

H. S. FOLGER AND T. ROSS.
SELF INKING STAMP.

APPLICATION FILED MAY 28, 1915. RENEWED FEB. 24, 1920.

1,353,994.

Patented Sept. 28, 1920.

3 SHEETS—SHEET 1.

Fig. 1.

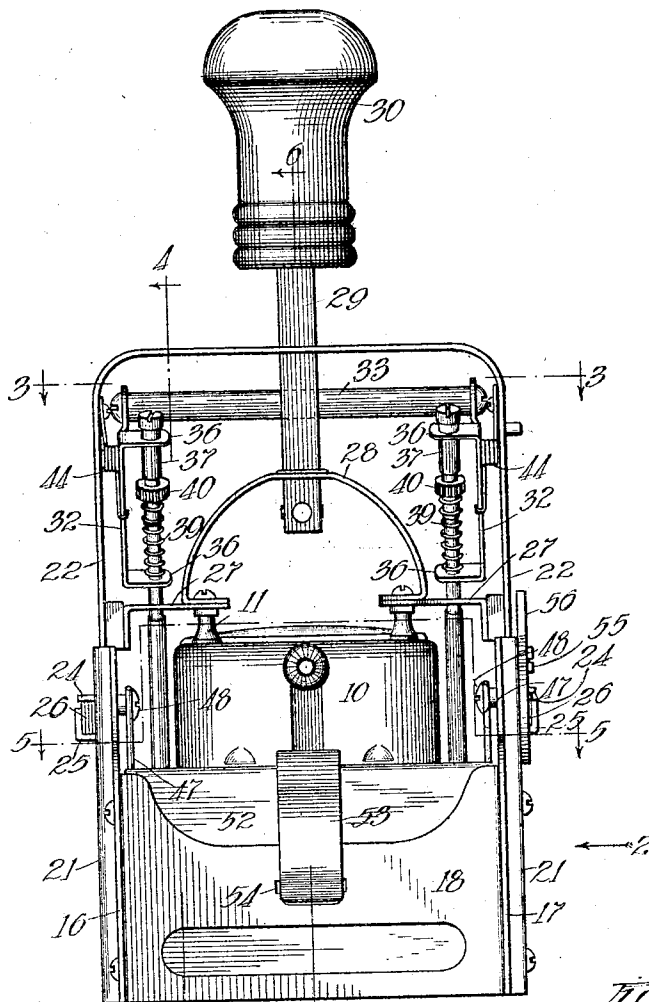


Fig. 2.

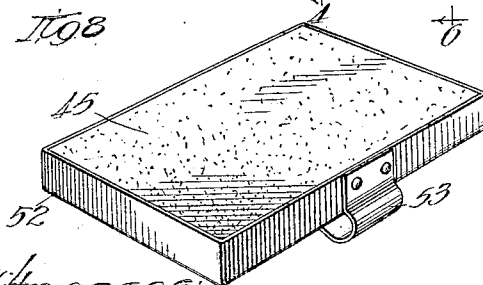
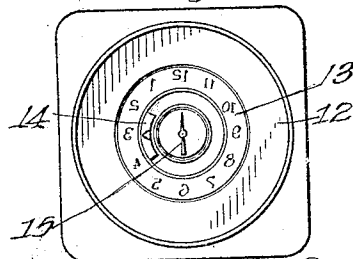


Fig. 3.



Witnesses:
Arthur H. Carlson

Inventors:
Harry S. Folger
Torey Ross
By Casper L. Redfield atty.

