No. 657,292. Patented Sept. 4, 1900.

J. F. LEHNER.

HAND STAMP.

(Application filed Apr. 19, 1899.)

(No Model.)

Fig. 1.

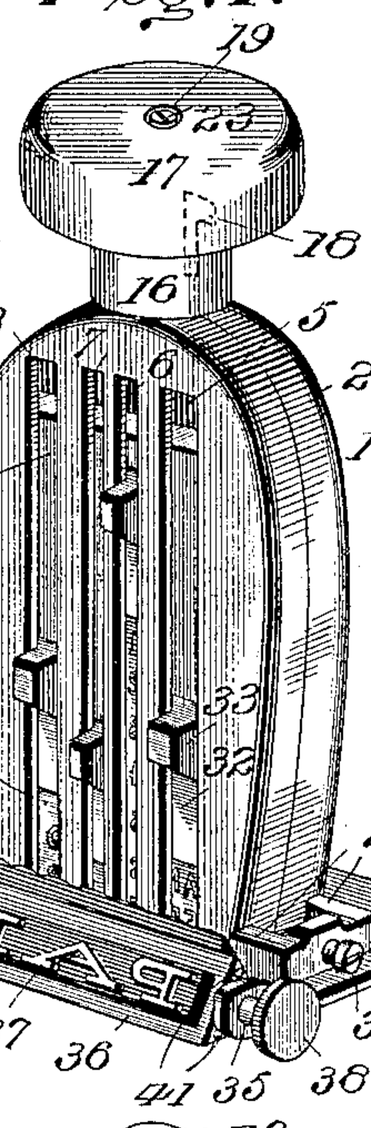

Fig. 3.

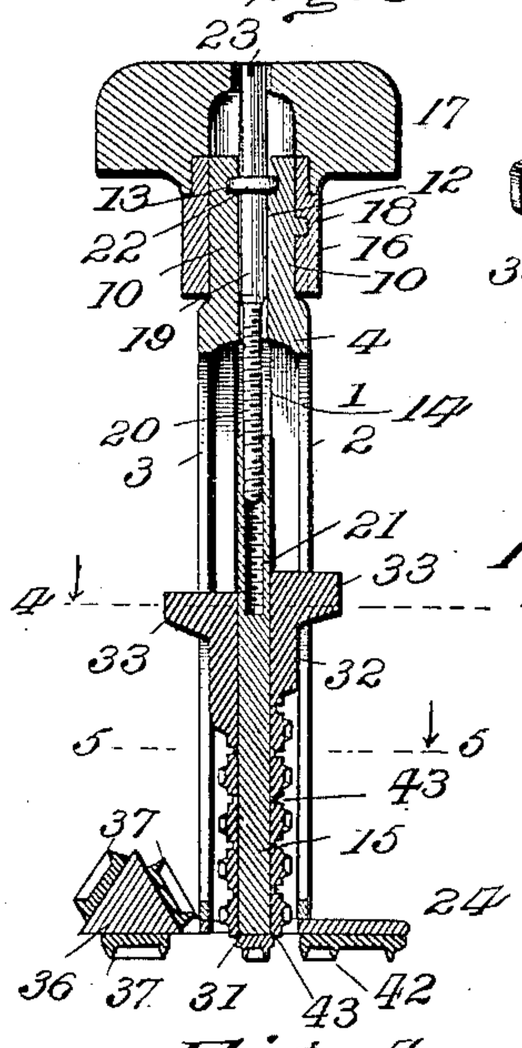

Fig. 2.

Fig. 6.

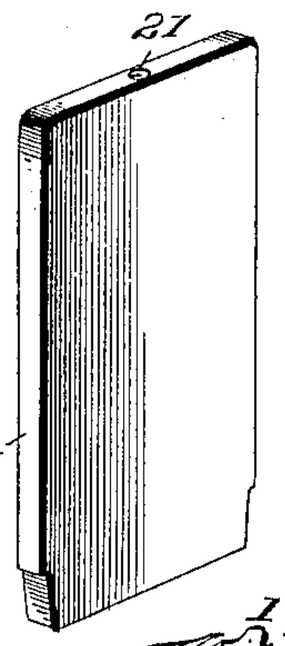

Fig. 7.

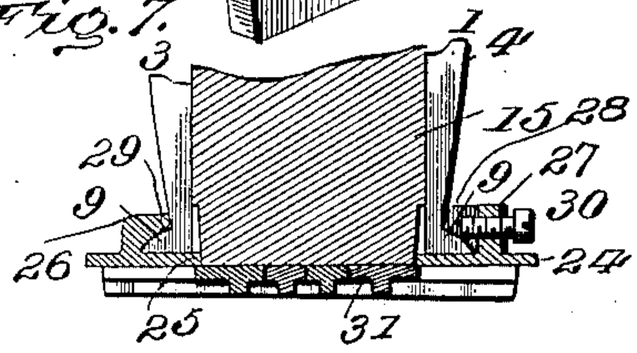

Fig. 4.

