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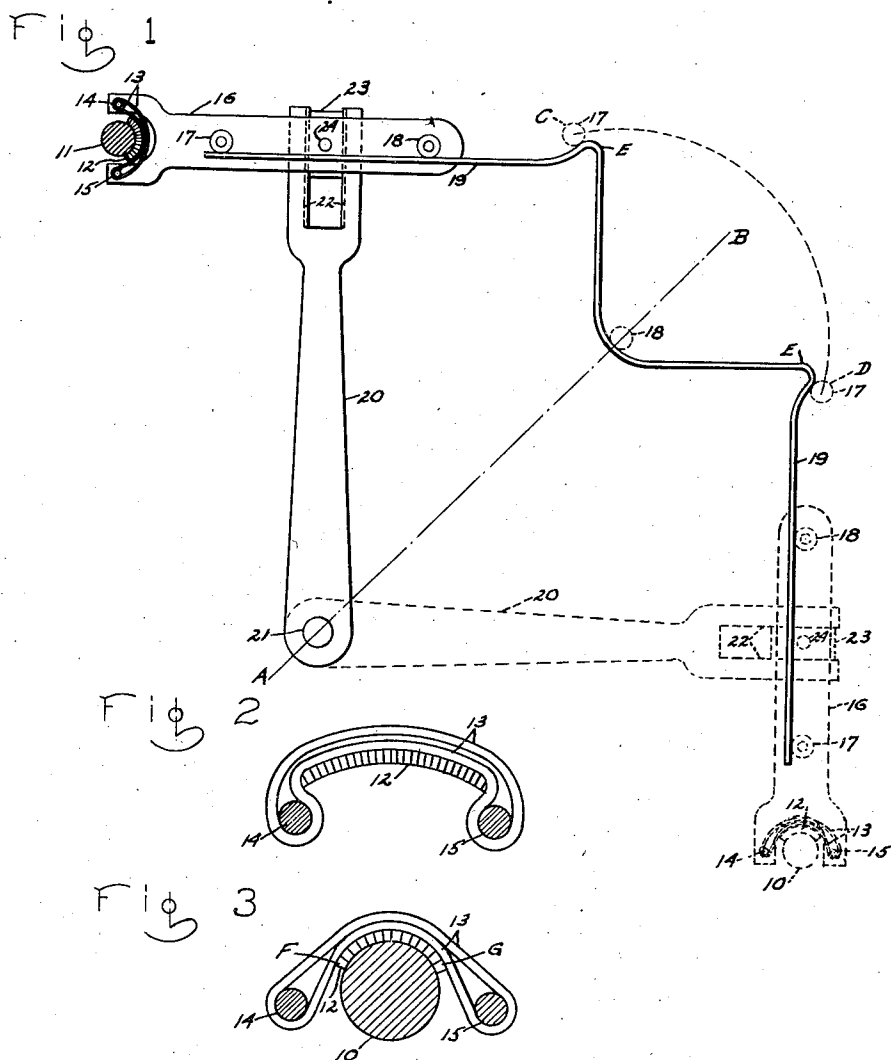
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1,992,037

APPARATUS FOR STAMPING ARTICLES HAVING CURVED SURFACES

Filed May 4, 1931

2 Sheets-Sheet 1



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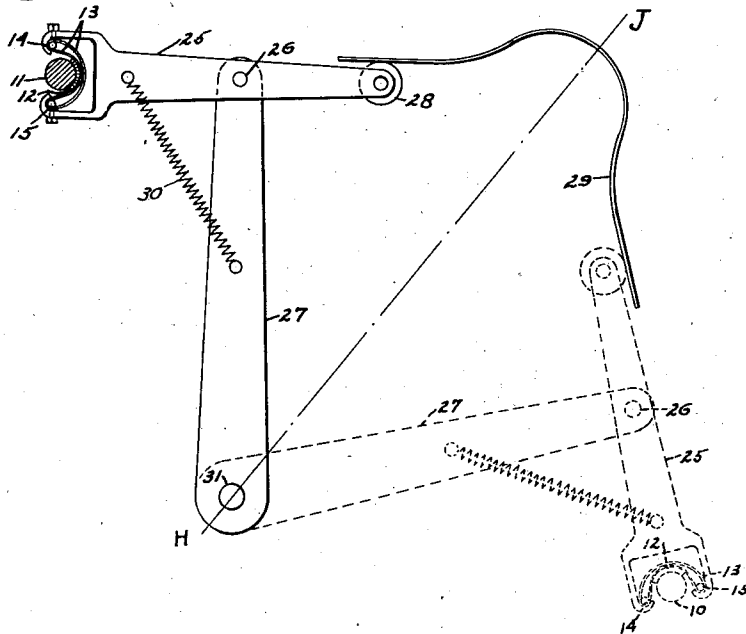
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Fig 4



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UNITED STATES PATENT OFFICE

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APPARATUS FOR STAMPING ARTICLES
HAVING CURVED SURFACES

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4 Claims. (Cl. 101—379)

My invention relates to apparatus for stamping articles having curved surfaces and may be used, for example, to stamp incandescent lamps or their bases. One of the features of my invention is that the stamping unit is supported on a flexible strip so that it accommodates itself to the curved surface to be stamped. Another feature is that the path of movement of the stamping unit is preferably symmetrical with respect to a central position between the stamp pad and the article to be stamped so that the direction and force of presentation to said pad and to the article are similar. To this end also the shape and size of the contact surface of the stamp pad are preferably substantially the same as those of that portion of the surface of the article to be stamped. Various other features and advantages of my invention will appear from the following description of species thereof and from the accompanying drawings.

