Oct. 20, 1931. W. J. PANNIER, JR 1,828,230

STAMP

Filed June 9, 1930

Fig. 1.

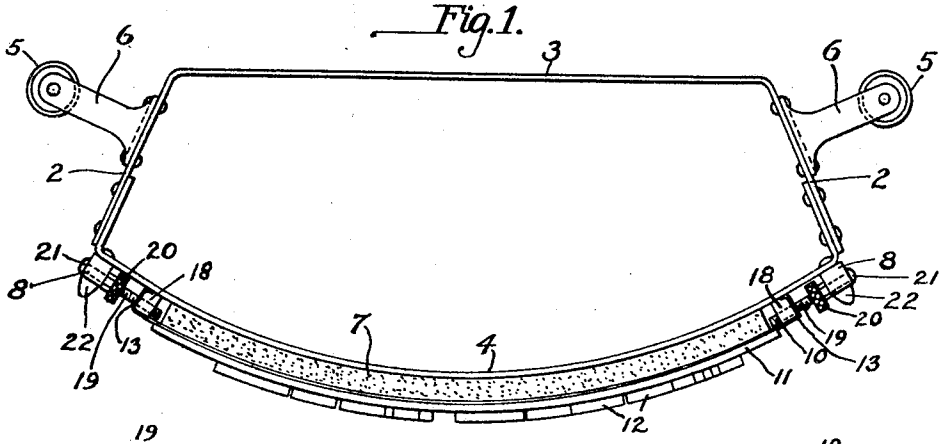


Fig. 2.



Fig. 4.

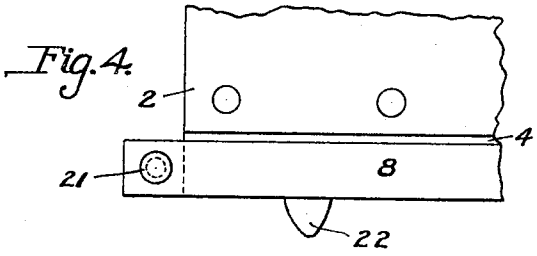


Fig. 3.

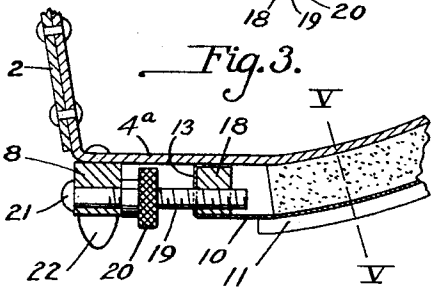
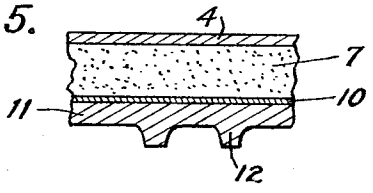


Fig. 5.



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Patented Oct. 20, 1931 1,828,230

UNITED STATES PATENT OFFICE

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STAMP

Application filed June 9, 1930. Serial No. 459,852.

My invention is an improvement in the class of stamps, similar to rubber stamps, adapted to mark any suitable surface with an imprint by means of raised letters extending beyond a supporting base or surface, of the same general type of construction as that disclosed in my prior Patent No. 1,071,527, issued August 26, 1913.

The invention has in view to provide a rocking or rolling stamp of such character, either for hand use or mechanical application in connection with a supporting roll and a suitable indicating pad or medium.

The object in view is to provide, in such a stamp, a stamping element or die which may be attached to and used with a suitable supporting base, preferably resilient and having a curved contour, whereby to be adaptable to the application of a plurality of stamping elements or members, removably and adjustably mounted thereon.

Ordinarily such stamps are made by molding the letters or characters in rubber on a printing portion which is permanently mounted and connected with the cushion which in turn is fixed to the stamping handle or frame, the several parts forming inseparable portions of each stamping unit. Such construction and practice, especially with stamps or rubber dies of large size involves very considerable expense in storage room which is avoided by my improvement.

The present invention comprises a supporting frame or holder having a resilient cushion portion, arranged in the arc of a circle around its under face and adapted to receive and hold, with sufficient tension to maintain it in position, an operable web-like printing or stamping member, the frame having devices for stretching such member across the face of the cushion and fixedly holding it thereon.

