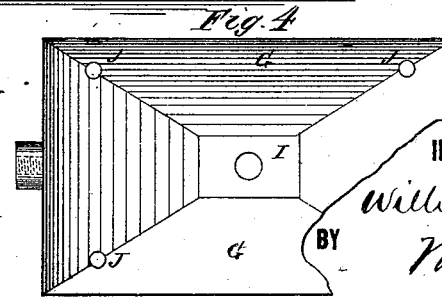
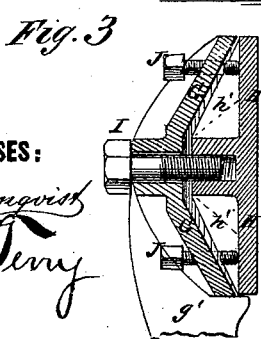
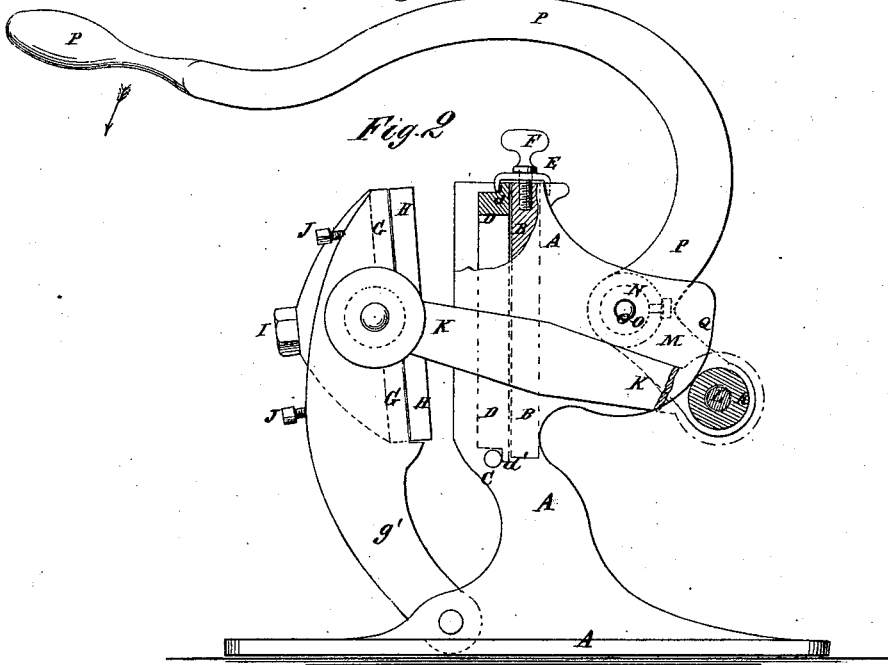
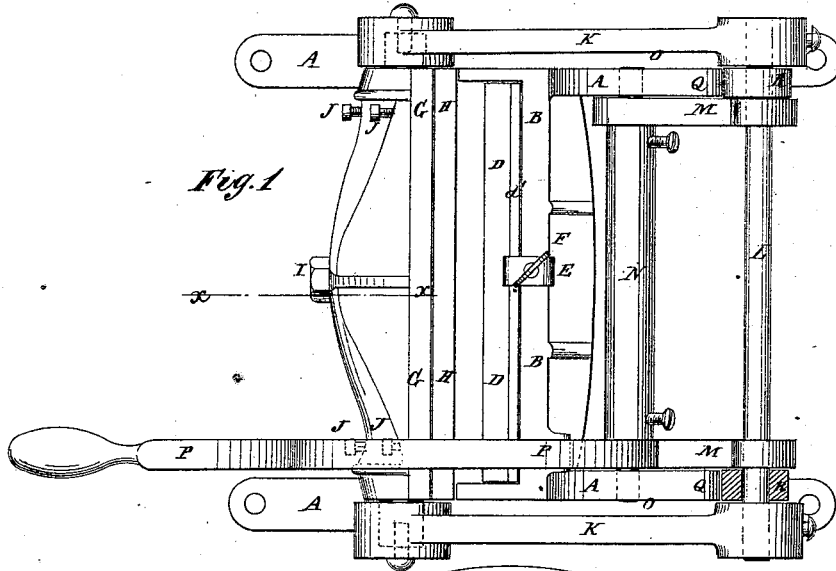


W. E. GUMP.
Printing-Press.

No. 159,819.

