

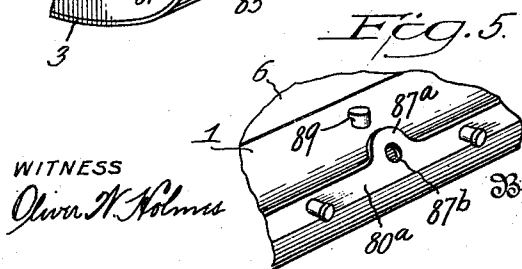
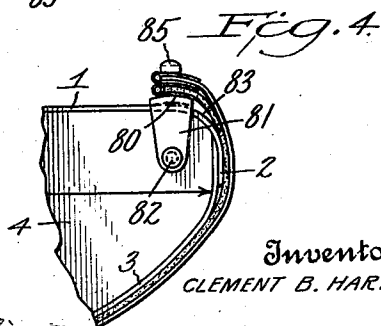
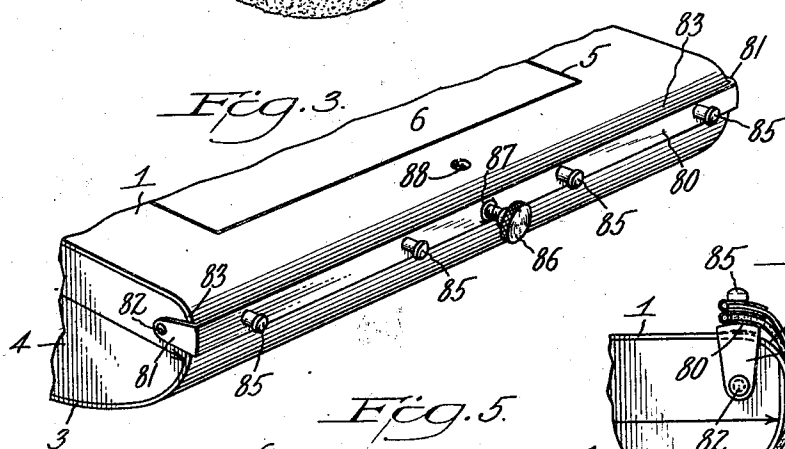
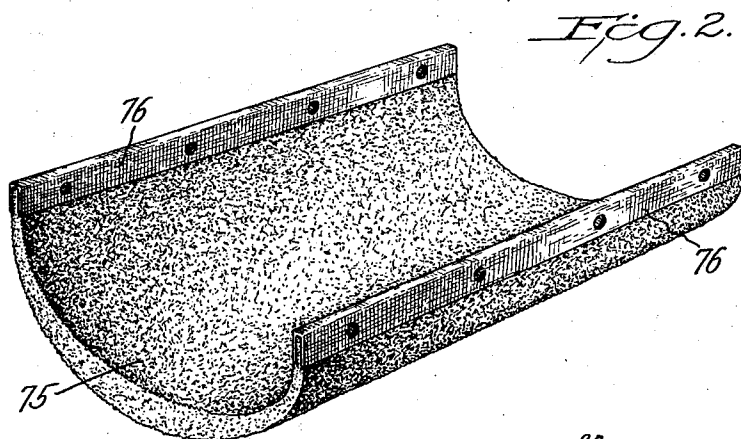
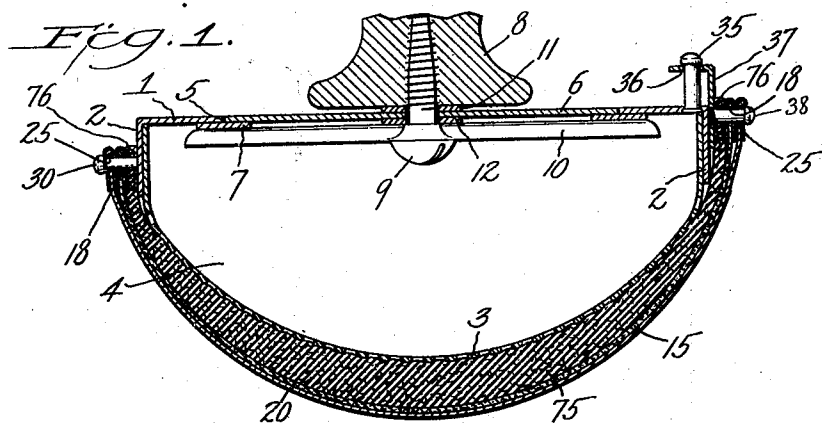
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C. B. HARTS

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STENCIL HAND STAMP

Filed April 8, 1929



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STENCIL HAND STAMP

Application filed April 8, 1929. Serial No. 353,572.

