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(54) **A stamp device.**

(57) Hand-operated stamp assemblies include easily changeable magnetic rubber strips carrying raised reverse-printed printing indicia, and the strips carry forward-printed identifying indicia on their reverse sides. An ink pad is carried in a spring-biased hinged cover in one embodiment.

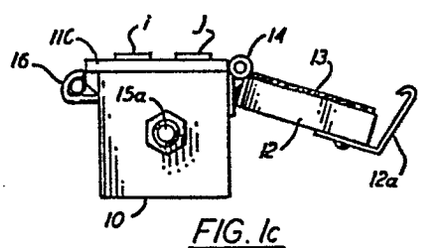

FIG. 1c

EP 0 167 380 A2

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A STAMP DEVICE

My invention relates to manual stamping or imprinting apparatus and more particularly, to an inexpensive stamp assembly which may be easily and rapidly altered to print a variety of different sets of indicia. A wide variety of hand-operated stamps are commonly used, in association with ink pads, to imprint one or more lines of text on a wide variety of receiving surfaces. For convenience of explanation, the total text or indicia which a stamp will print during the impression of the stamp at a given time will be termed the "message" then on the stamp. In various applications a user finds it desirable or necessary to print a variety of different messages. That may be accomplished, of course, by mere provision of a suitable plurality of separate hand stamps, but that tends to be costly, and in some cases utterly impractical. One general object of the present invention is to provide an improved hand stamp on which the message may be easily and rapidly altered.

Where a hand stamp is used with a variety of changeable text strips, it is desirable that a user be able to rapidly and accurately determine which text strip (or strips) is currently installed in the stamp. While the user theoretically can read the raised indicia, they are presented to the user backwards and because the indicia are usually the same color as the background from which they extend, reading may be tedious and fraught with error. Another object of the invention is to provide a stamp assembly with changeable text strips in which installed strips may be easily identified.

Another object of the invention is to provide a hand stamp assembly in which a user may insert and remove text strips without soiling his or her fingers with ink.

Another object of the invention is to provide a hand stamp assembly incorporating an ink pad which a user can conveniently carry in his or her pocket, or in a briefcase or purse, for example.

The invention accordingly comprises the features of construction, combination of elements, and arrangement of parts, which will be exemplified in the constructions hereinafter set forth, and the scope of the invention will be indicated in the claims.

For a fuller understanding of the nature and objects of the invention reference should be had to the following detailed description taken in connection with the accompanying drawings, in which:

Fig.1a is a side elevation view of a preferred embodiment of the invention;

Fig.1b is an end view taken at lines 1b-1b in Fig.1a;

Fig.1c is an opposite-end view of the assembly of Figs.1a,1b with the stamp assembly shown opened;

Fig.2a is a top view of an alternative form of the invention;

Fig.2b is a side elevation view of the device of Fig.2a;

Fig.2c is an end view taken at lines 2c-2c in Fig.2b;

Fig.3 is an end view of a further embodiment of the invention.

In the stamp assembly of Figs.2a,2b and 2c, handle member 20 is shown as comprising a rectangular wooden block to the lower surface of which a magnetically-permeable metal (e.g. iron or steel) channel member 21 is affixed, by means of gluing, or, if desired, by screw means (not shown). Channel member 21 is coextensive in length with handle member 20, and provided with flanges 21a,21b. Two different types of magnetic rubber 28,29 are shown inserted into channel 21. It will be seen that flanges 21a, 21b are mutually non-reentrant, i.e. they do not lean toward each other, and hence a strip or strips located between them can be pulled upwardly out of the channel, and need not be slid lengthwise for installation or removal. A plurality of pins 22,22 staked into the underside of the web of the channel act as stop means to limit leftward (in Fig.2b) insertion of magnetic rubber strips 28,29. A non-magnetic rubber strip 27 cemented to magnetic rubber strip 28 carries raised indicia 27' spaced along its length.

Magnetic rubber strip 29 is shown not carrying a non-magnetic rubber strip, but having raised indicia provided on the magnetic rubber strip itself. The two different types of magnetic rubber strips are shown solely for sake of example, and two (or more) strips of the same type may be used, if desired.

