H. S. FOLGER & C. L. REDFIELD.

SELF INKING HAND STAMP.

APPLICATION FILED JULY 15, 1914.

1,265,642.

Patented May 7, 1918.

Fig. 1.

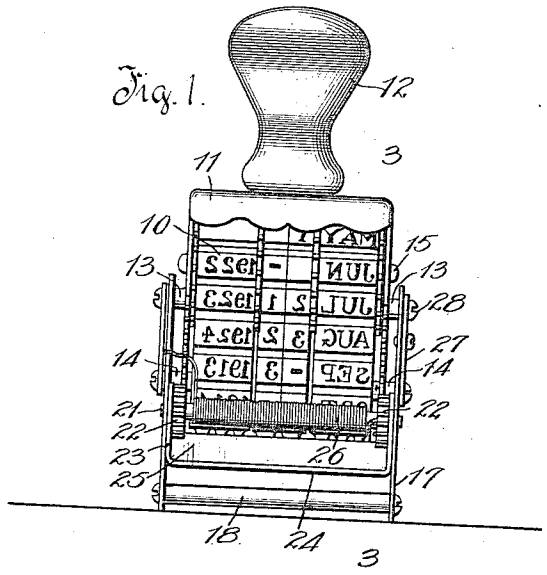


Fig. 2.

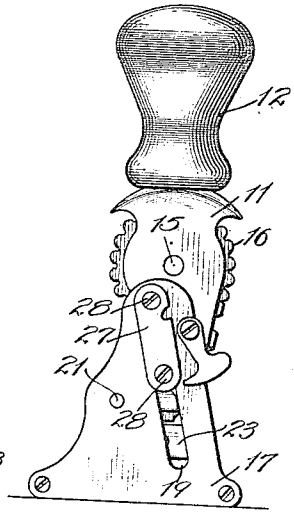


Fig. 3.

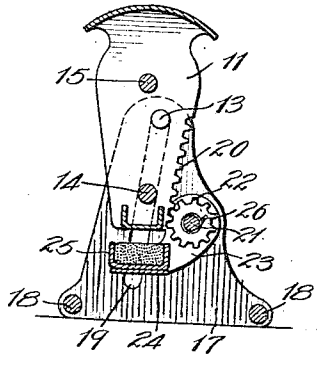
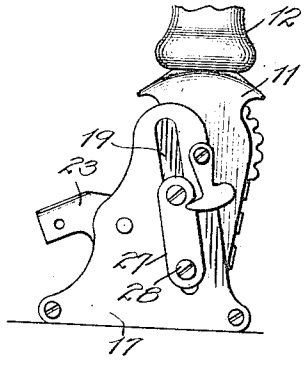


Fig. 4.



Witnesses.

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UNITED STATES PATENT OFFICE.

HARRY S. FOLGER AND CASPER L. REDFIELD, OF CHICAGO, ILLINOIS; SAID FOLGER ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO R. D. SWISHER MANUFACTURING COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

SELF-INKING HAND-STAMP.

1,265,642. Specification of Letters Patent. Patented May 7, 1918.

Application filed July 15, 1914. Serial No. 851,041.

To all whom it may concern:

Be it known that we, HARRY S. FOLGER and CASPER L. REDFIELD, citizens of the United States of America, and residents of Chicago, county of Cook, State of Illinois, have invented certain new and useful Improvements in Self-Inking Hand-Stamps, of which the following is a specification.

Our invention relates to self inking hand stamps, and has for its object improvements in the construction by which a self-inking device is made for a stamp commonly used as a hand inker.

In the accompanying drawings—

Figure 1 is a rear elevation;

Fig. 2 is a side elevation;

Fig. 3 is a section on line 3—3 of Fig. 1; and

Fig. 4 is an elevation similar to Fig. 2 but with the stamp held at near its lowest position in the frame.

In said drawings the type bands 10 are supported in a stamp frame 11 provided with a handle 12. These parts, and the other parts held in the stamp frame 11, constitute an ordinary hand dating stamp made in various widths and of a type well known in the trade, and one which requires no detailed description. For convenience these parts as a whole will be designated as "the stamp" to distinguish the present commercial article from what is added to make a self inker.

Secured to the vertical sides of the stamp frame 11 are pins 13 and 14, so located that a line connecting their centers will be parallel with the rear inclined edges of the stamp frame 11. The pins 14 are preferably the ends of a shaft which runs through the lower part of the stamp on the center line below the stamp shaft 15. The pins 13 are, however, studs secured in the sides 11 because it would not be possible to run a shaft through the stamp at the points where it is desirable to have these pins. The band wheels 16 on the shaft 15 preclude such shaft.

