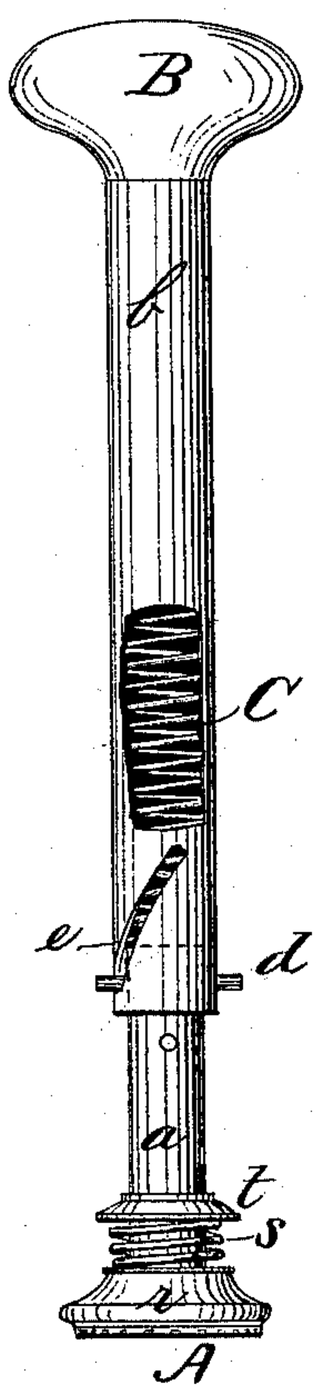


Fig. 2.

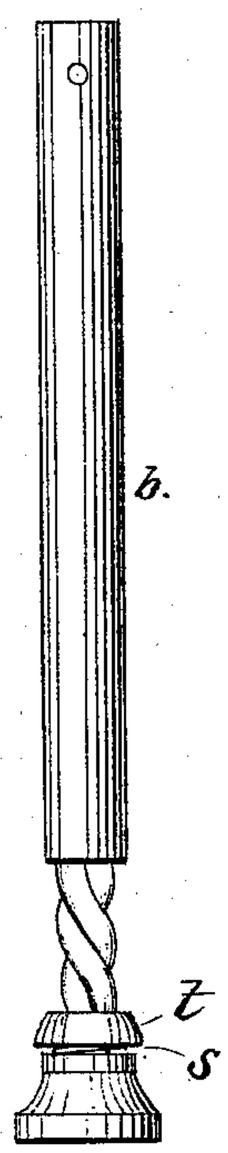


Fig. 3.

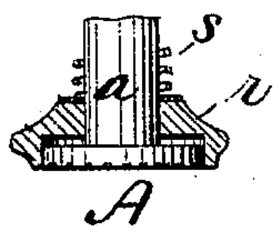
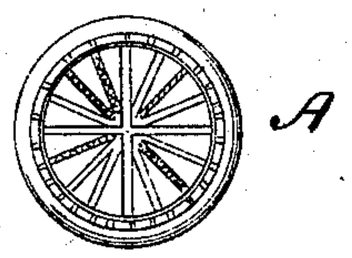


Fig. 4.



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UNITED STATES PATENT OFFICE.

DAVID M. COOPER, OF GEORGETOWN, DISTRICT OF COLUMBIA.

IMPROVEMENT IN STAMP-CANCELERS.

Specification forming part of Letters Patent No. **165,308**, dated July 6, 1875; application filed June 22, 1875.

To all whom it may concern:

Be it known that I, DAVID M. COOPER, of Georgetown, in the District of Columbia, have invented certain new and useful Improvements in Stamp-Cancelers; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings forming part of this specification, in which—

Figures 1 and 2 are side elevations, representing different modes of constructing the canceling-instrument. Fig. 3 is a section of the head of the instrument; and Fig. 4 is a plan view of the face of the abrading-disk and surrounding annular plate.

Similar letters of reference in the accompanying drawings denote the same parts.