H. S. FOLGER AND T. ROSS.

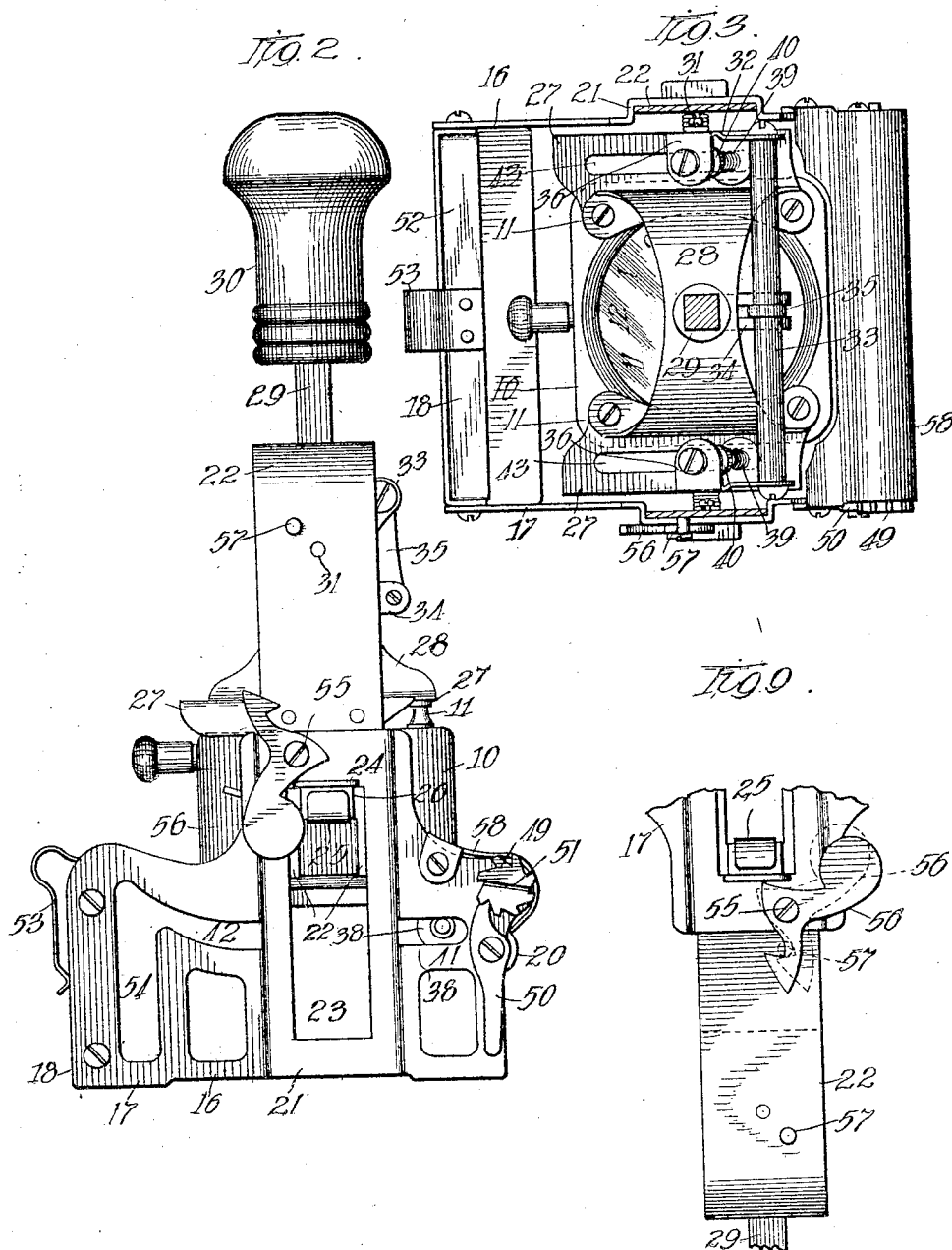
SELF INKING STAMP.

APPLICATION FILED MAY 28, 1915. RENEWED FEB. 24, 1920.

1,353,994.

Patented Sept. 28, 1920.

3 SHEETS—SHEET 2.



Witnesses:
Arthur H. Carson

Inventors:
Harry S. Folger
Torrey Ross
By *Casper L. Redfield* atty.

