J. LEWIS.

PRINTING PRESS.

No. 9,923. Patented Aug. 9, 1853.

Fig. 2.

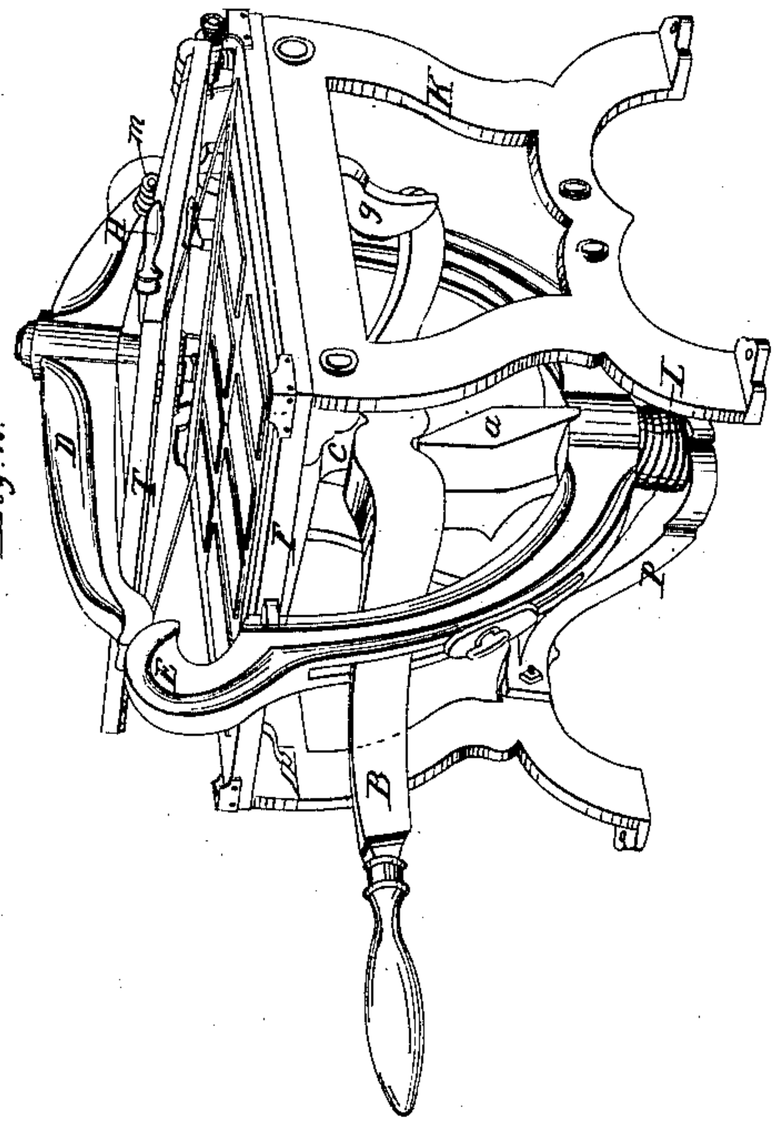


Fig. 3

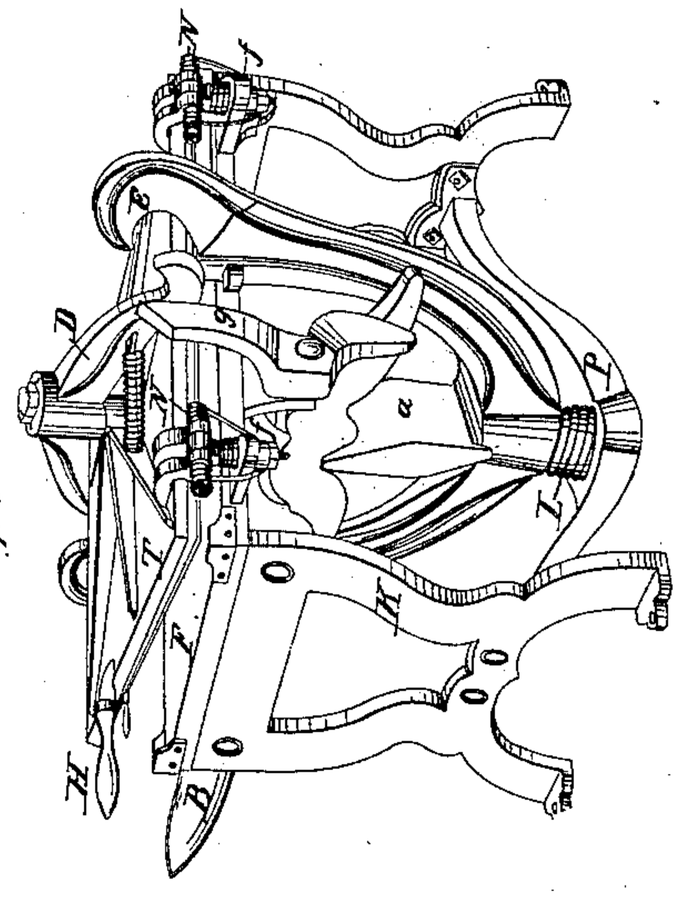
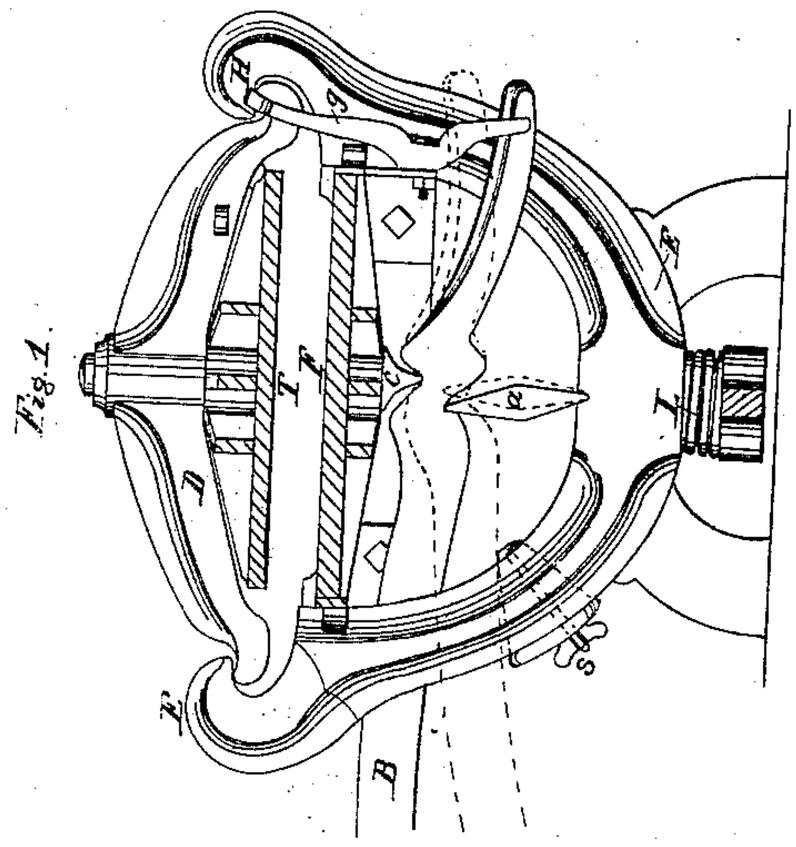


