H. J. HOLLAND.

IMPRINT OR SHOE STAMPING MACHINE.

APPLICATION FILED JUNE 5, 1908.

924,990. Patented June 15, 1909.

FIG. 1.

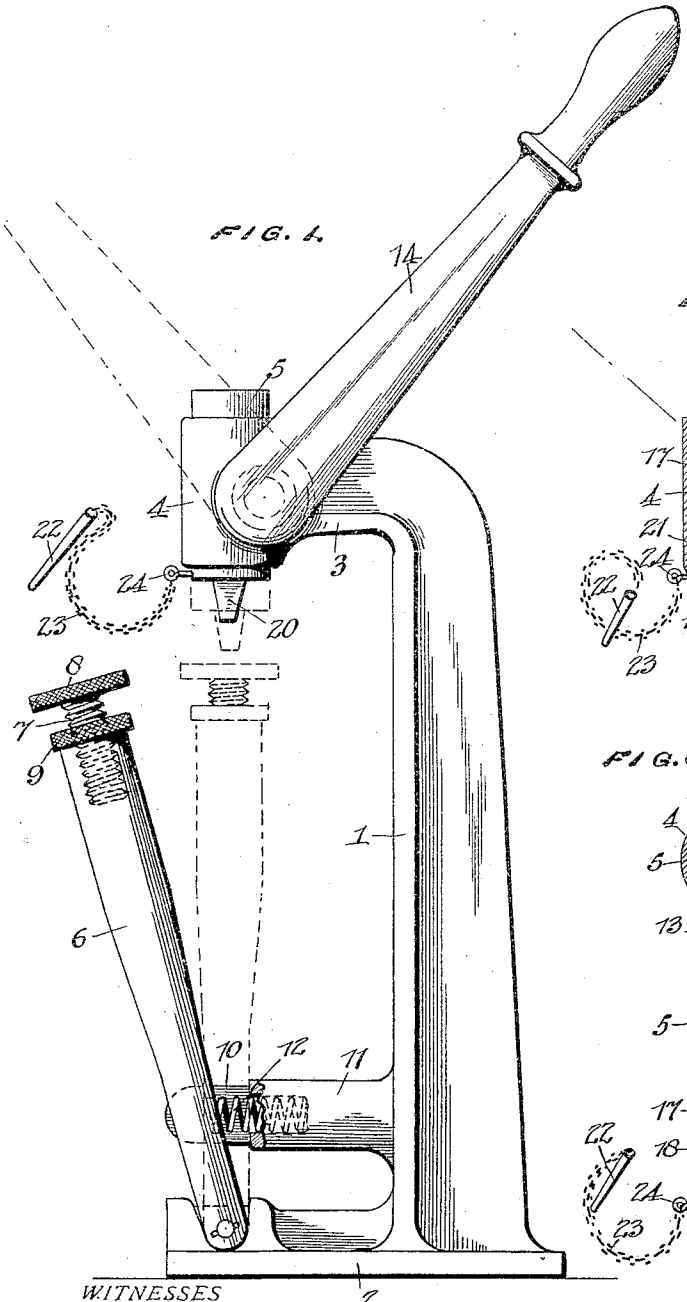


FIG. 2.

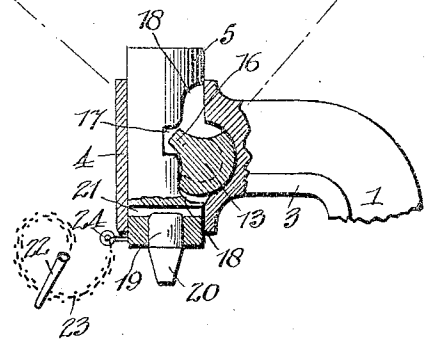


FIG. 3.

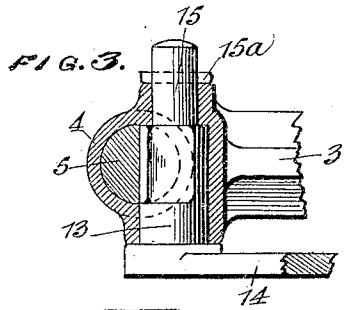
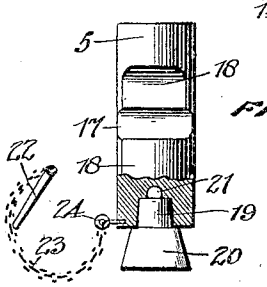


FIG. 4.



WITNESSES

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IMPRINT OR SHOE STAMPING MACHINE.

No. 924,990. Specification of Letters Patent. Patented June 15, 1909.

Application filed June 5, 1908. Serial No. 436,921.

To all whom it may concern:

Be it known that I, HARRY J. HOLLAND, citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Imprint or Shoe Stamping Machines, of which the following is a specification.

My invention relates to imprint or shoe stamping machines employed to stamp the manufacturer's or dealer's name upon the soles of shoes, bands of hats, margins of pocket books, patent dates on wood, leather, metal or other goods, and the object of my invention is to provide a novel, simple, and inexpensive device embodying an improved construction of die block and die, together with improved means for operating said block and removing said die, and an improved movable adjustable work support.

Further objects and advantages of my invention will appear in the course of the following description in which reference is made to the accompanying drawings, forming a part of this specification, in which like numerals are used to designate like parts throughout the several figures, and in which,

Figure 1 is a side elevation of an imprint stamping machine constructed in accordance with my invention. Fig. 2 is a vertical sectional view through a portion thereof, carrying the die block, and illustrating said die block partially in section. Fig. 3 is a horizontal sectional view taken therethrough, and Fig. 4 is an elevation of the die block, partially in section, and at right angles to the view thereof as taken in Fig. 2.