H. S. FOLGER AND T. ROSS.

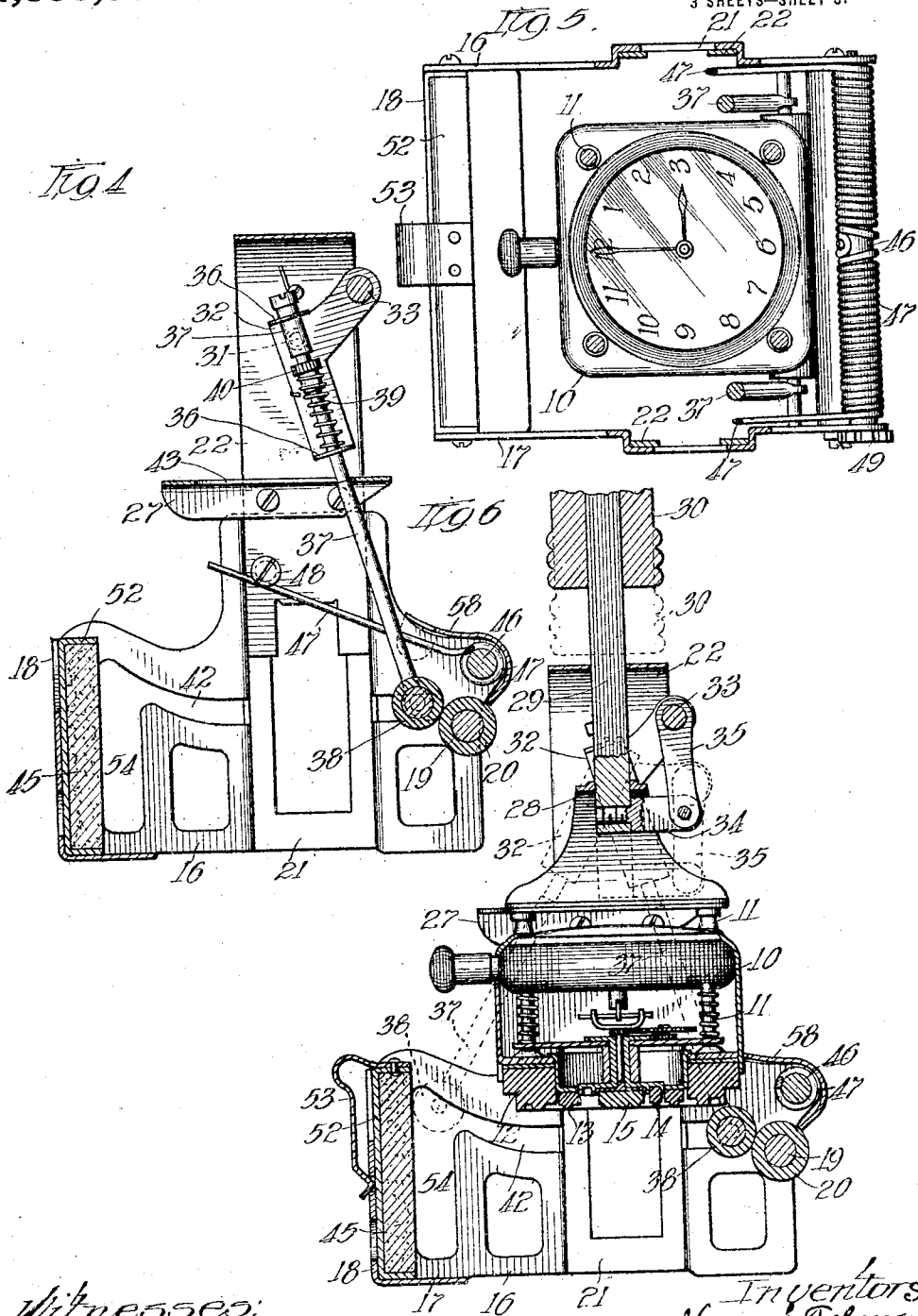
SELF INKING STAMP.

APPLICATION FILED MAY 28, 1915. RENEWED FEB. 24, 1920.

1,353,994.

Patented Sept. 28, 1920.

3 SHEETS—SHEET 3.



Witnesses:
Arthur Carlson

Inventors:
Harry S. Folger
T. Ross
By *Casper L. Redfield atty.*

UNITED STATES PATENT OFFICE.

HARRY S. FOLGER AND TOREY ROSS, OF CHICAGO, ILLINOIS, ASSIGNORS, BY DIRECT AND MESNE ASSIGNMENTS, TO R. D. SWISHER MANUFACTURING COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

SELF-INKING STAMP.

1,353,994.

Specification of Letters Patent.

Patented Sept. 28, 1920.

Application filed May 28, 1915, Serial No. 30,903. Renewed February 24, 1920. Serial No. 360,762.

To all whom it may concern:

Be it known that we, HARRY S. FOLGER and TOREY ROSS, citizens of the United States of America, and residents of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Self-Inking Stamps.

Our invention relates to the type of self inking time stamp in which the inking apparatus is normally free from the time indicator, and has for its object improvements in such stamps.

In the accompanying drawings—

Figure 1 is a rear elevation;

15 Fig. 2 is a side elevation;

Fig. 3 is a plan, the upper parts being removed by section on line 3—3 of Fig. 1;

Fig. 4 is a section on line 4—4 of Fig. 1;

20 Fig. 5 is a section on line 5—5 of Fig. 1, the clock being shown in plan;

Fig. 6 is a section on line 6—6 of Fig. 1, the die and parts of the clock being also in section;

25 Fig. 7 is a bottom view showing the face of the die;

Fig. 8 is a perspective of the ink pad removed; and

Fig. 9 is a detail to be described.