Strips 28 and 29 are both provided with a length such that they protrude outside channel 21 when their other ends abut pins 22. The upper sides of the protruding portions of strips 28,29 bear indicia identifying the nature of the raised indicia carried on their opposite sides. The identifying indicia may be printed, stencilled or otherwise fixed directly on the magnetic rubber strip, as is shown in the case of strip 29, or it may be carried on a paper or similar label 26 pasted on the strip, as is shown for strip 28. The identifying indicia either may repeat the raised indicia, in a smaller type and with forward printing, or it may identify the raised indicia by means of a suitable abbreviation or a simple code, and in some cases may comprise a single character or other mark. In any event, the identifying indicia may contrast starkly in color to the background on which it is presented, and since it may comprise forward printing, it may be easily read by the user with little or no chance of error. In addition to carrying identifying indicia, the portion of the strip extending beyond end 20a of the base serves as a convenient un-inked handle which the user may grasp either to slide the strip lengthwise off of the metal plate, or to pull the strip off of the metal plate in a direction perpendicular to the x-x and y-y directions shown. The lengthwise direction is shown labelled x-x in Figs.2a and 2b, and the sidewise direction is shown labelled y-y in Figs.2a and 2c. The flanges 21a,21b of channel member 21 act as stop means to limit movement of the magnetic rubber strips in both directions of the y dimension, and pins 22,22 act as stop means to limit movement in one direction of the x dimension.

In the modified embodiment illustrated in Fig.3, the stop means comprise three ridge portions surrounding a rectangular recess formed in wooden handle member 30. A magnetically-permeable metal plate 31 is fitted within the recess, and the three ridges of member 30 extend below the lower surfaces of plate 31 to act as three stop means to limit movement of magnetic rubber strip 39 (shown partially cut away) to which is cemented a non-magnetic rubber strip 37 carrying raised indicia 37'. Strip 39 protrudes outside member 30, and its upper side carries identifying indicia (not visible in Fig.3).

Referring to Figs.1a,1b and 1c, a hand stamp assembly includes a handle member 10 shown as comprising a rectangular generally-solid wooden block. Affixed to one side of block 10 is a three-sided magnetically-permeable metal tray 11 having three flanges or sides 11a,11b (Fig.1b) and 11c (Fig.1c), leaving one end of the tray open, as shown in Fig.1b. A pair of magnetic rubber strips 18,19 are shown laid in tray 11, to which strips 18,19 adhere by magnetic attraction. Each flexible magnetic rubber strip carries a non-magnetic rubber strip cemented thereto, with each non-magnetic rubber strip bearing raised indicia, such as alphanumeric characters. In Fig. 1c the raised indicia are shown at i,j extending above the edges of tray 11.

A box or cover 12 carrying an ink pad 13 is hingedly connected to block 10 by means of a conventional spring-biased hinge 14, the spring (not shown) of which urges cover 12 and ink pad 13 toward the open position shown in Fig.1c. Cover 12 may be rotated (counterclockwise as viewed in Fig.1c) against the hinge spring force so that ink pad 13 rests atop the indicia-carrying rubber strips. As cover 12 is so rotated, a hook 12a on cover 12 eventually snaps over and hooks on the end of wire rod 15, locking the cover closed, in the position shown in Figs.1a and 1b. A wire loop 16 keeps the hinged spring force from bending the end of wire 15 upwardly (as viewed in Figs.1a and 1b). With cover 12 closed no portion of ink pad

13 is exposed, and hence one can carry the assembly in a pocket or purse without soiling other articles therein with ink.

Wire rod 15 extends through lengthwise bore 10a in block 10 and carries a release button 15a on one end. A compression spring 17 seated in a partial bore 10b in block 10 urges button 15a (and hence rod 15) rightwardly as viewed in Fig.1a, so that the bent end 15b of rod 15 normally seats against the end of block 10. If the user pushes release button 15a inwardly toward block 10 against the force of compression spring 17, rod 15 slides leftwardly (as viewed in Fig.1a), and when end 15e of the rod slides past hook 12a, cover 12 will be released, allowing hinge 14 to snap cover 12 and ink pad 13 to the open position shown in Fig.1c. When it snaps open, cover 12 and ink pad 13 rotate somewhat more than 180 degrees, until a portion of the cover strikes a portion of hinge 14, as shown in Fig.1c. Then one may press the freshly-inked indicia i,j down onto a desired receiving surface to print the message carried on strips 18,19. Each of strips 18,19 carries indicia on the protruding portion of its side opposite to where the raised indicia are carried, at surface 19a in Fig.1a, for example, to identify the nature of the raised (printing) indicia. If desired, the identifying indicia can be placed on the same side of a strip as the raised indicia, but using forward printing.