Patented Feb. 16, 1875.



WITNESSES:
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UNITED STATES PATENT OFFICE.

WILLIAM E. GUMP, OF NEW YORK, N. Y., ASSIGNOR TO MRS. MARIA L. GUMP,
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IMPROVEMENT IN PRINTING-PRESSES.

Specification forming part of Letters Patent No. 159,819, dated February 16, 1875; application filed
October 31, 1874.

To all whom it may concern:

Be it known that I, WILLIAM E. GUMP, of the city, county, and State of New York, have invented a new and useful Improvement in Printing-Presses, of which the following is a specification:

Figure 1 is a top view of my improved press, one of the friction-rollers being shown in section. Fig. 2 is a side view of the same, parts being broken away to show the construction. Fig. 3 is a detail section of the lower and upper platens, taken through the line *x x*, Fig. 1. Fig. 4 is a face view of the recessed lower platen.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved hand printing-press, which shall be so constructed as to give a full and clear impression, and which shall be simple in construction and convenient in use.

The invention will first be fully described, and subsequently pointed out in the claims.

A represents the frame of the press. B is the vertical plate against which the form is secured. C is a rod placed at the lower edge and a little in front of the plate B, for the lower edge of the chase D to rest upon. Upon the upper and lower edges of the chase D are formed flanges or shoulders *d'* for convenience in securing the form in place. The flange *a'* of the lower edge of the chase D rests against the inner side of the rod C. The flange *d'* of the upper edge of the chase D is grasped by one jaw of the U-shaped clamp E, the other jaw of which grasps the edge of the plate B. The clamp E is secured in place by a set-screw, F, as shown in Figs. 1 and 2. To the lower part of the frame A are pivoted the arms *g'* of the lower platen G. In the face of the lower platen G is formed a recess made in the form of a low truncated pyramid, as shown in Figs. 3 and 4, to receive the ribs *h'* of the upper platen H which ribs are deepest at the center and taper gradually toward its edges. The upper platen H is secured in place by the set-screw I, that passes in through the center of the lower platen G and screws into a screw-hole in the center of the upper platen H. The upper platen H is trued by means of

four set-screws, J, that pass in through screw-holes in the lower platen G, near its corners, and their forward ends rest against rear side of the upper platen H. To the ends of the lower platen G, are pivoted the ends of the two bars K, which cross the ends of the frame A, and their other ends are placed upon the ends of the rod L, where they are secured by set-screws. Upon the rod L, at the inner sides of the end frames A are placed the ends of the arms M, the other ends of which are formed solidly upon the hollow shaft N. The hollow shaft N is placed upon a rod, O, the ends of which work in bearings in the end frames A. To the hollow shaft N is rigidly attached, or upon it is formed, a long lever, P, which passes over the top of the press, and is curved downward to bring it into a convenient position to be operated.

By this arrangement, by operating the lever P, the platens will be brought up against the form to take the impression. Upon the rear of the upper parts of the end frames A are formed cams Q, of the shape of the curve described by the rod L in its movements, and which take up all the play of the joints of the rods, arms, and levers, and bring the platens against the form fairly and squarely, and thus insure a full, clear, and clean impression.

Upon the parts of the rod L that bear against the cams Q are placed rollers R to diminish the friction upon the said cams.

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

1. In an oscillating printing-press, the combination of the lower platen G having a recessed front face, with the upper platen H, provided with ribs *h'*, fitting into said recess, as and for the purpose specified.

2. The combination of the plate B, rod C, flanged chase D, double clip or clamp E, and screw F, as herein shown and described, for the purpose set forth.

WILLIAM E. GUMP.

Witnesses:

JAMES T. GRAHAM,
T. B. MOSHER.