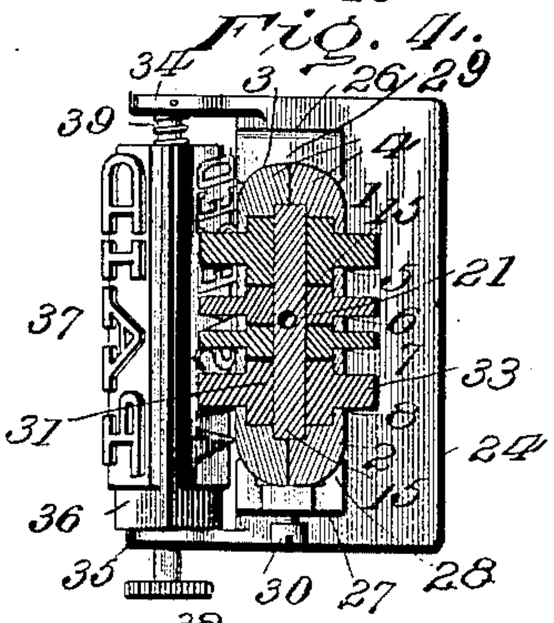

Fig. 5.

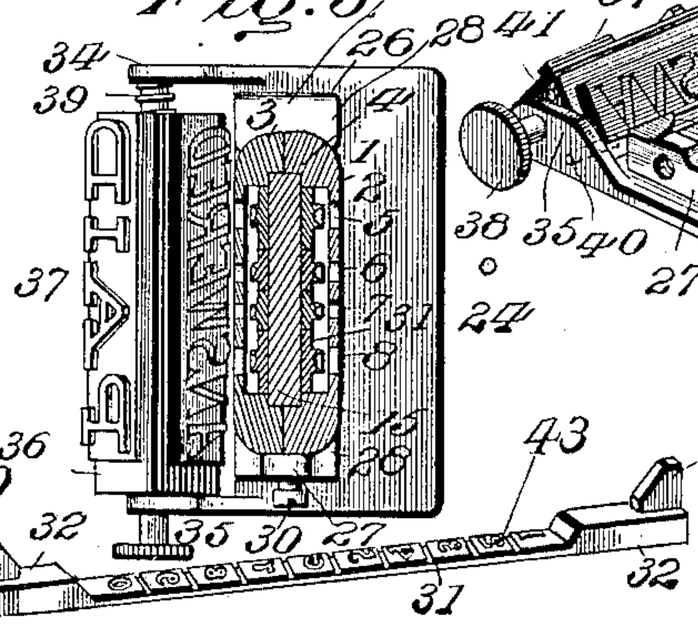

Fig. 8.

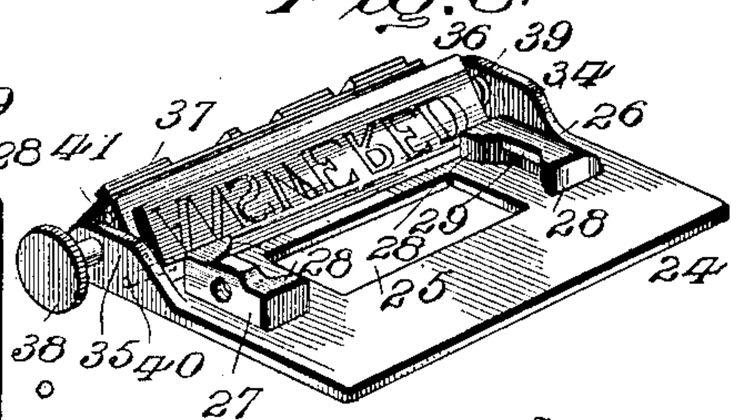

Fig. 9.

Witnesses:
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William E. Huff

Inventor
John F. Lehner
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his Attorneys

UNITED STATES PATENT OFFICE.

JOHN F. LEHNER, OF BALTIMORE, MARYLAND.

HAND-STAMP.

SPECIFICATION forming part of Letters Patent No. 657,292, dated September 4, 1900.

Application filed April 19, 1899. Serial No. 713,625. (No model.)

To all whom it may concern:

Be it known that I, JOHN F. LEHNER, a citizen of the United States, residing at Baltimore city, in the State of Maryland, have invented certain new and useful Improvements in Hand Printing-Stamps, of which the following is a specification.

My invention relates to improvements in hand printing-stamps of the class in which raised printing characters are arranged upon parallel strips of flexible material, the said strips being independently adjustable, so that the characters on adjacent strips may be brought into proper relation to print the desired character; and its object is to obviate some of the difficulties which have attended the practical working of stamps of this charter, as well as to increase the practical utility and simplify the construction of such devices.

