June 8, 1948. C. C. HOGAN 2,443,137

SELF-INKING SEAL PRESS

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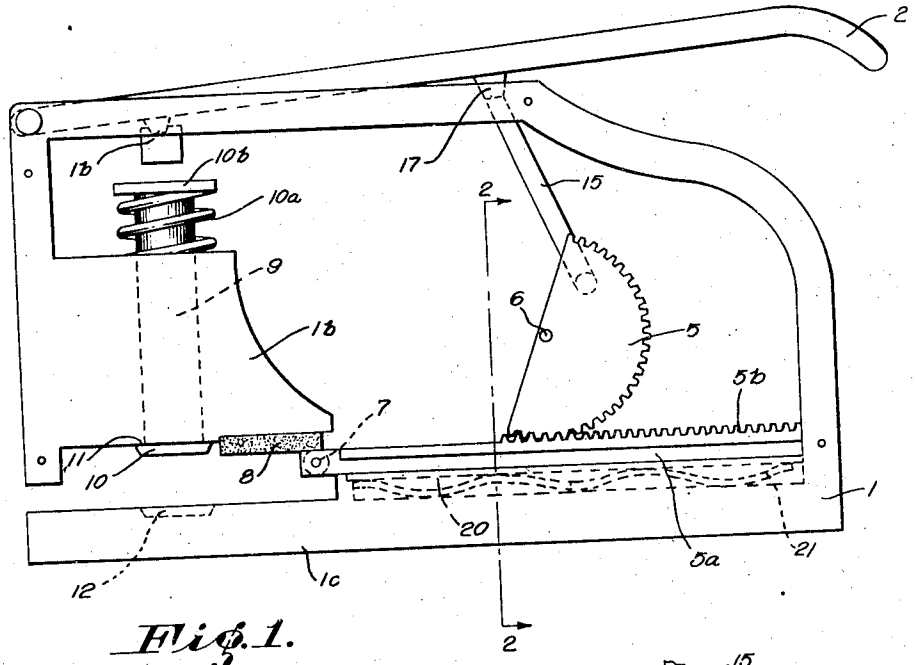


Fig. 1.

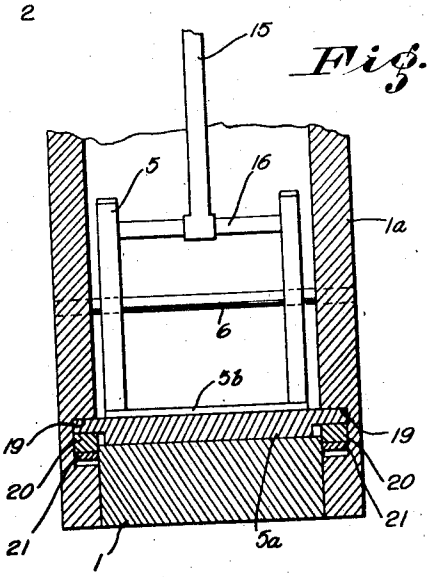


Fig. 2.

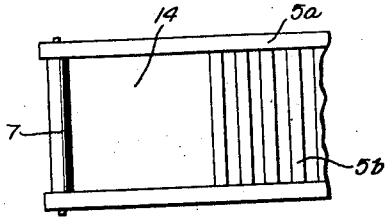


Fig. 3.

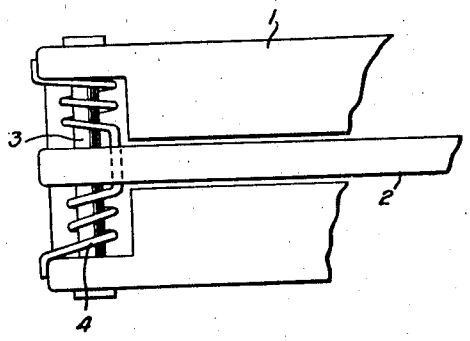


Fig. 4.