This invention relates to that class of iustruments in which a handle, a revolving disk attached to a stem, and a spring are so combined that when the disk is pressed against any object, by means of pressure applied at the handle, the disk will rotate in contact with the object against which it is pressed, and cut or bore away a portion of the substance thereof, and when the pressure is removed the spring will return all the parts to their original position, ready for operation again. In such instruments, when they are to be used to remove a portion of a stamp for the cancellation thereof, they are provided with a ring or annular plate, extending around the cutting-disk, for the purpose of holding both the stamp and the canceling-instrument properly in place during the operation; and the mainspring has been heretofore employed for the purpose of pressing said ring upon the stamp. The employment of the mainspring for such purpose, however, renders the instrument unsightly and inconvenient to handle. If the spring is inclosed within a suitable case it adds to the weight and bulk of the instrument, and interferes with the proper freedom of movement of the annular plate; and, if not so inclosed, the instrument must be handled very carefully, or the spring is liable to injure the fingers. Whether inclosed or not, the pressure upon the annular plate around the head cannot be adjusted without at the same time and by the same movement adjusting the pressure upon the rotary cutting-plate inclosed by the ring. Again, such instruments have always heretofore been made to operate by cutting out a definite portion of the stamp, as, for example, by cutting out and removing a circle or a ring from the substance of the stamp. This mode of cancellation is objectionable, and never has obtained the sanction of the Government for postal purposes, for the reason that the cutting-edges are apt to cut too deep, and injure the envelope itself or its contents.

My object is to remedy these two defects, and adapt the instruments referred to for practical use for the cancellation of Government stamps; and to these ends my invention consists in the combination of parts, as I will now proceed to describe.

Two forms of the instrument thus improved are shown in the drawings, viz., one in Figure 1, in which the stem *a* of the disk A is supported in a tube, *b*, attached to the handle B, and rotated by means of a pin, *d*, working in a spiral slot, *e;* and another, shown in Fig. 2, in which said stem *a* is constructed with spiral grooves and ridges, which work in a suitable socket in the tube *b*. In both forms the mainspring C, which returns the parts of the instrument to their proper position after each operation, is contained within the tube *b*, where it is concealed from view, and prevented from coming in contact with the hand. Around the abrading-disk A is arranged a loose annular plate or ring, *r*, which is free to turn around the stem *a*, to adjust itself to the movements of the instrument. The lower edge of this ring or plate is roughened, to cause it to take hold of the stamp without slipping thereon. At a very short distance, say, from one-eighth to one-half an inch, above the upper side of the ring, a collar, *t*, is fixed to the stem, preferably so as to be capable of adjustment thereon toward or from the head of the instrument, any suitable means being employed for the purpose of such adjustment. Between the collar *t* and ring *r* is arranged a small independent spiral spring, *s*, the compression and force of which may be adjusted by moving the collar up and down on the stem. The spring bears upon the ring, and holds it upon the stamp while the disk A is rotating to abrade the surface thereof. The collar *t* extends out from the stem far enough to prevent the hand

from coming in contact with the spring when operating the instrument; and its outer edge may be turned down to nearly cover this spring and conceal it from sight, as shown in Fig. 2. The lower surface of the rotating disk A is roughened, or provided with a series of scrapers extending radially outward from the center, which operate to scrape off or file off, as it were, the outer surface of the stamp, not cutting out any particular portion, but defacing it generally, so that it cannot be used again without instant detection. No guard or adjustment is needed to prevent the disk from cutting through the stamp into the envelope or letter, because, from the very nature of its cutting-surface, it can do no damage to anything except the stamp. The instrument is, therefore, enabled to be made very simple and compact in structure and neat in appearance. When in use it rarely, if ever, needs adjustment after it is once properly set, and it operates without any danger of injuring the hand through accident or carelessness.

Having thus described my invention, I claim as new—

The yielding non-rotating impression-ring *r*, the rotating abrading-disk A, and the adjustable spring *s*, combined with the rotating spring-stem *a*, made in one piece, and the slotted tubular handle *b*, substantially as described, for the purpose specified.

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