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(54) POCKET HAND STAMP

(71) I, TAKAJI FUNAHASHI, of Japanese Nationality, of No. 1 2-chome, Kitatakasho-machi, Nishi-ku, Nagoya-shi, Aichiken, Japan, do hereby declare the invention for which I pray that a patent may be granted to me and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to a pocket hand stamp and more particularly to a pocket hand stamp in which the printing plate can be covered to prevent the ink on the printing plate from soiling adjacent articles when the stamp is not in use.

The pocket hand stamp in accordance with the invention comprises a holder hold- a printing plate at one end and a pair of box-shaped covers pivoted to the other end of said holder, said covers serving to cover the said printing plate when they are turned to a position under the said one end of said holder and provide a handle for the stamp when they are turned to a position over the said other end of the holder and placed upright back to back.

According to a preferred feature of the invention the holder has a detachable cover plate on its said other end, each of said holder and said cover plate having a pair of recesses at its outer ends forming, in mutual combination, sockets and each of said box-shaped covers has at the inner side of its ends pivot pins adapted to engage the respective sockets.

According to a further preferred feature of the invention, in the above mentioned pocket hand stamp, the holder is provided with a pair of sockets at the outer side of each of its ends, and each internal end of the box-shaped covers has pivot pins to engage said sockets.

According to a yet further preferred feature of the invention the printing plate is formed from an elastic sponge material having a fine open foam structure.

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Specific embodiments of the invention will now be described with reference to the accompanying drawings in which:

Figure 1 is a perspective view, partially broken away, of an embodiment of the pocket hand stamp in accordance with the invention, with its covers turned to a position in which they cover the printing plate.

Figure 2 is a perspective view, partially broken away, of the pocket hand stamp shown in Figure 1, showing the covers turned to an upright position over the top of the holder, back to back to provide a handle for the stamp,

Figure 3 is a front elevation, partially in cross-section, of the pocket hand stamp shown in Figure 1,

Figure 4 is a front elevation, partially in cross-section, of the pocket hand stamp as shown in Figure 2,

Figure 5 is an exploded perspective view of the pocket hand stamp shown in Figure 1,

Figure 6 is a front elevation, partially in cross-section, of another embodiment of the pocket hand stamp in accordance with the invention with the box-shaped cover turned to the position under the bottom of the holder to cover the printing plate,

Figure 7 is a front elevation, partially in cross-section, of the pocket hand stamp shown in Figure 6, showing the covers turned to an upright position over the top of the holder back to back to provide a handle for the stamp,

Figure 8 is an exploded perspective view of the pocket hand stamp as shown in Figure 6,

Figure 9 is a plan view of a cover plate for still another embodiment,

Figure 10 is a cross-sectional view taken through line A-A in Figure 9,

Figure 11 is a bottom view of the cover plate, and

Figure 12 is an end view of the same.

SEE ERRATA SLIP ATTACHED

Referring to Figures 1 to 5 of the drawings the holder 1 is of a shape of a box with an open top 2 and an open bottom 3 and is preferably made of acrylic butadiene styrene copolymer resin. The bottom 3 has a inner flange 4 and the top 2 has a pair of recesses 5,5;5,5 at the outer side of each end.

The printing plate 6 has a printing surface 7 on its one side and is preferably made of an elastic sponge material material, having a fine, open foam structure for example nitryl butadiene copolymer rubber. The most suitable method for manufacturing this porous material is described in applicant's United States Patent 3,342,911. The printing plate 6 is supported on the flange 4 so that its printing surface 7 protrudes beyond the flange 4. An ink pad 8 is positioned on the printing plate 6 in the holder 1. The ink pad 8 is made of a porous material such as polyvinyl formal resin or felt. By impregnating the printing plate 6 and the ink pad with ink before use, continuous stamping is possible without using a separate stamp pad.

The cover plate 9 is tray-shaped and detachably mounted on the open top 2. The cover plate has a pair of recesses 10,10;10,10 at the outer side of each end. On assembly of the plate 9 with holder 1 each of the recesses 10,10 combines with each recess 5,5 of the holder 1 to form a socket.

An indicating plate 11 and a transparent plate 12 are overlaid within the cover plate 9, the projections 13,13 on both ends of the transparent plates 12 being removably fitted in slots 14,14 formed in the ends of the cover plate 9.

A pair of bov-shaped covers 15,15 preferably made of polyacetal resin, each have, on the inner side of their ends pivot pins 16,16 which are adapted to engage the sockets formed by said recesses 5,5,10,10. The box-shaped covers 15,15 are pivotally affixed to the holder 1 by fitting the pivots 16,16 into recesses 5,5 and then fitting the cover plate 9 on the open top 2 of the holder 1.

The box-shaped cover 15,15 has a pair of snap members 17,17 for opening or closing at its flange, and has in the inside ribs 18,18 for reinforcement and to provide a good grip when holding the stamp for use.

