

W. DUNKERLY & W. H. DUNKERLY, Jr.
Hand Printing-Presses.

No. 137,664.

Patented April 8, 1873.

Fig 1

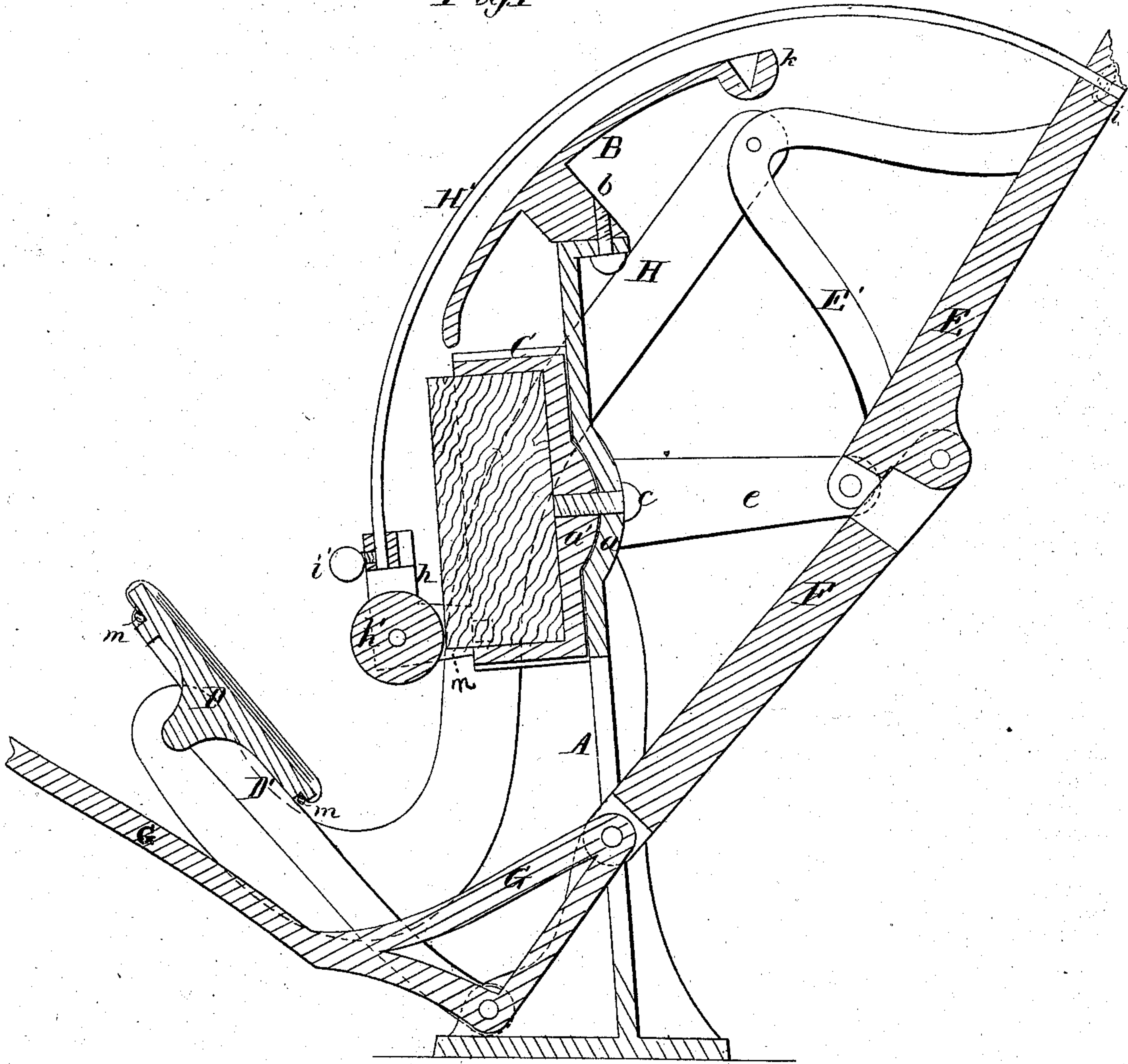
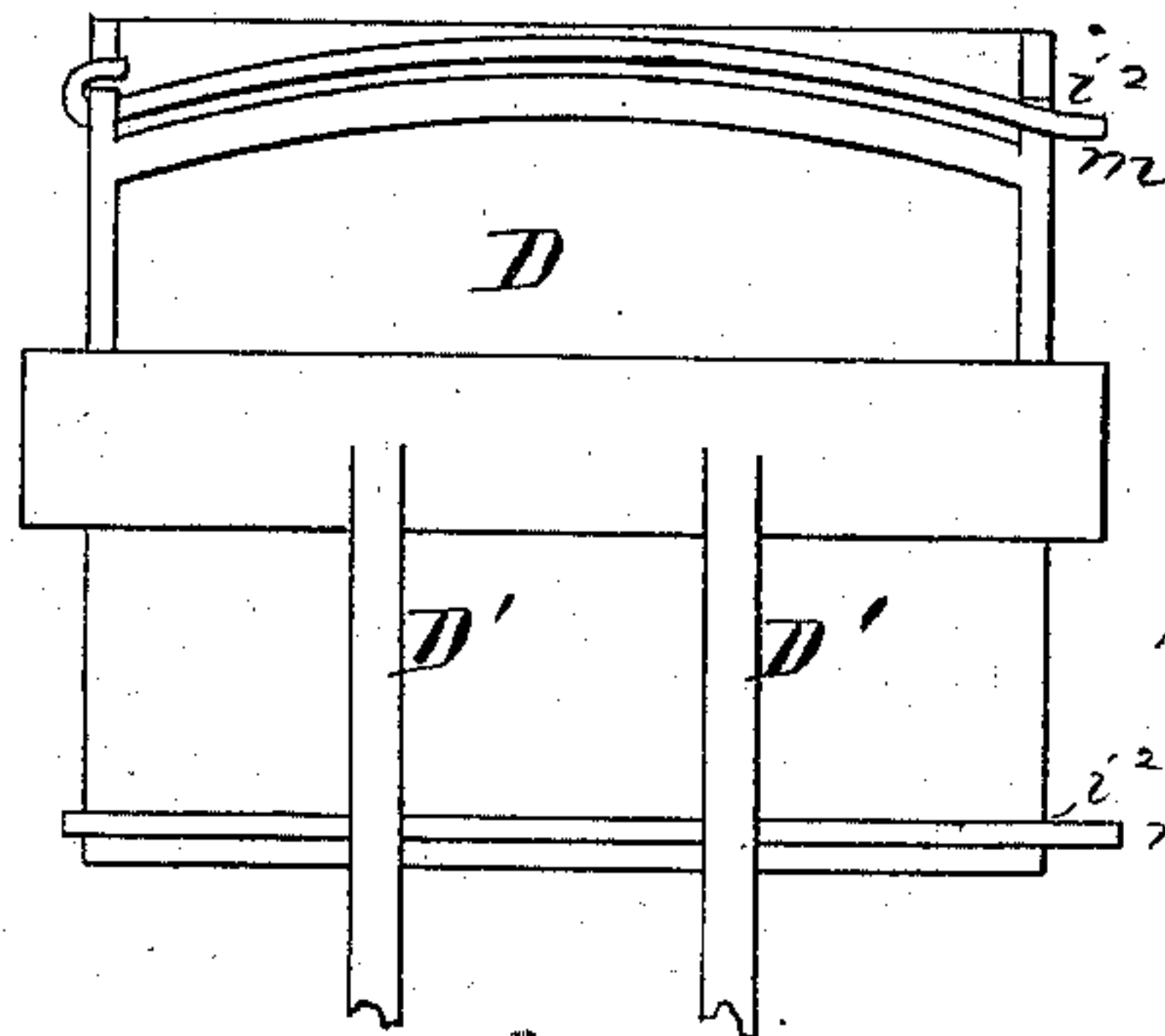


Fig 2



Witnesses:
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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN HAND PRINTING-PRESSES.