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SELF-INKING SEAL PRESS

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3 Claims. (Cl. 101—319)

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My invention relates to an improvement in an impression seal press with an automatic inking attachment affixed as an integral part thereof which provides not only for the indentation of the lettering and insignia of the seal on the document to be sealed but also for the imprinting of such lettering and insignia with ink, thus rendering the same more legible and easily read.

The combination of an impression seal press with an automatic inking attachment is shown in the accompanying drawings which are intended to be merely illustrative since it is obvious that modifications may be made without departing from the spirit of the invention.

Fig. 1 is a side elevation with the front face plate removed of an embodiment of my invention.

Fig. 2 is a section taken on the line 2—2 of Fig. 1.

Fig. 3 is a plan view of a portion of the rack 5*a*.

Fig. 4 is a plan view showing the mode of attachment of the lever 2 to the frame 1.

Referring now more particularly to Fig. 1, the numeral 1 refers to a frame or housing composed of aluminum, iron or other suitable metal casting, hollowed out and machined to accommodate the various working parts. The front face-plate 1*a* on the upper segment encloses the working parts, and is attached to the frame by screws, or nuts for fastening on lugs imbedded in the frame, or by other suitable fastenings, permitting the face-plate to be readily removed for adjustment, repair or lubrication of the working parts.

A hand operated lever 2, which is attached to the front end of the frame or housing by a pin 3, permits a free downward or upward movement of the lever. Pin 3 (see Fig. 4), is attached to and encased in a spiral or coil spring 4 attached to frame 1 at both ends to hold the lever 2 in upright position when not in use.

A double semi-circular gear wheel 5, constructed as a single unit of appropriate width is pivoted at both inner sides of the frame or housing by the projecting ends of the axle or bolt 6, extending at right-angles through the axis or center of the gear wheel.

A slide bar or rack 5*a* is supplied with teeth 5*b*, which engage gear wheel 5. An inking roller 7 is rotatably mounted at one end of the rack 5*a*.

A removable inking pad 8 is mounted on the underside of the projecting portion 1*b* of the frame 1.

An upright shaft 9 is slidably supported in the projecting portion 1*b* of the frame 1. The shaft

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9 may be provided with a square cross-section to prevent turning. At the lower end of the shaft 9 is attached the upper part or head of the seal 10. On the upper end of the shaft 9 is a horizontal projecting head 10*b* to hold in place a compression spring 10*a*, resting upon the projecting portion 1*b* of the frame 1. The purpose of the spring is to hold rigidly upright the shaft 9, and to spring it back in place after the seal is used. The shaft 9 is held in place and prevented from being sprung too high to permit contact with the ink roller 7, by a projection 11, integral with the portion 1*b* of the frame 1, and located immediately above the seal-head 10. (Note: The position of the male and female portions of the head and foot of the seal, conventionally in common use, is reversed, so that the head of the seal consists of the male or raised type of the seal to provide for the inking of the face of the type.)

In the base 1*c* (which is a part of the frame or housing 1) is imbedded the lower half or foot of the seal 12.

Attached to lever 2 is a lug designed to contact the head 10*b* of shaft 9 when the lever 2 is depressed thus forcing the shaft 9 downwardly.

The space between the head 10*b* and lug 13 is regulated to permit the ink roller to pass under and clear the upper part 10 of the seal at the lower end of shaft 9, permitting the seal to pass through the aperture 14 formed in the rack 5*a* between the ink roller 7 and the tooth portion of the rack (see Figure 3).

Above the double gear wheel 5, the connecting rod 5 is attached to the lever 2 at 17, at a proper angle to give leverage. The lower end of the connecting rod 15 is rotatably secured to a cross-bar 16, which is fixedly attached to the double gear wheel 5 half way between the two gears as indicated in the drawings.

The slide bar or rack 5*a* rests within a groove 19 on both inner sides of the frame or housing and upon smooth metal tracks 20 imbedded in the grooves underneath which are compression springs 21 resting on the frame or housing 1, which maintain at all times sufficient pressure to engage firmly the gears, also pressing the inking roller 7, firmly against the inking pad 8, and the surface of the upper portion or head of the seal 10, when used. The springs 21 are shown in dotted lines in Fig. 1.