It will thus be seen that the objects set forth above, among those made apparent from the preceding description, are efficiently attained, and since certain changes may be made in the above constructions without departing from the scope of the invention, it is intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

CLAIMS

1. A stamp device comprising a base member carrying detachable raised indicia displaceable relative thereto, characterised in that the base member (10:20) has a magnetically permeable metal plate (11,21) having a generally flat receiving surface; that magnetic rubber strip means (18,19:28,29) are provided and adapted to magnetically adhere to said metal plate (11,21); and that stop means (21a, 21b, 22, 22) are provided for locating rubber strip means (18,19,28,29) in position adjacent said metal plate (11,21); said magnetic rubber strip means (18,19,28,29) carrying raised indicia (i,j,27').

2. A stamp device as claimed in claim 1, in which said stop means extends towards said base member, or in which said stop means comprise a pair of first and second stop means (21a, 21b) which extend away from said base member (10,20) beyond said receiving surface; and said stop means fix said position in a first dimension (y-y).

3. A stamp device as claimed in claim 1 or 2, in which the stop means includes a third stop means (22,22) extending away from said base member beyond said receiving surface to limit said position in one direction of a second dimension (x-x) perpendicular to said first dimension (y-y).

4. A stamp device as claimed in any of claims 1 to 3, in which said magnetic strip means comprise a plurality of flexible magnetic rubber strips (18,19,28,29) each having a pair of mutually parallel edges.

5. A stamp device as claimed in any of claims 1 to 4, in which said magnetic rubber strip means (18,19,28,29) carry identifying indicia (26) on the side of said strip means (18,19,28,29) opposite from said raised indicia (i,j,27').

6. A stamp device as claimed in any of claims 1 to 5, in which at least one of said stop means comprises a flange (11a,11b,21a,21b)

formed at an edge of said metal plate (11, 21).

7. A stamp device as claimed in any of claims 1 to 6,having a cover member (12) pivotally connected to said base member (10), and an ink pad (13) affixed to said cover member (12).

8. A stamp device as claimed in any of claims 1 to 7, in which said stop means comprise a pair of mutually non-reentrant edges (11a, 11b, 21a, 21b or of 30) whereby said magnetic rubber strip means (18,19,28,29) can be placed on or removed from said metal plate (11,21) in a direction perpendicular to said metal plate (11, 21).

9. A stamp device as claimed in claim 5 and any subsequent claim or claims, in which said raised indicia (i,j,27') are backward-printed and said identifying indicia (26) are forward-printed.

10. A stamp device as claimed in claim 5 and any subsequent claim or claims in which said magnetic rubber strip means (18,19,28,29) has a length exceeding said metal plate (11,21) so that a portion of said strip means (18,19,28,29) extends beyond said metal plate (11,21) and said identifying indicia (26) are carried on said portion of said magnetic rubber strip means (18,19,28,29).

11. A stamp device as claims in claim 7 and any subsequent claim or claims, in which said cover member (12) is spring-biased (14) away from said magnetic rubber strip means (18,19), and said device includes releasable latch means (12a, 15,16) to maintain said cover member (12) in a position adjacent said magnetic rubber strip means (18,19) so that said ink pad (13) is pressed against said raised indicia (i,j).

12. A hand stamp assembly, comprising, in combination, a base member having a magnetically permeable metal plate and a pair of stop means, said plate having a generally flat receiving surface and said stop means extending away from said base member beyond said receiving surface; and magnetic rubber strip means adapted to magnetically adhere to said metal plate at a position fixed in a first dimension by said stop means, said magnetic rubber strip means carrying raised indicia.

