

(No Model.)

E. H. DODGE.
HAND STAMP.

No. 507,067.

Patented Oct. 17, 1893.

Fig. 3.

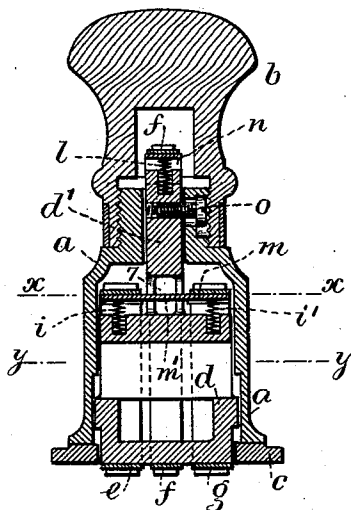


Fig. 6.

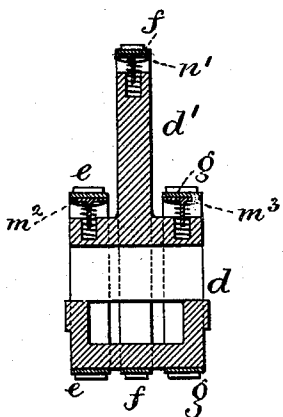


Fig. 4.

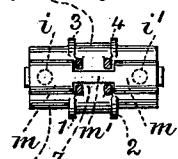


Fig. 5.

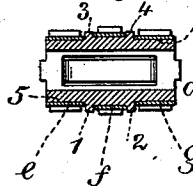


Fig. 2.

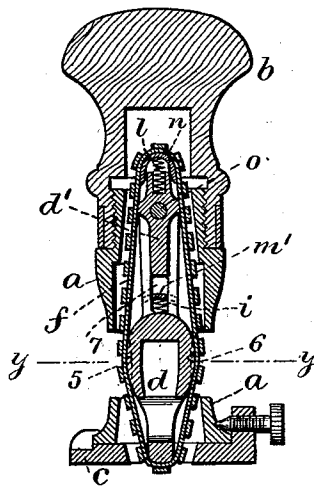


Fig. 1.

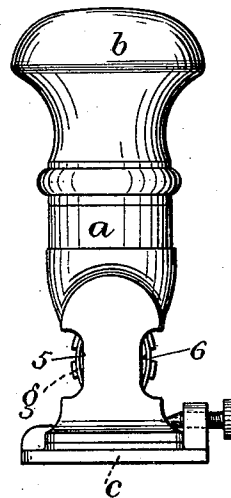
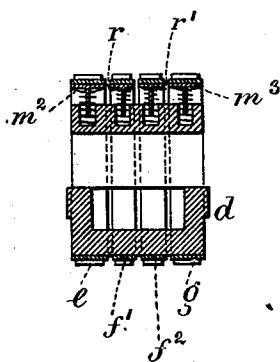


Fig. 7.



Witnesses:

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UNITED STATES PATENT OFFICE.

EDWIN H. DODGE, OF NEW YORK, N. Y., ASSIGNOR TO WILLIAM A. FORCE,
OF SAME PLACE.

HAND-STAMP.

SPECIFICATION forming part of Letters Patent No. 507,067, dated October 17, 1893.

Application filed March 14, 1892. Serial No. 424,776. (No model.)

To all whom it may concern:

Be it known that I, EDWIN H. DODGE, a citizen of the United States, residing at the city, county, and State of New York, have invented a new and useful Improvement in Hand-
5 Stamps, of which the following is a specification.

My invention relates to the class of hand stamps employing endless type bands of rubber, which bands are rotatable to bring different dates, numbers, or other inscriptions into the proper position for printing purposes. Heretofore devices have been employed for taking up the slack of these endless rubber
10 type bands, such as an elastically expandible and compressible support, but in these devices it was either difficult to get at the type bands to shift them with the fingers, or where they were accessible the support was not of a sufficiently rigid character to be effective. My improvements in this class of hand stamps consist in peculiar and simple devices for taking up the slack, or in other words, applying the necessary tension to the endless
15 rubber type bands and which devices are located within the body of the hand stamp where they are protected from injury, and in an unyielding support for the type bands at the place where they are shifted or rotated
20 by the fingers or by any other suitable instrument.

In the drawings Figure 1 is a side elevation of my improved hand stamp. Fig. 2 is a vertical cross section of the same. Fig. 3 is a vertical longitudinal section. Fig. 4 is a sectional plan of the inner metal frame at the line *x x*. Fig. 5 is a cross section of the inner metal frame at the line *y y*, Figs. 2 and 3. Fig. 6 is a vertical section of the inner metal
35 frame showing a slight modification, and Fig. 7 is a vertical section of the inner metal frame showing all the endless bands of the same length.

The casing *a* is preferably made of metal in
45 one piece with a screw threaded upper end to receive the wooden handle *b*, and said casing is open at the bottom and at the two sides. The removable face plate *c* is to be connected to the lower portion of the casing *a*. These
50 parts are of well known form and do not require further description. The inner and re-

movable metal frame *d d'* supports the endless rotatable type bands *e f g* of rubber, *d* being the main and hollow lower portion of the frame and *d'* the upper portion of said
55 frame. The lower portion of the frame *d* adjacent to the opening in the face plate *c*, slightly exceeds in width the height of the characters or types upon the bands *e f g*, and at this place the impression of the types is
60 made upon the paper or other surface to be printed upon.