The present invention relates to improvements in stencil hand stamps or duplicators of a type in which an inking body and stencil are stretched over the foraminous bottom wall of a hollow stamp body in which stencil ink is placed.

The present improvements relate first to an improved form of inking pad which adapts the hand stamp for making stencil impressions upon rough or irregular surfaces, the pad being made of a highly resilient completely porous material such as some forms of high-grade sponge rubber, and being shaped with a central thickened portion which is gradually reduced in thickness toward its edges by which the pad is secured to the stencil body. Any ordinary sheet stencil of the proper size may be employed with the improved porous resilient inking pad.

The second feature of the invention is the improved tension device for effectively attaching the inking pad and stencil sheet to the body of the hand stamp. This improved tension device comprises a bar with means for engaging the edges of the pad and stencil sheet with means for pivotally mounting it at its ends upon the stamp body and means for securing it in position after the pad and stencil sheet have been properly tensioned or stretched.

In order that the invention may be fully understood, it will first be described with reference to the accompanying drawings and afterwards more particularly pointed out in the annexed claims.

In said drawings:

Figure 1 is a vertical transverse sectional view of a stencil hand stamp illustrating the improved resilient porous inking pad;

Figure 2 is an improved perspective view of the improved ink pad removed from the stencil hand stamp;

Figure 3 is a detail perspective view illustrating the improved pivotally mounted tension bar for the inking pad and stencil sheet, showing one form of device for securing the tension bar in tensioning position;

Figure 4 is a detail end elevation illus-

trating the improved device in active position;

Figure 5 is a detail perspective view showing a slight modification of means for attaching the bar in tensioning position.

The construction of the stencil hand stamp may be of any approved design, but is preferably of substantially the form illustrated and described in an application filed in the name of W. O. Gorr under date of October 20, 1928, Serial No. 313,814. This is the form of stencil hand stamp to which the present improvements have been applied for the purpose of illustrating the present invention.

The hollow body of the improved stencil hand stamp is formed of a top plate 1 having the integral downwardly presented side flanges 2 extending at right angles to the top plate and to which the opposite edges of the segmental cylindrical bottom wall 3 are brazed or soldered. The bottom wall 3 is closely perforated throughout the greater part of its area. The hollow body is completed by the two end wall sections 4 which are brazed or soldered to the flanged top plate 1 and the foraminous bottom wall 3.

The top wall 1 has a relatively large central rectangular opening 5 cut through it, in which closely fits a removable cover plate 6 resting preferably upon a flange or stop plate 7 secured to the inner surface of the top plate 1 and projecting slightly within the cover opening 5 to provide a ledge for the support of the cover plate 6. The cover plate 6 has rotatably mounted upon it a handle 8 secured by means of a bolt or screw 9 inserted from beneath and passing through a locking bar 10 which is keyed or otherwise fastened to the bolt or screw 9 so as to rotate upon the cover plate 6 with the handle 8. Spacing washers 11 and 12 are mounted between the locking bar 10 and cover plate and between the handle 8 and cover plate for the purpose of giving the handle and locking bar more freedom of movement.

Returning to consideration of the body of the stencil hand stamp, it will be observed that one of the longitudinal side walls 2 is provided with outwardly projecting headed

pins or lugs 30, four of them being employed on a large size stamp. These headed pins or lugs 30 are spaced to correspond with the spacing between the perforations or openings 18 of the pad 15 and 25 of the stencil 20 so that one edge of the pad and one edge of the stencil can be mounted upon these headed pins or lugs, the stencil being superposed upon the pad.

At the opposite side of the stencil body, the top plate 1 has projecting up from it two headed guide pins 35 over which fit the perforations 36 of the angular tension bar 37. Projecting from the side of the angle bar 37 are the four spaced headed pins or lugs 38 corresponding in position and spacing to the pins or lugs 30 above referred to.