Heretofore in stamps of this description the printing characters have generally been formed on endless bands, which extend around a common bar or bridge spanning the opening in the base-plate and a support or a series of supports arranged in the upper part of the frame. Generally these supports are rollers having serrated flanges which extend through the casing, so that they may be turned by hand, and as they are revolved the endless bands are drawn around by them. In order to keep the bands taut, and where rollers are used to provide sufficient friction between the rollers and the bands to insure movement of the latter, considerable tension is required, and tension devices are generally employed; but it is found in practice that when sufficient tension is applied to accomplish the desired result it becomes difficult to turn the rollers or to move the bands, and this trouble becomes aggravated when the stamp, after considerable usage, becomes clogged with ink, dust, &c., while the severe strains on the bands destroy their uniformity and render the printing uneven. These are difficulties which seem to be inherent to a greater or less degree in all stamps wherein endless bands are employed.

In carrying out my invention, instead of using a series of endless bands like those in common use I employ strips of suitable material not joined at the ends. These strips are so formed and arranged that they are under practically no tension or strain, and the adjustment can always be accomplished with ease, while the duration of the strips and the uniformity of the printing are preserved.

Other important features of my invention are the simplicity of the construction, requiring few parts, which are easily put together, and a rotatable impression device connected with the die-plate and carrying on its several faces different words or characters, so that the stamp may be quickly adapted to various purposes.

In the accompanying drawings, which illustrate my invention, Figure 1 is a perspective view of my improved stamp complete. Fig. 2 is a similar view of one section of the stamp-casing. Fig. 3 is a central vertical section through Fig. 1. Fig. 4 is a section on the line 4 4 of Fig. 3. Fig. 5 is a section on the line 5 5 of Fig. 3. Fig. 6 is a perspective view of the internal adjusting-plate. Fig. 7 is a central longitudinal section of the lower part of the device, the upper part being broken away. Fig. 8 is a top perspective view of the die-plate, and Fig. 9 is a perspective view of one of the printing-strips.

Referring to the drawings, 1 indicates the frame of my improved stamp, which, as shown, consists of a pair of opposing sections or plates 2 3, each having around its top and sides an evenly-faced flange 4, which flanges when the parts are assembled constitute the top and side walls of the casing and form the meeting surfaces between the sections. Each section is provided with a series of parallel openings 5, 6, 7, and 8 extending longitudinally throughout the greater portion of its length. As shown in Fig. 2, outwardly-projecting feet 9 are formed at the lower extremities of the side walls of each section, said feet having inclined upper surfaces, and an extension 10 projects from the top wall, this extension being semicircular in cross-section and having a longitudinal groove 12 and a transverse recess 13 on its inner face. The side walls are formed with parallel guideways 14 on their inner edges. When the two sections are placed together, the guides 14 form a groove for the reception of a rectangular adjusting-plate 15, and the parts 10 form a tubular head which is adapted to pass into a socket 16, connected with the handle 17. The

handle is removably secured to the head by means of a bayonet-joint 18. The plate 15 is adjustable longitudinally within the guides 14 by means of an adjusting-rod 19, having a screw-threaded end 20, which engages with a correspondingly-threaded socket 21 in the top of the plate 15. This rod extends through the tubular head and is free to turn therein, but is prevented from moving longitudinally by a boss 22 near the upper end of the rod, which enters the recesses 13. The outer end of the rod has a slot 23, so that it may be turned by means of a screw-driver or other suitable instrument.

The base-plate 24 is provided at either end of the opening 25 with receptacles 26 and 27, each having inwardly-extending arms 28, one of said receptacles 26 having an overhanging flange 29 and the other being provided with a set-screw 30. To attach the casing to the base-plate, the feet 9 on one side of the casing are inserted under the flange 29, and the set-screw 30 is turned so as to bear upon the inclined faces of the feet on the other side of the casing. The arms 28 hold the two sides of the casing together at the bottom.

In Fig. 9 I have illustrated in perspective one of the printing-strips which I employ. It consists of a thin strip of flexible material 31, having on its face the usual raised type and at either end a thickened portion 32, as shown, of the same width as the strip and which extends above the type. The ends 32 should be slightly wider than the longitudinal openings in the casing, although the part 31 may be of any desired width. Projecting from the center of each thickened portion 32 is a narrow thumb-piece 33. I employ four of these strips in each stamp, the two central strips having type representing the digits, while the right and left hand strips, respectively, have the years and months arranged thereon. These strips are arranged within the casing before the parts are assembled by extending the thumb-pieces of each strip through the opposing openings in the casing, and when the two parts of the casing are brought together, the adjusting-plate being in place, each strip will be doubled around the lower end of the plate, as shown in Fig. 3, and the thickened ends of the strips will be slightly compressed between the casing and plate, while the part carrying the type will not touch the casing. The strips are thus held by frictional contact only at the ends, and they may be moved in either direction by an upward pressure on the appropriate thumb-piece, or, preferably, by a downward pressure on one side and an upward pressure on the other side, as this latter method relieves the strip of any strain. The thumb-pieces 33, projecting through the openings, form guides for the strips. By means of the adjusting-plate 15 and rod 19 the type may be adjusted at the impression-point to correspond with the surface of the stationary type 42 on the base-plate.