30 The clock 10 is of a kind ordinarily used in time stamps, and is connected to the other mechanism by its posts 11. The die consists of stationary parts 12 and 13 and movable parts 14 and 15 driven by the clock mechanism in a well known manner. (Figs. 6 and 7).

35 The main frame of the apparatus consists of side plates 16 and 17 which are connected together at the rear by the tie plate 18, and at the front by the tie rod 19 on which is a rubber covering 20. (Figs. 4 and 6).

40 The central parts of the frame plates 16 and 17 are pressed outward to form internal vertical guides 21 for the U-shaped sliding frame 22. The central part of the guides 21 are cut away to form slots 23, and the upper ends of the slots are lips 24. The lower ends of the legs of the slide 22 are slotted, and the metal from the slots is bent outward to form lips 25 which project through the slots 23. Mounted on the lips 25 are rubber cushions 26 which are adapted to come in contact with the lips 24 to limit the upward movement of the slide in the guides. (Figs. 1 and 2).

The clock 10 is supported between the legs

of the slide 22 by brackets 27 secured to the 55 inner faces of said legs and to the posts 11 of clock 10. Also secured to the posts 11 is a bridge 28, the central portion of which serves as the lower guide for a stem 29 of handle 30, the upper guide being an opening 60 in the central part of the slide 22 similar to the opening in the bridge 28 which serves as the lower guide. It will be evident that the handle 30 and its stem 29 have a sliding movement with respect to the slide 22. 65

Pivoted at 31 (Figs. 2 and 4) on each leg of the slide 22 are bell crank levers 32, the laterally projecting arms of which are connected together by a rod 33. Secured to the lower end of the stem 29 is an arm 34 which 70 is connected by a link 35 to the center of the rod 33. When the stem 29 slides with respect to the slide 22, that movement causes the arms 32 to swing on their pivots 31.

The bell crank arms 32 are provided with 75 lips 36 (Fig. 1) arranged to support and guide the sliding rods 37, which rods project through slots 43 in the brackets 27 (Fig. 3) and carry at their lower ends an inking roller 38 adapted to travel across the face of 80 the die 12—13—14—15 when said arms swing on their pivots 31. Springs 39 and adjustable nuts 40 on rods 37 serve to hold the roller against the die during such movement. The ends of the shaft 41 of roller 38 85 preferably project into slots 42 in the side plates 16 and 17. (Fig. 2). When the roller is against the rubber 20 on shaft 19, the ends of the shaft 41 engage the upper edge of slot 42 to hold the roller 38 clear of the 90 die 12. (Fig. 6).

95 Springs 44 (Fig. 1) mounted on the pivots of the bell cranks 32 serve to swing the rods 37 so as to normally elevate the handle 30 in slide 22 and hold the roller 38 against the rubber 20 on rod 19. When the handle is manually depressed, the roller 38 traverses the face of the die and has its swinging movement brought to a stop by a contact with the upper part of the vertical 100 ink pad 45 removably supported on the tie plate 18. As the sliding of the stem 29 with respect to the slide 22 is stopped by contact between the roller 38 and pad 45, further depression of the handle moves the 105 slide, and parts carried thereby, downward until the die strikes at the printing point. In this downward movement the roller 38

traverses the face of the pad 45 and becomes inked. In the return upward movement, the inked roller 38 again traverses the ink pad until the upward movement of the slide 5 is stopped by the cushions 26 engaging the stopping lugs 24. Further upward movement by the handle is then under the action of springs 44 which cause the inked roller to traverse the face of the die and come to a stop in contact with the rubber 20.

Supported between the plates 16 and 17 is a shaft 46 on which is mounted a spring 47. The center of the spring is secured to the shaft, while the ends engage studs 48 on the slide 22 to elevate it. On one end of the shaft 46 is a ratchet wheel 49 adapted to be engaged by a dog 50 conveniently pivoted on the end of the shaft 19. A screw driver slot 51 in the ratchet wheel 49 serves as a convenient means for turning shaft 46 to adjust the tension of spring 47. The dog 50 holds the adjustment made.

The pad 45 is contained in a box 52, the lower edge of which rests on the lower lip 25 of the tie plate 18. Secured to the upper edge of the box 52 is a handle 53 made in the form of a clamping spring, the free end of which engages a notch 54 in the tie plate 18. The construction provides an easy means for removing the pad for inking purposes.

