

Aug. 4, 1953

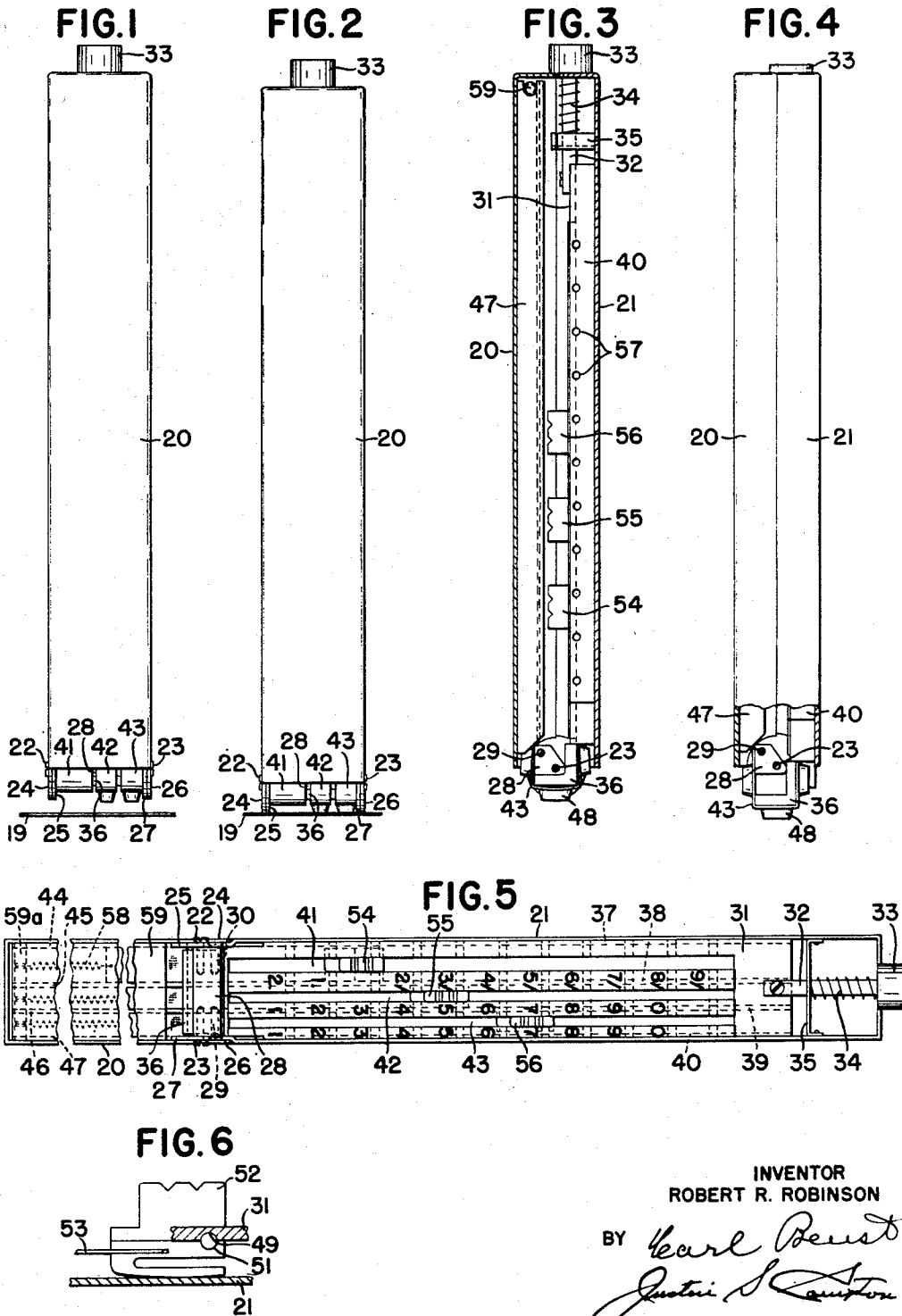
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2,647,461