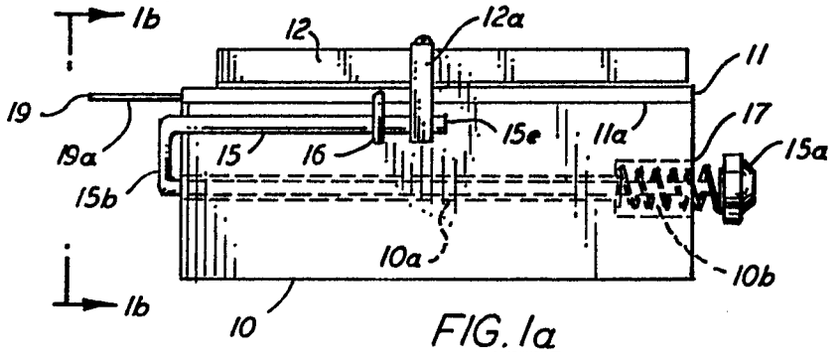

FIG. 1a

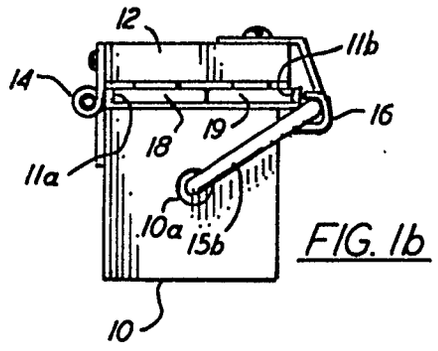

FIG. 1b

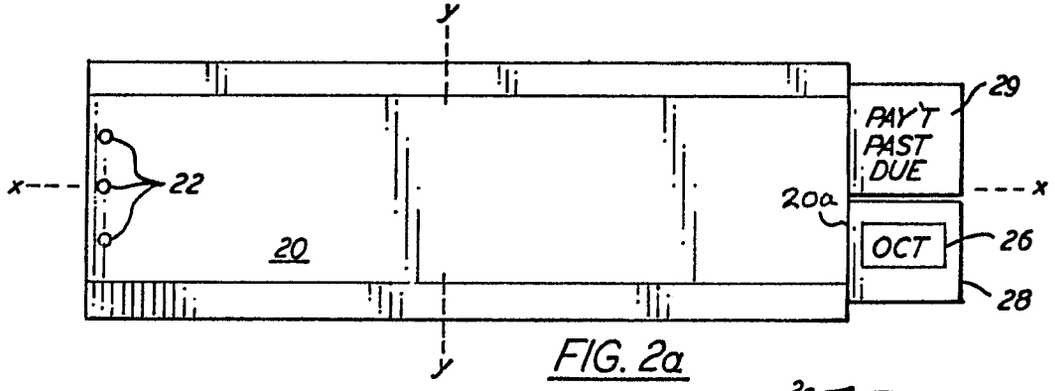

FIG. 2a

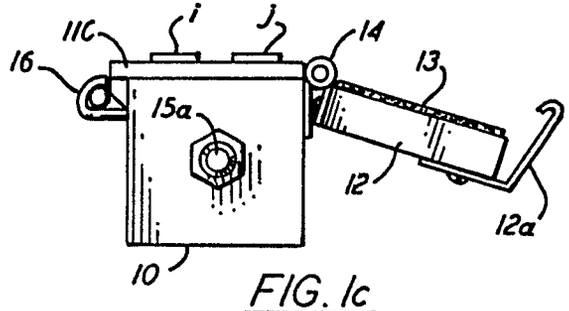

FIG. 1c

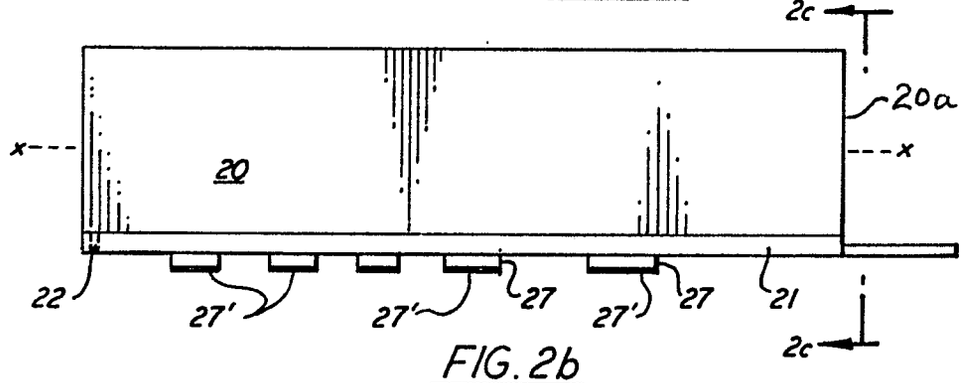

FIG. 2b

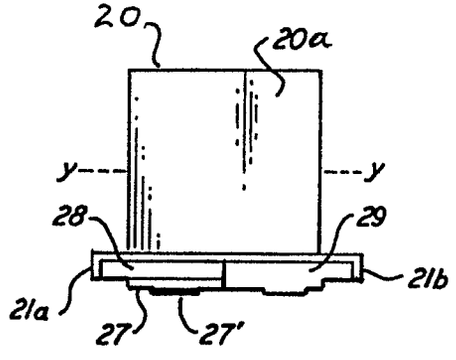

FIG. 2c

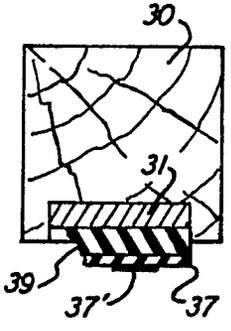

FIG. 3

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