Slight transverse indentations or grooves 43 are formed in the strip 31 between the characters thereon in order that each character may bear squarely against the lower end of the plate 15 when in position for use.

The front part of the base is provided with a pair of ears 34 35, which extend beyond and above the plate and form bearings for the spindle of an adjustable impression-block 36, having on its several faces different combinations of letters or words, such as "Paid," "Answered," "Received," &c. As shown, this block is triangular in cross-section, its three sides being provided with printing characters 37; but it may evidently be made with a less or greater number of printing-surfaces. Interposed between the block and the ear 34 is arranged a coiled compression-spring 39, which normally forces the opposite end of the block against the ear 35. The block is capable of an endwise as well as a rotary movement, both movements being effected through the medium of a knob 38. The ear 35 is provided with an inwardly-projecting locking-pin 40, (shown in dotted lines, Fig. 8,) which when the block is turned into the proper position for printing registers with one of a series of holes 41, suitably disposed in the end of the block. To rotate the block, the knob 38 is pushed inward against the action of the spring and then turned until the proper characters are brought to the front. When the knob is released, the pin 40 enters the opposing hole in the end of the block and locks it securely in position.

If desired, instead of employing the adjustable impression-block 36 type similar to those at 42 may be stationarily arranged at that side of the stamp where in the embodiment herein illustrated the said adjustable block 36 is located.

By means of the adjustable impression-block the stamp may be quickly and conveniently adapted to a variety of purposes.

The operation of my improved stamp will be apparent from the foregoing description.

Without limiting myself to the precise construction shown and described, what I claim, and desire to secure by Letters Patent of the United States, is—

1. In a hand-stamp, the combination with a casing having opposing longitudinal openings in its sides, of a printing-strip having thickened portions held frictionally within said casing, and thumb-pieces extending into the openings, substantially as described.

2. In a hand-stamp, the combination with a casing having opposing longitudinal openings in its sides, of a printing-strip having thickened ends held frictionally within said casing, and thumb-pieces connected with said ends and projecting through the openings, substantially as described.

3. In a hand-stamp, the combination with a casing having opposing pairs of longitudinal openings in its sides, of a plate within said casing and printing-strips, one for each

pair of openings, extending around the lower end of said plate and having thickened portions frictionally held between said plate and the casing, substantially as described.

4. In a hand-stamp, the combination with a casing having opposing pairs of longitudinal openings in its sides, of a plate longitudinally adjustable within said casing and printing-strips, one for each pair of openings, extending around the lower end of said plate and having thickened ends frictionally held between said plate and the casing, and thumb-pieces connected with said ends and extending through the openings, substantially as described.

5. In a hand-stamp, the combination with a casing having longitudinal side openings, internal guideways and a tubular head, of a plate movable in said guideways and having a threaded socket, an adjusting-rod extending through said head and having a screw-threaded portion engaging the threaded socket in the plate and type-carrying strips extending longitudinally of said plate provided with thumb-pieces extending through the longitudinal side openings, substantially as described.

6. In a hand-stamp, a printing-strip of flexible material having raised impression characters thereon, and thickened end portions, substantially as described.

7. In a hand-stamp, a printing-strip of flexible material having raised impression characters on one side, thickened end portions extending outwardly beyond said characters, and guide-pieces projecting from said end portions, substantially as described.

8. In a hand-stamp, the combination of a base having an aperture, a casing having elongated openings formed in opposite sides, a flexible type-carrying strip so arranged within the casing that the type thereon will extend through the aperture in the base, thumb-pieces connected with the ends of said strip and extending through the elongated openings in the sides of the casing, and type stationarily secured to the lower face of the stamp-base, substantially as described.

9. In a hand-stamp, a printing-strip of flexible material having raised impression characters thereon, separated one from another by transverse-extending grooves or indentations, and having at the ends laterally-projecting guides.

10. In a hand-stamp, the combination of a casing having slots formed in opposite walls, and a flexible printing-strip having raised impression characters thereon and having laterally-projecting guides extending into the slots in said casing.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN F. LEHNER.

Witnesses:

GEORGE KENT,

ALFRED R. RIGGS.