HAND STAMP

Filed Jan. 16, 1952

2 Sheets-Sheet 1



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FIG. 7

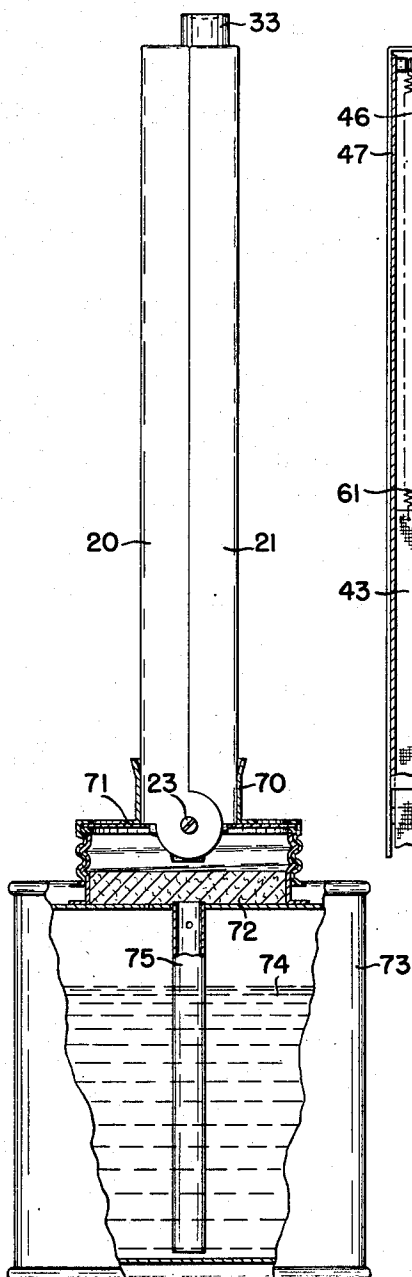


FIG. 8

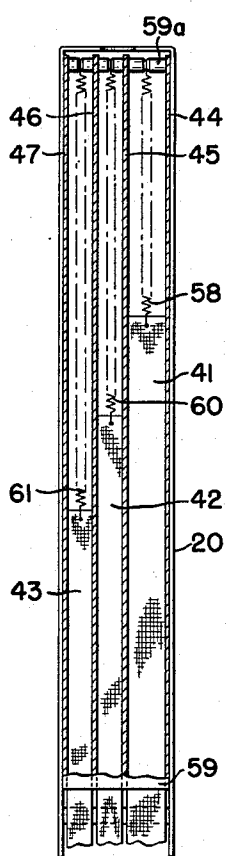
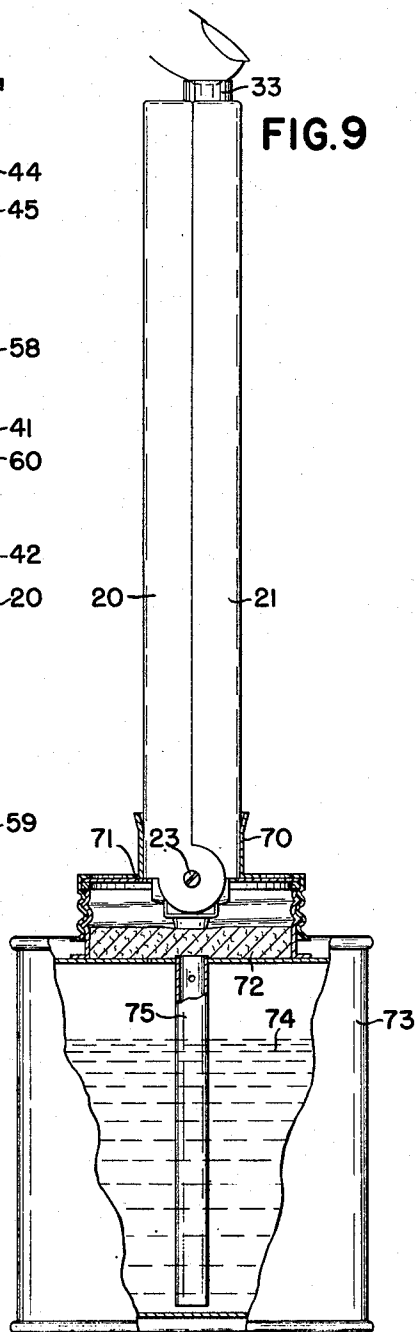


FIG. 9



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HAND STAMP

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Application January 16, 1952, Serial No. 266,639

4 Claims. (Cl. 101-109)

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This invention relates to a hand stamp with adjustable type, and more particularly pertains to one in which the type are mounted on sliding flexible strips within a folding case, the case being opened to adjust the type and closed to expose the adjusted type for a printing operation. The folded case acts as a handle for the user to grasp.

The hand stamp is particularly adapted for use with resilient type, especially porous rubber type impregnated with ink.

The novel hand stamp is an improvement over that disclosed in application for United States Letters Patent, Serial No. 208,223, filed by George T. Brown, Jr., on January 27, 1951, now Patent No. 2,597,919, with respect to the mounting of the type strips in that springs are provided to keep them taut, by the provision of a movable bridge supporting the selected type at printing position, movement of the bridge from normal position projecting the selected type for inking, and by the provision of limit stops to prevent excessive printing impressions.