In the drawings, Fig. 1 is a vertical elevation of a device embodying my invention; Fig. 2 is a detailed view on a larger scale of the stamp before stamping; Fig. 3 is a detailed view of the stamp during the stamping; and Fig. 4 shows another form of device embodying my invention.

Referring to Fig. 1, 10 is the body to be stamped and 11 is the ink pad which, preferably, consists of a porous cylindrical tube having a diameter equal to that of the section of the body to be stamped and is filled with the stamping liquid and a capillary material such as glass wool.

The stamping unit 12 is flexible and first receives its supply of ink from the pad 11. The flexible strip 13, which supports unit 12, may consist of rubber and have the form of an endless belt supported by the pins 14—15 which are fastened to the stamp holder 16. The holder 16 then moves to the right in the drawings on the rollers 17—18 which run on the track 19. This movement is caused by the rotation of crank 20 around the pin 21 by a drive (not shown), said crank having ways 22 in which the crosshead 23 slides. The said crosshead is pivotally connected through pin 24 to the stamp holder 16.

When the roller 18 reaches the center position A B the roller 17 which is at the position C swings around with the stamp holder 16, pivoting on pin 24, to the position D. A smooth movement is obtained by giving the track the characteristic shape shown at E. The stamp holder then continues along the track 19 and the stamping unit 12 comes in contact with the body 10 to be stamped. After having stamped the body 10, the movement of the mechanism is reversed by the

swinging of the crank 20 to the left and the stamping unit 12 again receives a supply of ink from the ink pad 11. Due to the shape of the track, the path of movement of the stamping unit is symmetrical with respect to the axis A B and perpendicular to the stamp pad 11 and body 10 at the time of contact.

While the stamping mechanism is in motion the stamping unit 12 with its holding strip 13 assume the position shown in Fig. 2, the strip 13 being longer than the distance between pins 14—15. The unit 12 touches the body to be stamped substantially in the center and the letters on either side of the center are gradually and successively pressed against the periphery to be stamped. The elastic strip 13 is tangential to the body that is to be stamped as each letter is presented to the surface, as can be seen at the extreme symbols F and G (Fig. 3).

Referring to Fig. 4, the body 10 to be stamped, the stamp pad 11, the stamping unit 12, and the flexible strip 13 suspended on the pins 14—15 are the same as shown in Fig. 3. The pins 14—15 supporting the flexible strip 13 and the stamping unit 12 are located in the stamp holder 25 which pivots on the pin 26 located in the crank 27 and which has at its opposite end a roller 28 which is held against the track 29 by the action of the spring 30 fastened at its ends to the crank 27 and the stamp holder 25. The crank 27 is rotated about the pin 31 by a drive (not shown) and carries the stamping unit 12 from the stamp pad 11 to the object 10 to be stamped, then back to the stamp pad 11. Due to the shape of the track 29, the path of movement of the stamping unit is symmetrical with respect to axis H J.

What I claim as new and desire to secure by Letters Patent of the United States is:—

1. A stamping apparatus comprising a pair of supports, a flexible elastic strip mounted on said supports, said strip being longer than the distance between said supports, and a flexible stamp unit carried by said flexible strip, said stamp unit normally extending beyond the inner edges of each of said supports and holding said strip tautly on said supports to prevent sagging thereof.

2. A stamping apparatus comprising a pair of supports, a flexible elastic strip mounted on said supports, said strip being longer than the distance between said supports, and a flexible stamp unit carried by said flexible strip and disposed above said supports, said stamp unit normally extending beyond the inner edges of each of said supports and holding said strip tautly on said supports to prevent sagging thereof between said supports.

3. A stamping apparatus comprising a pair of supports, a flexible elastic strip mounted on said supports, said strip being longer than the distance between said supports, and a concave flexible stamp unit carried by said flexible strip, said stamp unit normally extending beyond the inner edges of each of said supports and holding said strip tautly on said supports to prevent sagging thereof.
- 5 4. A stamping apparatus comprising a pair of support pins, a flexible elastic strip consisting of an endless belt disposed on said pins, said endless belt being longer than the distance between said support pins, and a flexible stamp unit carried by said belt, said stamp unit normally extending beyond the inner edges of each of said support pins and holding said belt on said pins to prevent sagging thereof.
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