No. 777,836. PATENTED DEC. 20, 1904.

T. S. BUCK.

HAND STAMP.

APPLICATION FILED MAR. 8, 1904.

NO MODEL.

Fig. 1.

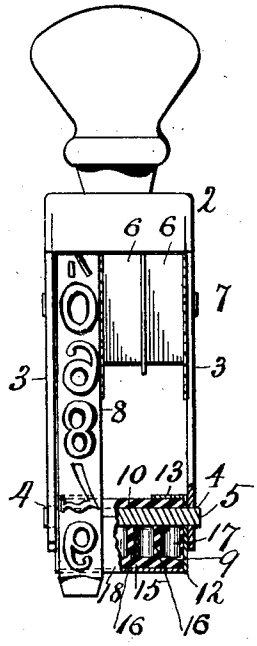


Fig. 2.

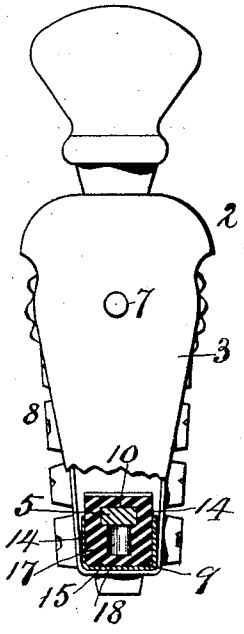


Fig. 3.

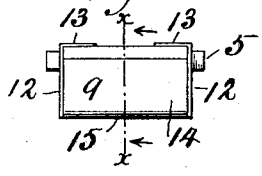
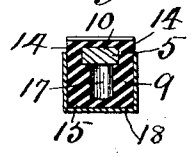


Fig. 4.



Witnesses
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No. 777,836. Patented December 20, 1904.

UNITED STATES PATENT OFFICE.

TAYLOR S. BUCK, OF NEW YORK, N. Y.

HAND-STAMP.

SPECIFICATION forming part of Letters Patent No. 777,836, dated December 20, 1904.

Application filed March 8, 1904. Serial No. 197,136.

To all whom it may concern:

Be it known that I, TAYLOR S. BUCK, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Hand-Stamps, of which the following is a specification.

My invention relates to improvements in that class of hand-stamps wherein the printing characters are mounted upon endless bands, usually termed "type-bands," which are mounted in a main frame upon rotary drums and on a bridge, which latter in the act of stamping or printing serves to press down upon the type for making the impression.

My invention relates to the construction of the bridge as shown in the accompanying drawings and as hereinafter described and claimed.

In the accompanying drawings, to which reference is made and which form a part of this specification, Figure 1 is a front elevation of a hand-stamp made in accordance with my invention, two of the type-bands being omitted and a portion of the bridge being shown in sectional elevation. Fig. 2 is a side elevation of the same, the lower part of the frame being broken away and the bridge shown in transverse section. Fig. 3 is a side elevation of the bridge removed from the frame, and Fig. 4 is a transverse sectional elevation of the bridge on line $x\ x$ of Fig. 3.

In the drawings, 2 designates the main frame, having cheek-pieces 3 3, which are formed with apertures 4 4 to receive the cross-piece or support 5, and 6 6 designate the drums mounted on the shaft 7 for holding and for adjusting the type-bands 8. The bridge 9 is of soft material, preferably soft india-rubber, vulcanized or otherwise secured or attached to the cross-piece or support 5, which is preferably of metal. The support 5 is by preference narrower than the bridge 9, so that it may occupy a space or channel 10 at the upper surface of the bridge 9. In this way the bridge 9, of soft india-rubber, is permanently secured to the support 5, so that the tendency of the type-bands to draw the lower face of the bridge to either side will not separate or detach the bridge from the support 5. The ends of the support 5 are passed through the said apertures 4 in the cheek-pieces of the frame, which openings are located above the lower ends of the cheek-pieces, so that the cheek-pieces below the apertures form supports for the ends of the bridge 9 and prevent bulging of the ends of the bridge when pressure is applied for stamping or printing. To still further obviate the tendency of the bridge to bulge at the ends and to still further obviate the tendency of the type-bands to draw the bridge to one side when they are rotated, I prefer to employ the stays 12 13, which are secured to the inner surface of the cheek-pieces of the frame or held by the support 5 in position for the bridge 9 to abut against them; but these stays may be omitted, if desired, particularly in small stamps.

The bridge 9 is made elastic, so that each type-band has practically its own independent bridge, so that in printing on uneven surfaces one or more of the printing characters or type may be depressed more than the other or others, and thus all the type on the bridge will make a clear and legible impression, and for this purpose the bridge 9 is made hollow, so as to inclose or confine air within it, and thus become partially pneumatic in its action, the same having continuous outer walls 14 and a continuous lower surface 15. The interior chamber of the bridge is by preference formed with integral flexible partitions 16, forming separate cells 17 for confining air, so that when pressure is applied the elasticity of the partitions and of the air confined in the cells will be localized to the several type-bands and so that each type or printing character will receive its due and proper amount of yielding pressure, and in case the type-bands shrink the bridge yields accordingly.

In order to prevent the type-bands from adhering to the bridge and to facilitate the shifting of the type-bands, I finish the bridge 9 with flexible non-adhesive or antifriction surfaces 18. As here shown, for this purpose I employ a thin separate covering of celluloid; but I do not limit myself to a separate antifriction-covering, for in some cases, particularly in large stamps, the surfaces of india-

rubber may be treated in the vulcanizing or other process, so as to have a flexible antifriction-surface for the type-bands to move upon.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a stamp having movable type-bands the combination with the type-bands of an elastic bridge formed with a longitudinal aperture and a cross-piece or support inserted in said aperture and held in the frame of the stamp, substantially as and for the purposes described.

2. In a stamp having movable type-bands the combination with the type-bands of an elastic bridge and a cross-piece or support narrower in width than the width of the bridge and to which the bridge is attached and by which it is secured in the frame of the stamp, substantially as described.

3. In a stamp having movable type-bands the combination with the type-bands of a hollow elastic bridge, flexible partitions in said bridge and a cross-piece or support applied to said bridge and to the edges of said partitions for closing the spaces between said partitions, substantially as described.

4. In a stamp having movable type-bands the combination with the type-bands of a stationary flexible bridge, a cross-piece or support for holding the bridge in the frame of the stamp and a flexible antifriction-surface applied to said cross-piece or support and to the bridge, substantially as and for the purposes set forth.

5. In a stamp having movable type-bands the combination with the type-bands of a flexible bridge, means for holding the said bridge in the frame of the stamp and stays applied to the ends of the bridge, substantially as described.

6. An elastic bridge for the type-bands of a stamp formed with a longitudinal aperture or channel 10 to receive a cross-piece or support for holding the bridge in the frame of the stamp, substantially as described.

7. An elastic hollow bridge for a stamp, the same being formed with interior vertical and flexible partitions attached to the bottom and side walls of the bridge, and a channel 10 formed above the upper edges of the said partitions, substantially as shown and described.

TAYLOR S. BUCK.

Witnesses:
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