The particular features of improvement involved herein relate to the mounting of the rubber web embodying the printing or stamping characters upon a flexible sheet metal base, adapted for easy and rapid connection or disconnection with the co-operating tightening and mounting elements of the base; also improved means for facilitating the application of the stamping characters to the surface acted upon in such a manner as to avoid smearing or distortion, in the form of preliminary contact ports in advance of the printing characters at each end.

Referring to the drawings illustrating one preferred embodiment of the invention:

Fig. 1 is a view in side elevation illustrating the complete stamp;

Fig. 2 is an under plan view of Fig. 1;

Fig. 3 is an enlarged sectional detail view on the line III—III of Fig. 2, in a reverse position;

Fig. 4 is a partial end view of the frame, corresponding to the construction of Fig. 3;

Fig. 5 is a detail cross sectional view on the line V—V of Fig. 3.

Referring to the drawings, the base member comprises a light portable frame of the desired size preferably made of sheet metal having end portions 2 connected by a back 3 and a rocking or curved bottom portion 4, all fixedly connected by riveting or otherwise, as shown.

These parts are arranged as shown for stiffness and convenience in use and are provided with gripping handles 5 one at each end carried by the outwardly projecting brackets 6. The bottom 4 extends around underneath from one of the end portions 2 to the other in the arc of a circle, of suitable radius to facilitate the rolling operation of the stamp from one end to the other over the surface being marked.

Upon the under side of the bottom 4 is cemented or otherwise suitably secured a resilient pad 7 of rubber-sponge-cushion or other suitable material, the outer surface of which is curved in parallelism with the base 4 and presents a smooth continuously curved supporting face for the stamping element from one end to the other.

At each end the main frame is provided with a projecting cross bar or ledge 8 which may be secured to each corner portion of the rocking frame by riveting or otherwise, and which comprise fixed portions of the rocking frame itself.

The flexible base of the character-printing element consists of a thin sheet metal strip

or web 10, of copper or other suitable metal with which is incorporated by cementing the rubber base 11 having the projecting integral rubber stamping characters 12, formed by molding, as is well understood.

The purpose of incorporating the flexible sheet metal strip 10 with the rubber strip 11 is to give the entire stamping member sufficient strength so that it may be stretched taut over the curved cushion 7 without undue stretching, with reinforcement for the rubber and to provide a single inseparable stamping element adapted for its usual purposes, of substantial and enduring character, and capable of ready attachment to and detachment from the holding and supporting portions of the main frame.

I have found that by applying the rubber character-supporting base to the metal web with suitable pressure, and in connection with proper vulcanizing of the rubber, that it makes a permanent inseparable connection with the metal base whereby the two associated elements are inseparably joined or connected.

Each end of the flexible base 10 is bent around in hook form, as at 13, providing a squared or otherwise suitably formed engaging terminal for reception of the transverse tightening and loosening cross bar 18. These, as shown, are in duplicate arrangement at opposite ends of the under side of the frame, either one or both of which being adjustable for tightening and loosening.

For such purpose I provide adjusting screws 19, utilizing a pair of such at each opposite end extending through and rotatable in the endmost cross bar 8, and having threaded engagement at their inner ends in bars 18. Each adjusting screw 19 is provided with a finger-operating wheel 20, fixedly connected with screw 19, the screw having a terminal head 21, being thus retained at each side of the bar 8. As thus constructed the screws 19 may be turned in either direction.

For the purpose of facilitating the operation of the adjusting screws 19, the bottom plate 4 is preferably made straight for a short portion of its length, as indicated at 4*a*, thus providing a flat surface over which the bar 18 may move in parallelism with the adjusting screws 19.

For the purpose of providing a temporary alining support at each end of the frame, whereby to maintain the printing surface of characters 12 outwardly from the base 4 at their operative distance, at the commencement of the operation, and to prevent improper or sliding contact against the surface to be stamped, each bar 8 is provided with outwardly projecting abutments or temporary supporting lugs 22.

These, as shown, are preferably coni-form or tapered, having rounded terminals, adapted to make preliminary contact with the flat surface, over which the rocker stamp is operated by rolling movement, in one direction or the other, by the operator. Such contact projections are also preferably in pairs at each end, so as to equalize the pressure and effect simultaneous preliminary contact of the characters for the full width of the printing rubber element 11.