In a co-pending application for United States Letters Patent, Serial No. 266,640, filed the same day as this application, there is claimed a combination of this novel hand stamp with a reinking device.

Therefore, it is an object of this invention to provide a novel hand stamp with the foregoing features.

With these and incidental objects in view, the invention includes certain novel features of construction and combinations of parts, a preferred form or embodiment of which is hereinafter described with reference to the drawings which accompany and form a part of this specification.

Of the drawings:

Fig. 1 shows the hand stamp in front elevation poised over record material.

Fig. 2 shows the substance of Fig. 1 except that the hand stamp and its type are in contact with the record material, this view showing how the hinges act as limit stops to prevent excess pressure and compression of the type.

Fig. 3 shows the hand stamp in side elevation, with the near sides of the two casing halves broken away.

Fig. 4 is a side elevation of the hand stamp with the near sides of the hinged ends of the casings broken away, showing the selected type in its projected position.

Fig. 5 is a view of the opened hand stamp looking at the adjusting mechanism, parts being broken out to accommodate the view to the sheet.

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Fig. 6 is a detail view of the indexing mechanism of one of the type strips.

Fig. 7 shows the hand stamp in the receiving socket of the inking device can with parts of the can broken away to show the disposition of the various elements.

Fig. 8 is a detail view of how the type strips are mounted and kept taut by extendable springs.

Fig. 9 shows the substance of Fig. 7 except that the type have been protruded by inward movement of the button at the top of the closed case so as to strike the ink-flooded re-inker pad.

Referring to Figs. 1, 2, 3 and 4, the hand stamp casing consists of two halves 20 and 21, mated to form a unit when together, said halves being hinged at 22 and 23 by hinging screws to form a folding case, said screws being passed through ears 24 and 26 of the casing half 20, and ears 25 and 27 of the other casing half 21, and screwed into a hinge block 28, which hinge block is itself pinned to the sides of casing 21 by pins 29 and 30, the pin 30 being shown in Fig. 5.

Referring especially to Fig. 5, the inner hollow side of casing half 21 has therein a sliding plate 31 which has attached thereto by the finger 32 a button 33 so that the plate may be pushed to the left by inward movement of said button 33, as shown in Fig. 5, and returned to normal by spring 34 as the button is released. Spring 34 extends between end wall of casing half 21 and a plate 35 secured between the side walls thereof. The left end of plate 31 ends in a turned up portion forming a bridge 36, which may also be seen in Figs. 1 to 4, said bridge acting to limit the movement of the plate 31 to the right, as seen in Fig. 5, by contact with hinge block 28. Plate 31 has fins 37, 38, 39 and 40, extending longitudinally thereof and toward the outer wall of casing half 21, forming channels in which are mounted type-bearing flexible strips 41, 42 and 43, which are slidable in said channels and extending from there under the hinge block 28 and bridge 36 into corresponding channels in casing half 20, formed by fins 44, 45, 46 and 47. These type-bearing strips preferably are of a combined cloth and porous rubber construction, the backing which is seen in Fig. 5 being of cloth and the type, such as type 48 in Fig. 4 being of porous resilient rubber. The porous rubber type are intended to be impregnated with ink and the particular mechanism by which plate 31 is moved by button 33 is to facilitate the reinking of such porous rubber by providing for the protrusion of the selected type against a felt pad flooded with ink, as will be described later in connection with Figs. 7 and 9.

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Referring to Figs. 5 and 6, the bottom of plate 31 is grooved as at 49, at intervals therealong corresponding to type positions, such grooves acting as locating detents for stud-like locating pins, such as pin 51 attached to a finger-moved locating button 52 secured to the end of a typical type strip 53 that is accommodated in casing half 21. The locating buttons for type strips 41, 42 and 43 are shown in Fig. 5 at 54, 55 and 56, respectively. Referring to Fig. 3, the detent grooves in plate 31 are formed by boring holes, such as holes 57, through the fins of plate 31, so that they will groove the bottom of plate 31.