Loosely pivoted at 55 on plate 17 (Fig. 2) is a gravity catch 56, and in the slide 22 is a pin 57 which comes adjacent to the catch when the die is depressed. In ordinary operation there is no engagement between the catch and the pin. But if the apparatus be turned upside down (Fig. 9) so that it may rest with the handle 30 on the table or desk, the heavy end of the gravity catch will move the hook of the catch into the path of the pin. Then if the frame be depressed with respect to the slide 22, the pin 57 will be caught by the catch 56, and the die will be held on a substantial level with the foot of the frame. In this position, removable parts of the die may be readily changed. Upon reversing the apparatus to its normal upright position and pressing down the handle, the gravity catch will be automatically released and the die will return to its normal elevated position under the action of the springs 47 and 44.

Secured to the front parts of the plates 16 and 17 is a shield or guard 58 which projects over and protects spring 47. It also serves as a tie between plates 16 and 17 at this point. The inking roller 38 normally resting partly under the die 12 and partly under the guard 58 is protected from any considerable deposits of dust.

In using the apparatus, the first action, upon depressing the handle 30, is to cause the inking roller 38 to traverse the die and come into contact with the ink pad 45. The

next action is to depress the die for printing purposes and to simultaneously cause the roller 38 to travel over the face of the ink pad 45. Upon releasing pressure upon the handle 30, these actions again occur in reverse order. In these actions ink is deposited on the face of the die, but the ink roller does not remain in contact with the movable part of the die and consequently does not act to stop or retard the clock.

What we claim is:

1. In a stamp, a frame providing guides, a die-carrying slide supported in said guides and providing another guide, a handle having a stem slidable in the other guide and arranged to move the die-carrying slide in its guides, an inking device, and means by which the inking device is operated by the sliding movement of the stem of the handle in the guide of the die-carrying slide.

2. In a stamp, a frame providing guides, a die-carrying slide supported in said guides, a handle for moving the slide, an inking device pivoted to and movable with the slide, and means by which a manipulation of the handle causes a movement of the inking device independent of the movement of the slide.

3. In a stamp, a frame providing guides, a die-carrying slide in said guides, a handle, an inking roller pivoted to the slide and movable therewith, a stationary ink pad, means by which a manipulation of the handle will move the roller on its pivot to cause it to traverse a die carried by the slide, and means by which a movement of the slide in its guides will cause the roller to traverse the face of said stationary ink pad.

4. In a stamp, a reciprocating die, an ink pad, a roller serving to transfer ink from the pad to the die, and an operating handle having a movement with respect to the die, which movement is limited by contact between the roller and the pad.

5. In a stamp, a frame providing guides, a slide in said guides, a die secured to the lower end of the slide, an ink roller located below the die and pivoted to the slide above the die, a spring 39 in the connection between the roller and its pivotal support, and a handle arranged to move the roller across the face of the die and the slide in its guides.

6. In a stamp, a reciprocating die, an ink pad, a roller arranged to traverse the faces of the die and pad in succession, an operating handle having a movement with respect to the die, which movement is limited by contact between the roller and the pad, and a stamp elevating spring the tension of which serves to determine the contact pressure between roller and pad.

7. In a stamp, a frame consisting of side plates each having a guide therein, a slide having legs engaging said guides, a die secured between the legs of said slide, an ink-

ing roller located below the die and pivoted between said legs above said die, and means for moving said roller on its pivots to ink said die.

5 8. In a stamp, a frame providing guides, a slide, a time indicating die carried by said slide, an inking device pivoted to said slide, a handle mounted upon the slide and movable with respect thereto, and connections
10 from said handle to said inking device for moving it across the face of the die.

9. In a stamp, the combination with a reciprocating die, an inking roller arranged to traverse the lower face of the die, and a
15 spring acting to force the roller upward, of a frame consisting of side plates furnishing guides for the slide and roller, the guides for the roller consisting of slots extending through parts of the plates and the guides
20 for the slides consisting of unslotted parts of the plates bent outward opposite the die and between the ends of the slots.

10. In a stamp, a frame consisting of opposite plates each providing a guide, ties connecting the plates together, an ink pad 25 secured to one of said ties, a slide having legs engaging said guides, a die secured between the legs of said slide, an inking roller pivoted to the slide and movable therewith, and means by which said roller is held in
30 contact with said pad during a reciprocation of the slide in the guides.

11. In a stamp, a frame consisting of opposite plates providing guides, a slide having legs operating in said guides, brackets 35 secured to the inner faces of said legs, and a mechanism provided with a time indicating die, said mechanism being secured to and suspended from the lower face of said
40 brackets.

Signed at Chicago, Ill., this 25th day of May 1915.

HARRY S. FOLGER.
TOREY ROSS.