(No Model.)

W. N. WHELESS.

PRINTING AND STAMPING PRESS.

No. 357,801. Patented Feb. 15, 1887.

Fig. 1.

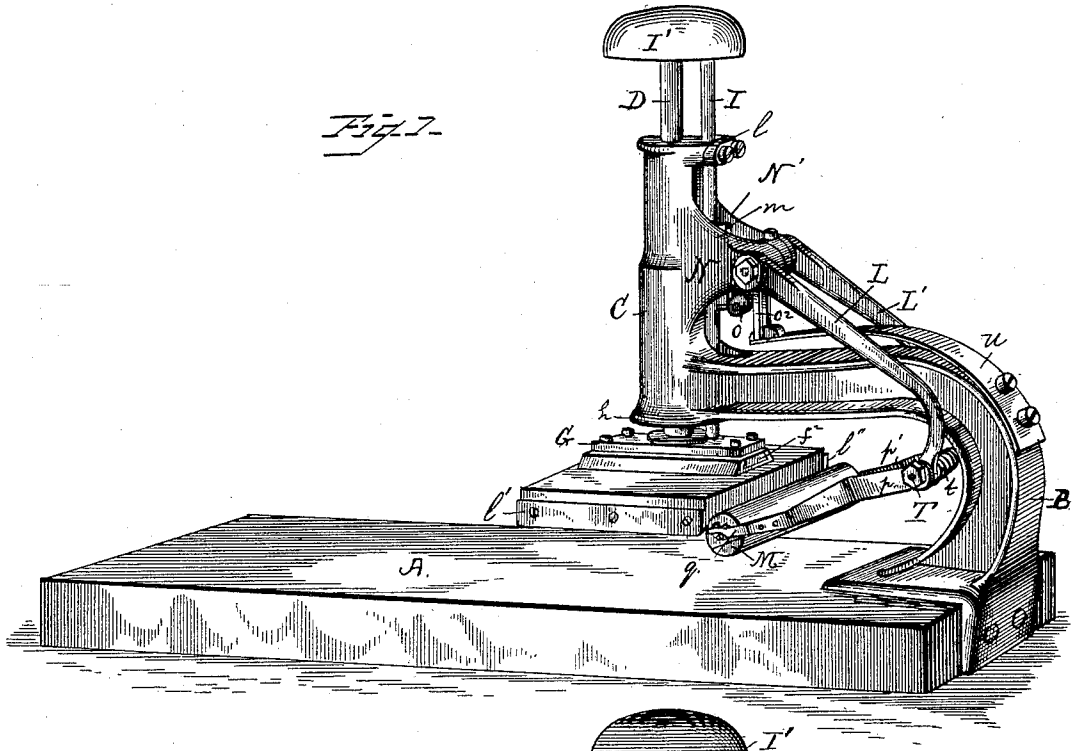


Fig. 2.

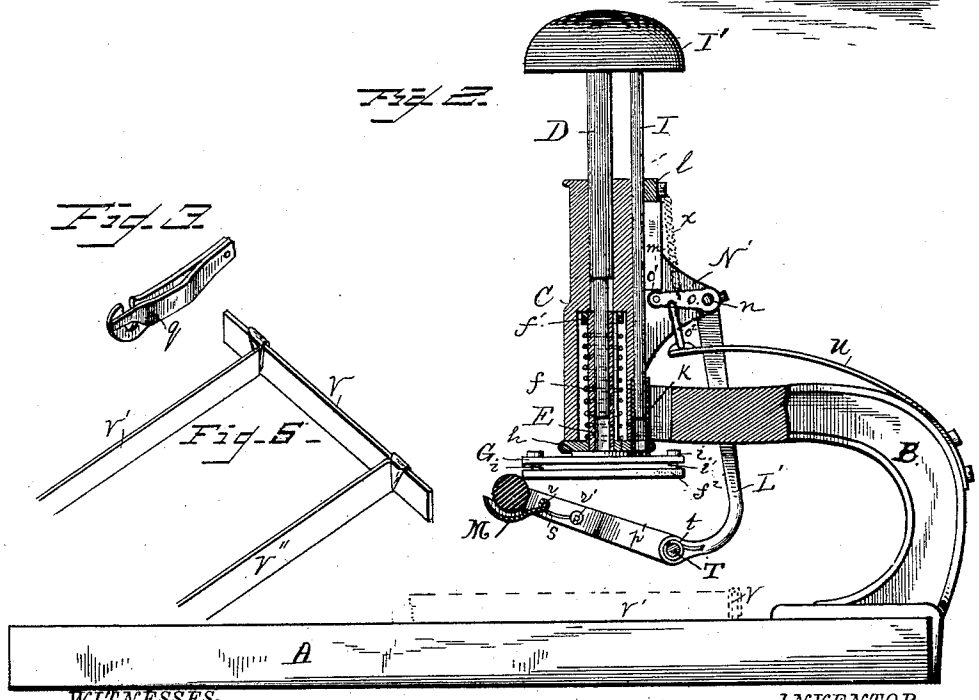
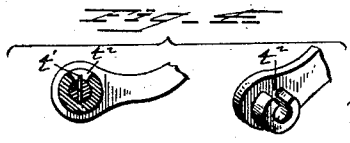