Specification forming part of Letters Patent No. **137,664**, dated April 8, 1873; application filed
December 14, 1872.

To all whom it may concern:

Be it known that we, WALTER DUNKERLY and WM. H. DUNKERLY, Jr., of Woonsocket, in the county of Providence and State of Rhode Island, have invented a new and valuable Improvement in Hand Printing-Presses; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a vertical longitudinal section of our printing-press. Fig. 2 is a detail of same.

This invention has relation to hand printing-presses; and it consists in the construction and novel arrangement of the platen, the ink-plate, and the devices for operating the platen and ink-roller, all substantially as hereinafter more clearly specified.

A in the accompanying drawing designates the press-frame supporting the convex ink-plate B, which is cast with an inclined brace, *b*, and the latter secured to the frame by means of a bolt. The frame A leans forward slightly, and has in its face a concave or cup-like socket, *a*, adapted to receive a corresponding convex protuberance, *a'*, on the back of the bed C. A bolt, *c*, passing through the cup-joint thus formed secures the bed to the frame, and allows the form to so adjust itself to the position of the sheet to be printed as to always insure a true impression. The platen D has arms D', which are pivoted to the base of the frame. A lever, E, having curved side arms E', is pivoted to arms *e* extending from the back of the press-frame, and is connected, by means of a bar, F, to an elbow-lever, G, having its fulcrum on the pivotal pin of the arms D'. The arms E', which curve upwardly as well as outwardly, are connected by means of curved side arms H to the sides of the platen, at the middle part thereof. A bent rod, H', extending from the lever E upward and forward over the ink-plate, holds a bracket, *h*, to which is journaled the ink-roller *h'*. The rod H' is inserted in holes in the lever E and bracket *h*,

and held by means of set-screws *i*¹, which allow said rod to be adjusted to any necessary extent. The rod H' is elastic, and therefore exerts the requisite degree of pressure upon the roller to cause it to take up and properly spread the ink. The ink-saucer *k* is located at the upper end of the ink-plate.

The press may be worked by power applied either to the lever E or lever G, or to both. When the impression takes place the ink-roller is at the upper end of the ink-plate. As the platen recedes from the bed the ink-roller travels downward and over the type, and as the platen approaches the bed it ascends, thus passing over the type and ink-plate twice during each complete action of the press.

The paper-cushion upon which the sheet is laid to receive the impression is secured to the platen by means of two rods, *m*, which are hinged to one of the side flanges of the platen, behind and close to the upper and lower edges of the platen. The upper sheets of the cushion are brought over and behind the upper and lower edges of the platen, after which the free ends of the hinged rods are placed in notches *i*² in the flanges opposite those to which they are hinged, thus tightly securing the cushion in place. The lower rod *m* instead of being hinged may be passed lengthwise into notches adapted for its reception, the arms D' serving to hold the rod in place, as shown in the drawing. The inking-roller is properly guided by means of flanges *u* at the sides of the bracket *h*, which embraces the sides of the bed as the rollers move up and down.

Sometimes we prefer to locate the cup-joint in the rear of the platen instead of behind the bed, thus allowing the platen and cushion to adjust themselves to the type.

What we claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the platen D having the pivoted arms D', of the lever E having the curved side arms E', connecting-rod F, connecting-arms H, and elbow-lever G, constructed and arranged as specified.

2. The convex ink-platen B having at its upper end the ink-saucer *k*, and attached to the frame A, substantially as specified.

3. The elastic adjustable rod H' and flanged brackets *h* with inking-roller *h'*, in combination with the convex ink-plate B and lever E, substantially as and for the purpose specified.

In testimony that we claim the above we

have hereunto subscribed our names in the presence of two witnesses.

WALTER DUNKERLY.

WILLIAM H. DUNKERLY, JR.

Witnesses:

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