The frame for holding the stamp consists of two similar sheet metal plates 17 secured together by tie bolts 18. The reason for this construction is that stamps of given dimensions as shown in Fig. 2 are made in various widths as appearing in Fig. 1, and the same side frames 17 are applicable for all widths by simply changing the lengths of the rods 18.

In the plates 17 are cut slots 19 which have an incline corresponding to the incline of a center line connecting the pins 13 and 14, so that when these pins project through the slots and are guided thereby, the stamp is held upright in the frame 17.

In the rear edges of the sides 11 of the stamp are cut racks 20, and on a shaft 21 in the frame 17 are gears 22 engaging these racks. The construction is such that when the stamp is reciprocated in the frame and guided by the pins in the slots 19, the gears will be driven to turn the shaft 21.

Secured on the shaft 21 are arms 23 connected together by a plate 24. The parts 23 and 24 are preferably made in one piece by stamping from sheet metal and then bending to the required form. The parts 23 and 24 form a holder for the pad box 25, the pad within which is adapted to engage the type faces on the lower parts of the bands 10 when the stamp is elevated in the frame 17.

On the shaft 21 is a spring 26, having one end secured to one of the gears 22 and the other end secured to the frame 17. The action of this spring is to turn the gears 22 in the direction which will elevate the stamp in the frame.

As previously stated, the pins 13 and 14 are connected to the stamp and project through the slots 19 to guide the stamp in a direction which is parallel to the rear edges of the side plates 11 as they now exist in commercial stamps. To prevent side movement, and to further guide the stamp in the frame, the ends of the pins 13 and 14 are connected together by links 27 and screws 28. In one of these links is a notch 29 adapted to be engaged by a dog 30 to hold the stamp in a depressed position and with the ink-pad removed from the type faces.

What we claim is:—

1. The combination with a hand stamp having a frame provided with rack teeth, of an outer frame consisting of plates located on opposite sides of the stamp, said plates being provided with guiding slots parallel with the racks formed on the stamp frame, ties connecting said plates together, projections on said stamp engaging said slots to guide the stamp in the outer frame, a pad

carrying frame pivoted to the outer frame, gears connected to the pad carrying frame at its pivoting points and engaging the racks on the stamp, and a spring mounted upon the pivotal support for the pad carrying frame and acting to turn said gears to elevate the stamp.

2. The combination with a hand stamp having a frame provided with rack teeth, of an outer frame consisting of plates located on opposite sides of the stamp frame, ties connecting the lower parts of the outer frame together, projections on the stamp frame serving as a tie for the upper parts of the plates forming the outer frame, means for guiding the stamp frame to reciprocate in the outer frame, gears supported on the outer frame and engaging said racks, a pad connected to said gears, and a stamp elevating spring mounted upon the pivotal support for said gears.

3. The combination with a hand stamp of the type ordinarily used as a hand inker and having rack teeth formed on the edges of the frame of such stamp, of an outer frame within which the stamp is held in an upright position, said outer frame being provided with guides parallel with the pitch lines of said racks, a pad pivoted to the outer frame, gears secured to the pad and engaging the racks, and a spring mounted upon the pivotal support of the gears and acting to elevate the stamp.

4. The combination with a hand stamp of the type ordinarily used as a hand inker, said stamp being provided with a tapering frame and having rack teeth formed along the rear inclined edges of said frame, of an outer frame within which the stamp is supported in an upright position, said outer frame being provided with guides having an incline corresponding to the incline of the racks formed on the stamp frame, projections on said stamp engaging said guides, a pad pivotally supported in the outer frame, and gears secured to said pad and engaging said racks.

5. In a stamping machine a main frame, a printing mechanism frame slidably mounted therein, a straight rack with a plurality of teeth on said frame, an ink pad carrier swingingly mounted on the main frame, a gear with a plurality of teeth on the carrier meshing with the rack to swing the carrier away from and toward the printing mechanism frame during reciprocation.

6. In a self-inking hand-stamp, the combination of a vertically reciprocating frame equipped with printing devices, an ink pad mounted to oscillate beneath said printing device about a horizontal axis and provided with a series of teeth partially surrounding its axis of oscillation, and a rack having a series of teeth carried by and moving with the vertically reciprocating frame and engaging the teeth of the pad.

7. The combination with a hand stamp provided with side members and a hand piece, printing character members between said side members and a shaft extending between said side members to support the printing character members, of an outer guide frame, a swinging pad carrier pivoted thereto, a spring to normally press the carrier toward the stamp type, the rear edges of the stamp frame being provided with elongated racks and gear sectors on the carrier to engage and travel along said racks.

Signed at Chicago, Ill., this 10th day of July, 1914.

HARRY S. FOLGER.
CASPER L. REDFIELD.

Witnesses:
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."