The main portion of the frame *d* adjacent to the side openings in the casing *a* is preferably in cross section of horse-shoe shape
65 with convex or curved surfaces, (see Fig. 2) upon which the type bands rest, and vertically disposed ribs 1, 2, 3, 4, form ways for and separate said bands so that they do not come in contact with each other. These con-
70 vex surfaces are shown at 5, 6 (Figs. 1, 2, 4 and 5) and form an unyielding curved surface against and over which the endless bands are partially rotated or moved along by the fingers at the open sides of the casing *a* or by
75 any device acting to push the bands along over these surfaces. Tension is applied and the slack of the endless type bands is taken up by helical springs and curved metal plates resting thereon and over which the said bands
80 pass. These springs and plates are located at the upper portion of the frame *d d'* at which places I employ holes or sockets in the metal of said frame portions to receive and steady
85 said helical springs.

In Figs. 2, 3 and 4, *i i'* and *l* represent the helical springs, and *m n* the metal plates. In these figures the frame portion *d'* is mortised through at 7, and the plate *m* has a reduced center *m'* passing through this mortise which
90 becomes a guide longitudinally for said plate while the mortise permits of its free vertical movement. This plate *m* rests upon the two springs *i i'* and the endless type bands *e g* pass over this plate, and these springs *i i'* apply the necessary tension to the bands *e g*.
95 The plate *n* rests upon the helical spring *l* at the upper end of the frame *d'* and is of curved form to straddle the end of said frame and the endless type band *f* passes over this plate,
100 and the spring *l* applies the necessary tension thereto. A screw *o* passes through the upper

part of the casing *a* into the frame portion *d'* to connect the parts for use.

The modification shown in Fig. 6 consists first, in employing separate plates *m*² *m*³ for the endless type bands *e* *g*, and second, in 5 steadying studs or spindles to the plates *m*² *m*³ and *n'* which pass down within the helical springs, these studs or spindles preventing the plates leaving their seats upon the springs. 10 The portion *d'* of the inner removable metal frame may be dispensed with, and in place of the long dating band *f* containing as usual the consecutively numbered days of the month, I may employ two narrow endless bands *f'* *f*² 15 with consecutive numbers from 1 to 0 the combinations of which will not only give any day of the month but any number from 1 to 99. The tension is applied to these bands by plates *r* *r'* and helical springs received in sockets in 20 the upper face of the frame *d*, similar to those heretofore described with reference to the other figures.

My improvement is very simple and effective and the parts being within the casing *a* 25 and handle *b* are not liable to be injured or to get out of order and the curved unyielding surfaces at 5 6 make it possible to rotate the type bands quickly and surely.

I claim as my invention—

30 1. In a hand stamp, the combination with a handle and a hollow casing with side openings, of a rigid metal frame, means for removably securing it in said casing, the said frame having convex surfaces and being provided with sockets in its upper portion, the 35 said sockets agreeing in number with the number of bands to be used, helical springs received in said sockets, curved plates, one for each band, resting upon such springs, and 40 the endless rotatable type bands passing around below the metal frame and over the curved plates, substantially as set forth.

2. In a hand stamp, the combination with a handle and a hollow casing with side openings, of a rigid metal frame, means for 45 removably securing it in said casing, the said frame having convex surfaces and being provided with sockets in its upper portion, the

said sockets agreeing in number with the number of bands to be used, helical springs 50 received in said sockets, curved plates, one for each band, resting upon such springs, studs connected to the under sides of such plates and passing down into such springs and sockets, and the endless rotatable type bands 55 passing around below the metal frame and over the curved plates, substantially as set forth.

3. In a hand stamp the combination with a handle, a casing having side openings and 60 the endless rotatable type bands, of an inner removable metal frame having an upward extension with a mortise through the base and having sockets in the upper portion of the said frame agreeing in number with and 65 beneath each type band, helical springs received in such sockets, the plate *m* having a reduced center *m'* passing through the mortise in the frame and guided thereby and resting upon two helical springs and carry- 70 ing two type bands, substantially as and for the purposes set forth.

4. In a hand stamp, the combination with a handle and a hollow casing with side openings, of a rigid metal frame having a portion 75 *d* and another portion *d'* of greater length, means for removably securing it in said casing, the said frame having convex surfaces and being provided with sockets in the upper faces of the portions *d* *d'*, the said sockets 80 agreeing in number with the number of bands to be used, helical springs received in said sockets, curved plates for the bands passing around the portion *d*, and a curved plate *n* 85 having downwardly extending ends for the band passing around the portion *d'*, said plate resting on said springs, and the endless rotatable type bands passing around below the metal frame and over the said curved plates, substantially as specified. 90

Signed by me this 9th day of March, A. D. 1892.

EDWIN H. DODGE.

Witnesses:

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HAROLD SERRELL.