Fig. 3.

Fig. 5.

Fig. 4.



WITNESSES:
F. L. Ourand
L. A. Thomas

INVENTOR
Wesley N. Wheless
By H. N. Jenkins
Attorney

N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

WESLEY N. WHELESS, OF AUGUSTA, GEORGIA.

PRINTING AND STAMPING PRESS.

SPECIFICATION forming part of Letters Patent No. 357,801, dated February 15, 1887.

Application filed July 18, 1884. Serial No. 138,045. (No model.)

To all whom it may concern:

Be it known that I, WESLEY N. WHELESS, a citizen of the United States, residing at Augusta, in the county of Richmond and State of Georgia, have invented new and useful Improvements in Hand Printing and Stamping Presses, of which the following is a full and exact description, reference being had to the accompanying drawings, making part of this specification.

This invention relates to the production of a simple, cheap, and effective self-inking press for printing cards, tags, paper bags, wrappers, &c.; and it consists in certain combinations and arrangements of parts for operating, as hereinafter fully described, and specifically claimed.

On the drawings, Figure 1 is a perspective view of my improved press. Fig. 2 is a side elevation thereof with certain parts shown in section. Fig. 3 is a detailed view showing a journal-bearing for one end of the ink-roller. Fig. 4 represents the lower end of one of the arms or levers to which the ink-roller frame is connected; and Fig. 5 is a perspective view, on a reduced scale, of the paper guiding and holding device.

The letter A designates a bed-plate or platform on which is bolted or otherwise secured a curved arm or bracket, B, having a vertical stem, C, provided with an opening for the reception of a plunger, D, hollow stem E, and spring *f*. That portion of the opening in which the hollow stem operates is of an enlarged diameter, and the said hollow stem is provided with a collar or flange, *f'*, to receive pressure from a spring, *f*, that is coiled around the hollow stem and held in place by a cap or plate, *h*, which is screwed or otherwise secured to the lower end of the stem C. The cap or plate *h* has a hole through its center for the operating therein of the hollow stem E, the lower end of which is secured to a plate, G, having perforations for the free passage of bolts *i*, the ends of which are threaded to fit in screw-sockets that are made in the upper surface of the type-holder, or of a plate, f^2, having beveled edges to permit of the sliding on or off thereof of a type-holder or printing-block, the upper surface of which is provided with a groove adapted to fit over the edges of the plate f^2, as shown in Fig. 1.

Each bolt is surrounded, between the plate G and the type-holder or lower plate, f^2, with a coil-spring, *i'*, for the purpose of allowing either side or corner of the type-holder to yield to any unevenness that may be encountered thereby—such, for instance, as the sealed portions of an envelope or the seam or folded portion of a paper bag, tag, or other article receiving the print or stamp.

The sides of the type-holder or die are provided with plates *l' l''*, the lower edges of which are set on a line slightly above or in rear of the face of the type, and serve to protect the latter by preventing too great a pressure thereon.

The aforesaid type-holder or die is held in a perfectly true line and prevented from turning by means of a rod, I, the upper end of which is secured to the head I' of the plunger D, while its lower end is fitted in a tube, *k*, which projects upward from and is secured to the plate G. The cap *l*, which is bolted at one side of top of the stem C, forms an additional guide for the aforesaid rod and at same time prevents its withdrawal, inasmuch as it forms a stop against which a ridge or projection, *m*, on the said rod is caused to impinge when the same is at the end of its upward stroke.