Referring to Fig. 5, the left end of each type strip is secured to a spring anchored in the end of casing 20, as for example, spring 58, which anchors type strip 41. This construction is shown better in Fig. 8, which shows how the ends of the springs are held by stud 59a, extending between the side walls of casing 20, and through the fins 44, 45, 46 and 47. Fins 44, 45, 46 and 47 extend downwardly from a cover plate 59, which acts as a closure for the inside of casing half 20. It will be clear that by pressing down on and adjusting finger buttons 54, 55 and 56 to the selected station, as accurately determined by the detent grooves, the selected type may be positioned at a point approximately opposite the hinge of the casing halves. The spring 58 for type strip 41 and the springs 60 and 61 for type strips 42 and 43 hold the free ends of the type strips so that in folding the hand stamp to a closed position the selected type may be accurately maintained at the printing point. The bottom formation of the locating buttons, as seen Fig. 6 permits them to be pushed in slightly to release the detent pins. As seen in Fig. 5, the selected type is positioned, in the opened condition of the casings, at a point just to the left of the bridge 36. As the hand stamp is folded to the closed position the bridge comes to the position shown in Fig. 3 with the selected type supported thereby, ready for printing.

It will be apparent that the height of the type with reference to the ears 24, 25, 26 and 27, as seen in Fig. 1, will permit only a slight squeeze impression of the type against record material 19.

It is desirable in re-inking porous type that as much of the type body as possible come in contact with an inking pad. To facilitate such re-inking, means is provided to move the selected type outwardly of the closed case by movement of bridge 36 away from hinge block 23 upon inward movement of button 31.

The printing strip 41 is shown positioned so that a blank space is at printing position, that is to say—no type character is to be printed in that column. The provision of the stop-limits afforded by formations 24 to 27, inclusive, prevent tilting of the stamp unit as it is applied to record material, and thus prevents smudging of the print.

Although the hand stamp was primarily designed for use with porous resilient type, it may be also used with the conventional rubber type, that is to say, solid rubber type, by using it in conjunction with an inking pad, or equivalent.

To fully illustrate the utility of the type projecting mechanism for re-inking, reference is made to Figs. 7 and 8, which show the hand stamp resting in the socket 70 of the re-inker can. In Fig. 7 the stamp is shown in normal

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position with the edges of the casing ends near the hinges resting on projection 71, wherein the type are out of contact with an inking felt 72, it not being desirable to leave the porous rubber type in continuous contact with the felt pad 72. The neck 70 acts as a convenient supporting place for the hand stamp when not in use and the snug-fitting collar 70 acts as a seal against atmospheric drying of the ink. In Fig. 9 the inking process is shown wherein by pushing inwardly on button 33 the type are caused to come in contact with the ink-impregnated felt 72. The can 73 is provided with flexible sides, which may be pressed inwardly to force ink 74 through a delivery pipe 75 to flood the felt 72.

In operation, the hand stamp is opened, the selected type moved to the printing station through the movement of locating buttons 54, 55 and 56, which are pressed in with the finger and then moved to the proper detent position, the casing is closed and the unit is used as an ordinary hand stamp.

The chief novelty of the invention resides in the spring tension imposed upon the type strips, the impression-limiting action of the hinge ears, the projecting means by which type is protruded to where it may be readily inked and the detent means for accurately positioning the type strips.

While the form of mechanism herein shown and described is admirably adapted to fulfill the objects primarily stated, it is to be understood that it is not intended to confine the invention to the one form or embodiment herein disclosed, for it is susceptible of embodiment in various other forms.

What is claimed is:

1. A printing stamp including, in combination, two mating casing pieces each open at one end and hinged together so as to be adjustable to open condition with the open ends facing each other to form a continuous hollow space from one casing piece to the other, and foldable to closed condition with the casing pieces in side-to-side contact and the open ends faced in the same direction; one or more flexible strip-like printing elements housed in the hollow spaces of said casing pieces and of shorter length than the combined length of said hollow spaces so as to be selectively movable back and forth between the casings when in unfolded condition, said elements having resilient type therealong, whereby upon movement of said elements the selected type may be positioned at the hinge between said casing pieces so that when the casing pieces are folded to closed position the type at the hinge are exposed; detent means secured to one end of each of said strip-like elements and cooperating with means having detent formations on one of said casing pieces so the associated strips may be adjusted to a selected position and maintained there; and extendable spring means for connecting the other end of each of said strips to the end of the other casing piece opposite the hinge, whereby said strips in their adjusted position are tautly but resiliently held.

2. The device of claim 1, in which hinge ends of said casing pieces are so formed as to act as limit stops to prevent excessive squeezing of the selected type on a printing operation.

3. The printing stamp of claim 1, in which a bridge piece is provided at the hinge whereby the type positioned at said hinge are supported by said bridge piece, said bridge piece being mov-

ably mounted so that it may be moved to a position where the type selected are protruding beyond their normal printing position.

4. A printing stamp like that of claim 1 having formations thereon which act as limit stops in making an impression with said type on record material; and means movable to protrude the selected type from the container for re-inking.

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