Fig. 1.



Inventor:
John. Lewis.

UNITED STATES PATENT OFFICE.

JOHN LEWIS, OF BUFFALO, NEW YORK.

PRINTING-PRESS.

Specification of Letters Patent No. 9,923, dated August 9, 1853.

To all whom it may concern:

Be it known that I, JOHN LEWIS, of the city of Buffalo, in the county of Erie and State of New York, have invented new and useful Improvements in Printing-Presses; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and the letters of reference marked thereon.

The nature of my invention consists in constructing a swinging bail and a pressure bail in combination with the lever power in such a manner as to bring the power upon the center of the platen by one motion of the lever.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation.

In the accompanying drawings like letters refer to like parts in each of the figures.

Figure I is a sectional view, and Figs. II and III are views in perspective.

The part referred to by the letters D, I denominate the swinging bail, and the part referred to by the letters E I denominate the pressure bail. The swinging bail D works upon a center on the platen T. The lever B works on and between the movable fulcrum *a* and the stationary fulcrum *c*. The stationary fulcrum *c* is cast on, and is part of the bed plate F.

S is a set screw to limit the downward motion of the lever B. The lever B is extended from the fulcrum to the perpendicular arm *g*. There is a projected inclined plane on the perpendicular arm *g*, where the lever B touches it, so that when the lever is moved up at that point, the perpendicular arm *g* moves against the swinging bail D, and forces it under the hooks of the pressure bail E. The movable fulcrum *a*, rests upon the pressure bail E, and when power is applied to the lever B the pressure bail is forced downward until its hooks catch the swinging bail, The swinging bail and the pressure bail being now clenched together the power upon the lever is continued through more space, and an immense pressure is brought upon the paper and type between the platen T and the bed plate F. The whole operation is performed by one motion of the lever through a few inches of space, and the power is exerted on the center of the platen and a uniform pressure given upon all parts of the type. When the power is removed from the lever B the action of the small spiral spring *m*, Fig. II removes the swinging bail D from the grasp of the hooks of the pressure bail E and then the action of the spiral springs N in Fig. III balances the platen T and raises it from the stationary bed plate F.

The paper now already impressed can be removed from the platen and new paper added, and the operation repeated.

There is an adjustable bolt *f*, which also forms part of the hinge upon which the platen turns. By means of this adjustable bolt, the platen can be raised or depressed and adapted to give an equal pressure upon all parts of the type upon the bed plate and to any thickness of paper.

K represents the frame.

P is a crooked cross bar upon which the pressure bail E rests.

L represents a spiral spring which is for the purpose of raising the pressure bail when the power is removed from the lever B and modifying its action.

This press is made mostly of cast iron. It is deemed to be cheaper and more simple and convenient than any press heretofore constructed. There is nothing new or difficult in the process of manufacture. The bolts the spiral springs and the castings are made in the ordinary way, and any mechanic skilled in the art is competent to make and use the same.

The device of the swinging bail D and the pressure bail E, as used and applied for this purpose and herein described I claim as new and useful.

Having now described the nature and operation of my improved printing press sufficiently to enable any mechanic skilled in the art to make and use the same, what I claim as my invention and desire to secure by Letters Patent is—

The swinging bail D and the pressure bail E constructed and operated substantially as herein set forth.

JOHN LEWIS.

Witnesses:
E. B. FORBUSH,
C. T. SHUTTUCK.