The box-shaped covers 15,15 cover the printing plate 6 when they are turned to the position under the bottom 3 of the holder 1 (see Figures 1 and 3) and provide a handle for the stamp when they are turned to the position over the top 2 of the holder 1 and are place upright back to back. (see Figures 2 and 4).

When the covers 15,15 are placed to cover the printing plate 6, the inner edges 19,19 of the snap members 17,17 engage each other to maintain the box-shaped covers 15,15 in closed position thereby preventing the ink on the printing plate from soiling other things.

In the flange 4 at both ends of the holder 1 are recesses 20,20 for communication of air between the inside and the outside of the holder 1.

In accordance with the invention, when the box-shaped covers are providing a handle, the covers 15,15 are manually gripped with the fingers engaging 18,18 reinforcements so that the holder 1 is supported without swinging with respect to the covers 15,15 thus making it possible to use the stamp stably.

When the ink needs to be replenished, the cover plate 9 is removed from the holder 1 and some ink is dropped from the top opening of the holder 1 and is dispersed in the ink pad 8, whereby the ink gradually reaches the printing plate 6 so as again to perform clear and continuous stamping without using a separate stamp pad.

The pocket hand stamp of the invention uses a relatively small number of component parts and therefore a relatively small quantity of material.

If such plastic material as mentioned before is used, the hand stamp becomes lighter and more pocketable.

In the second embodiment shown in Figures 6 to 8, the holder 21 is of a box shape and has a tray-shaped top plate 22 and an open bottom 23. The tray-shaped top plate 22 has a lattice-shaped rib 24 in its inside. The indicating plate 25 and a transparent plate 26 are placed superposed within the tray-shaped top plate 22. The projections 27,27 formed at the ends of the transparent plate 26 are removably fitted in slots 28,28 provided at the ends of the tray-shaped top plate 22.

The ink pad 29 and printing plate 30 are placed superposed in the holder 21. A metallic frame 31 is fitted at the open bottom 23 of the holder 1 between the peripheral edge of the printing plate 30 and the inner surface of the side wall 32 of the holder 21, whereby the printing plate 30 is supported by the holder 21 and the printing surface 33 of the printing plate 30 protrudes outward beyond the metallic frame 31.

The holder 21 has a pair of bearing holes 34,34;34,34 in the outer portion of each top end. Longitudinal grooves 35,35 are provided along the outer surface of the side wall 32 of the holder 21 and extend from the bearing holes 34,34 to the bottom 23.

A pair of box-shaped covers 36,36 have pivot pins 37,37 at the inner sides of their ends to engage with said bearing holes 34,34.

The box-shaped covers 36,36 may be pivotally secured to the holder 1 by sliding the pins 37,37 upwardly along grooves 35,35 into the bearing holes 34,34 by using the

elasticity of the box shaped covers 36,36.

The box-shaped covers 36,36 have snap members 38,38 in their flange for opening or closing operation and has in their interior ribs 39,39 for reinforcement and slippage-prevention when holding.

The cover plate 9 in the embodiment shown in Figure 1 may be a shape having ink replenishing holes as shown in Figures 9,10, 11,12 in order to make the replenishment of ink easy. In this case, the covers 15,15 can not be removed without removing the cover plate 9' from the holder 1. Thus, after having removed the transparent plate 12, the indicating plate 11 and then plug *b*, ink is dropped through an ink replenishing hole *a* and absorbed in the ink pad 8 whence it invades the printing plate 6 and reaches the printing surface 7. Therefore it is possible to perform clear stamping for a long period of time.

WHAT I CLAIM IS:—

1. A pocket hand stamp comprising a holder holding a printing plate at one end and a pair of box-shaped covers pivoted to the other end of said holder, said covers serving to cover the printing plate when they are turned to a position under the said one end of the holder and provide a handle for the stamp when they are turned to a position over the said other end of the holder and placed upright back to back.

2. A pocket hand stamp as claimed in claim 1 in which said holder has a detachable cover plate on its said one end, each of said holder and said cover plate having a pair of recesses at its outer ends forming, in mutual combination, sockets and each of said box-shaped covers has at the inner side of its ends pivot pins adapted to engage the respective sockets.

3. A pocket hand stamp as claimed in claim 1 in which the holder is provided with a pair of sockets at the outer side of each of its ends, and each internal end of the box-shaped covers has a pivot pin to engage one of said sockets.

4. A pocket hand stamp as claimed in claim 2, in which an elastic sponge material having a fine open foam structure is used as the printing plate.

5. A pocket hand stamp as claimed in claim 4, in which ink replenishing holes are provided in the cover plate.

6. A pocket hand stamp as claimed in any preceding claim, wherein an ink pad is interposed between the printing plate and the cover plate.

7. A pocket hand stamp substantially as hereinbefore described with reference to and as illustrated in Figures 1 to 5 or Figures 6 to 8 or Figures 1 to 5 as modified by Figures 9 to 12 of the accompanying drawings.

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