The hand grips 5 are preferably of the construction shown in the drawings, consisting of cylindrical shaped handles mounted on supporting pins carried at each end of the bracket extension 6, and with ample clearance for the fingers of the operator, as in the form of construction.

The operation of the invention will be readily understood from the foregoing description. When any particular stamping member 11 is utilized, the screws 19 at one or both ends are reversely adjusted, moving the bar or bars 18 inwardly sufficiently far to permit engaging attachment of the hooked terminals 13 over the bars.

There upon the screws 19 may be reversely rotated, feeding the bar or bars 18 outwardly until the metal strip 10 is tightened against the base, whereupon the device is ready for application and use in the usual manner. The frame is then grasped by the handle 5, one in each hand, and the printing characters of the rubber strip are inked by a partial rolling operation over a suitable inking pad, when the impression may be then made on the surface to be marked, as will be readily understood.

The curved surface of the device greatly facilitates the marking operation, enabling ample pressure to be exerted throughout the entire length of the stamp, ensuring regularity of impression and great speed. The mounting of the rubber characters and their permanent connection with the sheet metal supporting strip provides a single unitary element of compact and continuously serviceable form capable of compact storage and use as desired, while the projections 22 insure continuous and uniformly good impressions, without requiring special skill in the operator.

The advantages of my invention will be readily appreciated by all those familiar with this class of stamps. It facilitates and simplifies the stamping operation: it obviates the necessity of keeping on hand a large number of stamping bases, each having its particular stamp; it effects great economy in storage space of the several stamping elements; it is rapid and effective in changing the stamping strips, and because of the features above described greatly simplifies and expedites the use of the device in printing or stamping various articles.

It will be understood that the invention may be greatly changed or varied in different details of construction, design, proportion, or

otherwise by the skilled mechanic, but that all such changes are to be considered as within the scope of the following claims.

What I claim is:—

1. A stamp consisting of a rigid holding frame having an outer curved face, a curved cushion thereon, a flexible stamping die having a flexible sheet metal base fixedly connected with the stamping die and provided with hook terminals, transverse bars laid across the face of the base at opposite end portions adapted to engage the hook terminals, and means on the base outwardly from one of the bars for tightening and loosening it and preliminary bearing projections associated therewith.

2. A stamp consisting of a rigid holding frame having an outer curved face, a curved cushion thereon, a flexible stamping die having a flexible sheet metal base fixedly connected with the stamping die and provided with hook terminals, transverse bars laid across the face of the base at opposite end portions adapted to engage the hook terminals, a cross bar at the end of the frame provided with adjusting screws swivelled at one end in the cross bar having opposite threaded ends engaging one of the hook engaging bars and an intermediate thumb nut, and bearing projections on the cross bar extending beyond such thumb nuts.

3. A stamp consisting of a rigid holding frame having an outer curved face, a curved cushion thereon, a flexible stamping die having a flexible sheet metal base fixedly connected with the stamping die and provided with hook terminals, transverse bars laid across the face of the base at opposite end portions adapted to engage the hook terminals, and a cross bar at the end of the frame provided with adjusting screws engaging one of the hook engaging bars and having spacing projections thereon adapted to make preliminary contact with the surface to be stamped.

4. In a stamp as described, the combination with the rocker base and a stamping element provided with a sheet metal backing mounted thereon provided with a hooked terminal, of an outer transverse bar having a plurality of swivel bearings on the rocker base, a transverse bar for the hooked terminal, and screws rotatably mounted in said swivel bearings having their opposite ends in threaded engagement with the transverse bar.

5. In a stamp as described, the combination with the rocker base and a stamping element provided with a sheet metal backing mounted thereon provided with a hooked terminal, of a plurality of screw bearings on the rocker base, a transverse bar for the hooked terminal, screws rotatably mounted in said bearings in threaded engagement with the transverse bar, and preliminary rest projections extending from the base co-extensive with the extension therefrom of the face of the stamping element.

6. In a stamp as described, the combination with the rocker base and a stamping element provided with a sheet metal backing mounted thereon provided with a hooked terminal, of a plurality of screw bearings on the rocker base, a transverse bar for the hooked terminal, screws rotatably mounted in said bearings in threaded engagement with the transverse bar, and preliminary rest projections extending from the screw bearings.

In testimony whereof I hereunto affix my signature.

WILLIAM J. PANNIER, JR.