In the practical embodiment of my invention, I provide a vertical supporting frame 1, having a horizontal base 2, and an upper angular arm 3 parallel with and above said base and provided with a vertically tubular extremity 4, for the reception of the die block 5.

Mounted with its lower end pivotally secured to the upper surface of the base 2, in vertical alinement with the die block 5, is a vertically extending work supporting arm 6, provided in its upper end with an axial threaded bore adapted for the reception of the threaded bolt 7, carrying a circular supporting plate 8, over which the work to be stamped, is placed. By rotating the bolt 7, the plate 8 is moved away from or toward the end of the supporting arm 6, to regulate the space between said plate and the die block 5, and may be locked in the desired adjustment by a jam nut 9, working upon said bolt 7 below its plate 8, said jam nut and said plate being provided with knurled peripheral edges by which the same may be more readily rotated. The supporting arm 6 is guided in its swinging movement upon its pivot beneath and from the die block 5, by the spaced parallel extension pieces 10 of a bracket 11, extending from the supporting frame 1, a short distance above and parallel with the base 2, and said arm 6 is normally held in an outwardly angular position away from said die-block 5 by a coil spring 12, extending centrally from the end of said bracket 11 between said extension pieces 10, and bearing against said arm.

The upper angular arm 3, is further provided with a transverse bore at right angles to and communicating with the vertical bore of its extremity 4, said transverse bore being adapted for the reception of an operating member in the form of a rotatable shaft 13, having an angular upwardly extending operating arm 14 at one end thereof, to rotate and provided with a reduced opposite end 15 projecting through the wall of said extremity 4, and normally locked against withdrawal by a cotter pin 15^a exteriorly of said extremity 4. The shaft 13 is provided with opposite longitudinal concave grooves forming between them, a longitudinal rib 16 adapted for engagement with a transverse groove 17 in the die block 5 centrally of a longitudinally extending cut-out portion 18 of said die block, against the base of which the sides of the shaft grooves engage at the limits of the rotative movement of said shaft, denoting the upward and downward limits of reciprocation of the die block.

The lower end of the die block 5 is provided with a central axial bore adapted for the reception of the shank 19 of the die 20, which bore is provided with diametrically opposite straight walls, and diametrically opposite inwardly tapering walls at right angles to said straight walls, as will be seen by reference to Figs. 2 and 4, to receive the correspondingly shaped shank of said die and maintain the same by frictional contact in such manner that the said die may be more readily removed. The die block 5 is further provided with a transverse opening 21 at the inner end of, and communicating with, its bore for the reception of the die 20, and with a taper pin

22, connected thereto by a chain 23 and staple 24, said taper pin 22 being adapted for introduction within and through opening 21 to press the die 20 outwardly.

From the foregoing it will be seen that in accordance with my objects in view, I provide a simple and inexpensive device, embodying an improved adjustable work support, improved positive means for reciprocating the die block, and improved means for holding the die within the die block and removing the same therefrom.

Having fully described my invention, I claim:

1. In an imprint stamping machine of the character described, the combination of a vertical supporting frame, provided with a lower horizontal base and an upper angular horizontal arm parallel with said base, a reciprocatory die block mounted to move within said angular arm in a vertical plane, means for reciprocating said die block, a work supporting arm pivoted at its lower end upon said horizontal base in alinement with said die block whereby the upper end of the same is capable of swinging to and from the path of movement of said die block, said supporting arm being provided with a central threaded bore in its upper end, a supporting plate provided with a threaded bolt adapted for engagement within said threaded bore, whereby said plate may be adjusted toward or away from said supporting arm, and means engaging said bolt and said supporting arm for locking said plate in the desired adjustment, substantially as described.

2. In an imprint stamping machine of the character described, the combination of a die block having a die holding bore therein, and an opening therethrough, at right angles to, and communicating with, the inner end of said bore, said die holding bore being provided with diametrically opposite parallel sides, and diametrically opposite inwardly tapering sides, at right angles to said parallel sides, a die having a shank provided with similarly formed sides, adapted for frictional engagement within said bore of said die block, and a tool for engagement within said transverse opening, to dislodge said die, substantially as described.

3. In an imprint stamping machine of the character described, the combination of a suitably mounted reciprocatory die block, a swinging work supporting arm, mounted with its pivot in alinement with said die block, and provided with a threaded bore with its end contiguous to said die block, a supporting plate provided with a threaded bolt adapted for adjustable engagement within said bore, and a nut surrounding and operating upon the said bolt, and adapted for engagement against the end of said supporting arm, to lock said plate in its adjusted position with relation thereto, substantially as described.

4. In an imprint stamping machine of the character described, the combination of a vertical supporting frame, provided with a lower horizontal base and an upper angular horizontal arm parallel with said base, a reciprocatory die block, mounted to move within said angular arm in a vertical plane, means for reciprocating said die block, a work supported arm pivoted at its lower end upon said horizontal base in alinement with said die block, whereby the upper end of the same is capable of swinging to and above the path of movement of said die block, a bracket integral with, and extending from, said plane, between said base and said frame arm, and parallel therewith, and adjacent to said base, and provided with spaced longitudinal extension pieces at its free end, embracing said work supporting arm to guide the same in its movement, and a spring carried by said bracket, and engaging said work supporting arm, to swing the same away from the said die block, substantially as described.

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

HARRY J. HOLLAND.

Witnesses:
G. B. SMITH,
K. V. O'HARA.