N N' are lugs which project rearwardly from the stem C at either side of the rod I. In these lugs are journaled a rocking shaft, *n*, to the central portion of which is keyed or otherwise secured an arm, *o*, the free end of which is provided with a friction-roller, *o'*, which, when the machine is at rest, is held immediately under the projection *m* of the rod I, as shown in Fig. 2.

To the outer ends of the rocking arm *n* are secured a pair of downwardly-projecting levers, L L', in the lower ends of which is journaled a connecting bolt or rod, T, having keyed or otherwise secured thereto the inner ends of an ink-roller frame, which is composed of two side pieces, *p p'*, having outward-bent ends provided with openings for the reception of the journals of the ink-roller shaft. One of the ink-roller journal-bearings is made round, the shaft being moved endwise into the same, while the other bearing has its upper portion slotted, so that its end of the shaft can be dropped therein, this end being prevented from springing outward by reason of a spring-catch, *q*, (shown more clearly in Fig. 3,) which

operates against the upper portion thereof. An ink-cup or pad-plate, M, is supported beneath the ink-roller by means of side pins, $r\,r'$, and spring s, the latter for keeping the pad-plate in close proximity to the roller as well as to prevent its dropping so low as to come in contact with the bed-plate or material thereon.

The bolt or rod T is surrounded by a coiled spring, t, one end of which is secured to the ink-roller frame and the other end to one of the levers, L, so that the action of same may tend to raise the outer end of the roller-frame, and thus insure the proper action of its ink-roller against the face of the type or die.

In order to limit the movement of outer end of the roller-frame, the rod T is provided with a pin, t', which is adapted to operate in a slot, t^2, formed in a boss at the inner end of one of the levers, L, as shown in Fig. 4. When in their normal positions, the levers L L′ and the ink-roller frame connected therewith are pressed forward through the action of a spring, U, which is secured to the bracket B with its yielding end connected with the arm o by a link, o^2, which insures the return of the ink-roller over the face of the type before the latter is caused to make its imprint on the material arranged below to receive same.

In lieu of the above arrangement a spiral spring may be employed, as shown in dotted lines at x, to connect the arm o with the upper part of the stem C; but the arrangement above described is preferred on account of its durability, neatness, and promptness of action.

In order that the successive impressions may be made in exactly the same relative position on the different sheets of paper or material operated upon, I provide a combination of metal or other bars, as shown in Fig. 5. The back stop or rear bar, V, is adjustably secured to the bed-plate or platform by inserting the same on edge in either of a series of transverse grooves made for the reception thereof in the said bed-plate, or by providing the ends of the aforesaid bar with springs or clamps for engaging the sides of the said bed-plate.

The side stops or bars, $v'\,v''$, are provided with slotted or bent ends, which are adapted to fit over the back stop so as to enable them to be moved along the same, and adjusted thereon at any desired distance from one another.

From the above it will be seen that any desired form or style of type-holder may be employed on this press, which admits of the use of metal or rubber type, or of type having metal bodies and rubber faces; hence the said press is adapted for the use of persons having either of the above kinds of type on hand.

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

1. The combination of the plate G and type-holder or lower plate, f^2, the bolts i, and coil-springs i', substantially as and for the purpose set forth.

2. The combination of the rod I, having a projection, m, the rock-shaft provided with levers L L′, carrying an ink-roller frame, as described, the arm o, provided with friction-roller o', adapted to operate against the projection m, the spring U, and the link o^2, connecting same with the arm, substantially as and for the purpose set forth.

3. In a printing and stamping press, the combination of the ink-roller frame, the supporting-levers L L′, the bolt or rod T, and a coiled spring, t, having its ends connected with the roller-frame and levers, as described, with the pin t', adapted to operate in a slot, t^2, formed in the lower end of one of the levers, L, substantially as and for the purpose set forth.

4. The combination, in a printing and stamping press, of an ink-roller frame provided with a roller for inking the face of the type or die, and an ink-cup or pad-plate adapted to be held in close proximity to the roller by a spring connected with the roller-frame, substantially as and for the purpose set forth.

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

WESLEY N. WHELESS.

Witnesses:

WARREN C. STONE,

C. G. TREVITT.