

W. M. CLARK.
Printing-Presses.

No. 155,927.

Patented Oct. 13, 1874.

Fig. 1.

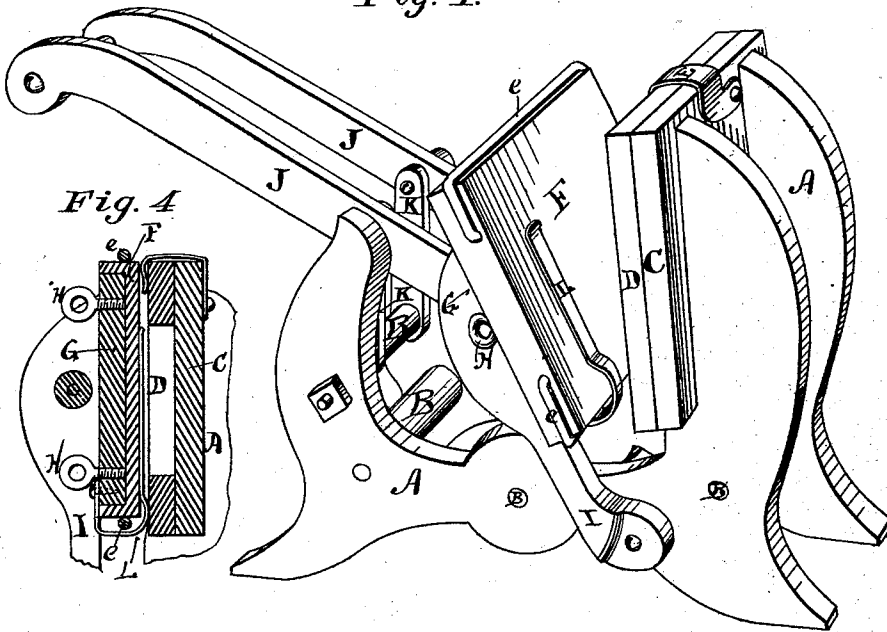


Fig. 2.

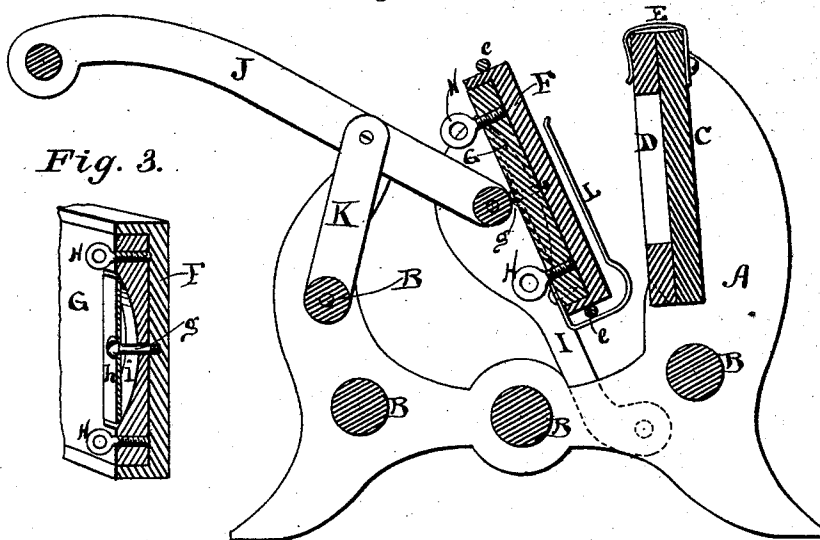
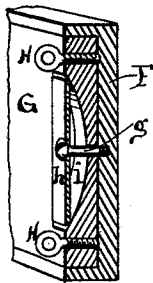


Fig. 3.



Attest:~
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UNITED STATES PATENT OFFICE.

WILLIAM M. CLARK, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF
ONE-HALF HIS RIGHT TO JOSHUA W. DAUGHADAY, OF SAME PLACE.

IMPROVEMENT IN PRINTING-PRESSES.

Specification forming part of Letters Patent No. **155,927**, dated October 13, 1874; application filed
April 1, 1874.

To all whom it may concern:

Be it known that I, WILLIAM M. CLARK, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Printing-Presses; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my press. Fig. 2 is a longitudinal section of the same. Fig. 3 is a perspective section of the platen and its bed. Fig. 4 is a sectional elevation, showing the action of the gripping-finger.

This invention relates to a class of printing-presses of an inexpensive character, which are designed for the printing of small forms, and adapted to amateur work generally. Its object is to produce a small press of efficient character, with very few parts, and of cheap construction; and it consists in the method of constructing and arranging the parts in relation to each other, as will be more particularly pointed out.

A A are the side frames, united by cross-bars B B. The bed-plate C is rigidly secured transversely across one end of the frames A A, and stands in nearly a vertical position. The chase D is fitted to the front of the bed C, its lower edge being confined by small lugs cast on the frame A A, and its upper edge is secured by a spring-clasp, E, or other convenient and proper devices. The platen consists of a flanged plate, F, which fits over the edges, and rests upon the face of the platen bed-plate G, the said flange answering a double purpose of stiffening the platen-plate, and holding it firmly from moving up and down, or endwise, thus securing a sharp and clear impression. The ordinary clamps *e e* are attached to hold the blanket and facing-paper in place. The platen F is secured to the face of the platen-bed G by means of one or more screws, *g*, which pass loosely through said platen bed-plate into the platen. An elastic attachment of the platen to the platen bed-plate is produced by the screws *g*, also passing through a spring, *h*, made of metal or other suitable material, to enable said platen to yield for adjustment. Under the spring *h* is a slot, *i*, cut in the back of the platen bed-plate G in such a manner that while the spring *h* is supported at either end said slot is sufficiently deep in the center to

allow the depression of said spring *h* to adjust the impression to be produced by turning the impression-screws H, in the usual manner. The platen bed-plate G is mounted upon the arms I I, which extend below the said platen bed-plate, and are pivoted to the frame A A nearly or quite in the plane of the bed C, so that as said platen moves toward the bed it comes up squarely. The levers J J are pivoted to the back of the platen bed-plate G, opposite the center thereof, and said levers are connected to the frame by the short connecting-levers or toggles K K, so that as the outer ends of said levers are depressed the toggles cause the levers and platen to advance, and they are so adjusted that at the instant the platen and type come in contact the toggle-centers are reduced to the same plane, or very nearly, and therefore the impression receives the well-known power due to the toggle combination. As the other ends of the levers are raised the platen is withdrawn from the impression, and its own weight also serves to assist in its retrograde motion. Therefore no springs are required to assist in the operation of this press. The power is positive, and is applied directly behind the platen, so that there can be no inequality of impression on account of yielding or springing of the parts or connections.

The arm L is made elastic, and is secured behind the platen with an adjusting-slot, so that it can be moved back or forth, to or from the center of the platen. It is bent outward at its lower part, so that it comes in contact with the face of the lower side of the chase D, immediately after the platen commences to move, and is thereby depressed, and binds the sheet to the platen while the impression is taking place, and the pressure is continued sufficiently long to cause the detachment of the sheet from the face of the type after the impression is finished.

Having described my invention, what I claim as new is—

The platen F, constructed with a peripheral rim or flange fitted over the edge of the platen-bed G, combined with elastic connections *g h*, and adjusting-screws H H, as set forth.

Witnesses: WM. M. CLARK.
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