I have found it to be very difficult if not impossible to produce a satisfactory stencil imprint upon rough surfaces with the stencil hand stamps heretofore in use. In experimenting upon this problem with a view to providing an effective stencil hand stamp that can be used for marking packages whether in wooden or pasteboard crates or in gunny sack wrappings, I have found that satisfactory results can be produced by employing a specially formed inking pad of unusual thickness made of a fine sponge rubber which provides complete porosity for the rapid capillary spread of ink from the stamp body.

In the drawings such an improved inking pad is illustrated at 75, it being noted that this pad has its greatest thickness in its central zone from which it gradually reduces in thickness to the reinforced attaching edges indicated at 76 which are perforated to receive the headed pins upon the stamp body by which it is securely held in place. This inking pad must be of high resiliency to accurately conform to rough surfaces, evenly pressing all parts of the stencil sheet into the irregularities upon the surface upon which the imprint is made. Added to this high degree of elasticity the inking pad must also have a high degree of porosity so that the many capillary channels will rapidly spread the stencilling ink to all parts of the stencil design and continue to supply the necessary ink as rapidly as necessary for successive imprints. The side edges of the improved inking pad are preferably formed with closed or tight skin surfaces to avoid the objectionable spread of ink to the side edges of the pad. Referring to Figures 3 and 4 of the drawings, I have shown an improved form of tension bar 80 having inwardly bent ends 81 which are pivotally mounted at 82 to the ends of a stencil hand stamp, the top and side wall of the stamp body being preferably curved as shown at 83 concentrically with the pivot 82 to permit the ready movement of the tension bar 80 under pressure of the operator's hands. This tension bar 80 carries four headed pins or lugs 85 with which one perforated edge of

the inking pad and the stencil sheet are engaged as in the older form of such devices. This pivotal tension bar 80 also carries a fastening screw 86 threaded through a lug 87 and adapted to engage the threaded opening 88 in the body of the hand stamp. When the pad and stencil sheet are put in place with their edges at one side of the hand stamp in engagement with the headed pins or lugs 30 and their inner edges mounted upon the pins 85 of bar 8, the operator presses upwardly upon the tension bar 80 to properly spread the pad and stencil sheet over the foraminous bottom wall of the stamp and when properly spread is held in stretching position by turning the screw 86 into engagement with the threaded opening 88.

In the modification shown in Figure 5 the construction is the same excepting the tension bar indicated at 80a is provided with a perforation 87b in the integral ear 87a which fits over and locks upon headed pin 89 projecting up from the stamp body.

I claim:—

1. A stencil hand stamp comprising a hollow body having a curved foraminous bottom wall and pad securing means, with an inking pad extending over said foraminous bottom wall, said pad being formed of a relatively thick highly resilient and porous material and a stencil sheet superposed upon said inking pad.

2. A stencil hand stamp comprising a hollow body having a curved foraminous bottom wall and pad and stencil securing means, with an inking pad extending over said foraminous bottom wall, said pad being formed of a highly resilient and porous material of greatest thickness in its central longitudinal zone and gradually reduced in thickness toward its side edges, and a stencil sheet superposed upon said inking pad.

3. A stencil hand stamp comprising a hollow body having a foraminous bottom wall and pad securing means, with an inking pad extending over said foraminous bottom wall, said pad being formed of a highly resilient and porous sponge rubber having its greatest thickness in its central longitudinal zone and of gradually reduced thickness toward its side edges.

4. A stencil hand stamp comprising a hollow body having a curved foraminous bottom wall and pad and stencil securing means, with an inking pad extending over said foraminous bottom wall, said pad being formed of a highly resilient and porous sponge rubber of great thickness in its central longitudinal zone and gradually reduced in thickness toward its side edges, means upon the pad to engage the securing means on the body and a stencil sheet superposed upon said pad.

5. In a stencil hand stamp the combination with a hollow body having a foraminous bottom wall, sheet engaging means at one

edge of said bottom wall, and an adjustable tension plate pivotally mounted adjacent to the opposite edge of said bottom wall, said tension plate having means for engaging a sheet and means for locking it in position upon the hand stamp.

6. In a stencil hand stamp the combination with a hollow body having a foraminous bottom wall, sheet engaging lugs upon one side of said body, a tension bale carrying sheet engaging lugs and formed with inwardly presented arms which are pivotally mounted upon the edge of said hollow body opposite said first-named lugs and means of engagement between said tension bale and said body.

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