By pressing downward handle bar 2, the double gear wheel 5 engages the teeth on the slide bar or rack 5*a* forces the ink roller 7, to which it is attached, forward over the ink pad and the face or head of the seal 10, and provides the

ink necessary to print an impression of the seal in the indentations in the document to be sealed. It is to be noted that with the ordinary impression seal, the raised lettering can be read directly while the depressed lettering is a reverse image of the lettering on the male member. With my seal however, the contrary is true. The male member carries the reverse image while the female member carries the true image. Thus with my seal the depressed lettering appears on the face of the document. As explained above, the indentations are supplied with ink carried down by the male member so that the printed matter can be read easily.

My invention permits of the manufacture of the seal in any size desired and the distance of travel of the slide bar or rack **5***a* can be regulated in the proper ratio to the double gear wheel **5**. As an example, if the distance of travel of the slide bar rack and inking attachment is to be 4 inches, a 3-inch outside diameter double gear wheel will accomplish this. (Note: Only one-half of the diameter of the gear wheel is necessary to be used.) The distance of travel of the slide bar rack **5***a* can be increased or decreased by increasing or decreasing the diameter of the double gear wheel and length of the toothed portions of the slide bar or rack. The down-thrust of the lever **2**, while actuating the movement of the slide bar or rack and inking roller, as indicated, likewise causes lug **13** to contact the head **10***b* of the shaft **9**, and forces the seal downward for the impression after the inking roller has cleared the upper portion or head of the seal. The aperture **14**, is provided in the slide bar or rack as indicated in Figure 3 to permit the head of the seal to contact the foot without interference from the slide bar or rack.

I am aware that there are seal presses available which have been in common use for several years, and which accomplish impressions on paper or parchments which are, however, in many cases, undecipherable, with impressions so slight and indistinct as to be unreadable.

I claim:

1. A self-inking hand stamp comprising a housing, a plunger in said housing and slidably supported thereby, means urging said plunger upwardly, a die carried by said plunger, an inking roller laterally offset from said die, an ink pad supported on said housing and positioned between said die and said inking roller in the normal non-operating position of said inking roller, a hand operated lever pivotally supported on said housing for depressing said plunger, means operated by said lever during the initial portion of its downward stroke for moving said inking roller across said ink pad and said die, said means comprising a toothed rack on which said inking roller is rotatably mounted, a gear wheel engaging the teeth of said rack, and a connecting rod hinged at its opposite ends to said lever and said gear wheel respectively.

2. A self-inking hand stamp comprising a housing, a plunger slidably supported in said housing, means urging said plunger upwardly, a die carried by said plunger at its lower end, an ink pad supported by said housing and offset to one side of said die, a frame movably supported in said housing having an inking roller mounted at one end thereof and having an aperture adjacent said inking roller, said inking roller, in its normal non-operating position, being laterally offset from that side of said ink pad away from said die, a hand operated lever pivotally supported on said housing for depressing said plunger, and means operated by said lever during the initial portion of its downward stroke for moving said frame and said inking roller across said ink pad and across and beyond said die to bring said aperture in said frame in vertical registry with said die to permit the passage of said plunger therethrough.

3. A self-inking hand stamp comprising a housing, a plunger slidably supported in said housing, means urging said plunger upwardly, a die carried by said plunger at its lower end, an ink pad supported by said housing and offset to one side of said die, a frame movably supported in said housing having an inking roller mounted at one end thereof and having an aperture adjacent said inking roller, said inking roller, in its normal non-operating position, being laterally offset from that side of said ink pad away from said die, a hand operated lever pivotally supported on said housing for depressing said plunger, and means operated by said lever during the initial portion of its downward stroke for moving said frame and said inking roller across said ink pad and across and beyond said die to bring said aperture in said frame in vertical registry with said die to permit the passage of said plunger therethrough, said means comprising a toothed rack carried by said frame, a gear wheel engaging the teeth of said rack and a connecting rod hinged at its opposite ends to said lever and said gear wheel respectively.

CLARENCE C. HOGAN.

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