

(No Model.)

2 Sheets—Sheet 1.

J. T. KING.
PRINTING MACHINE.

No. 361,423.

Patented Apr. 19, 1887.

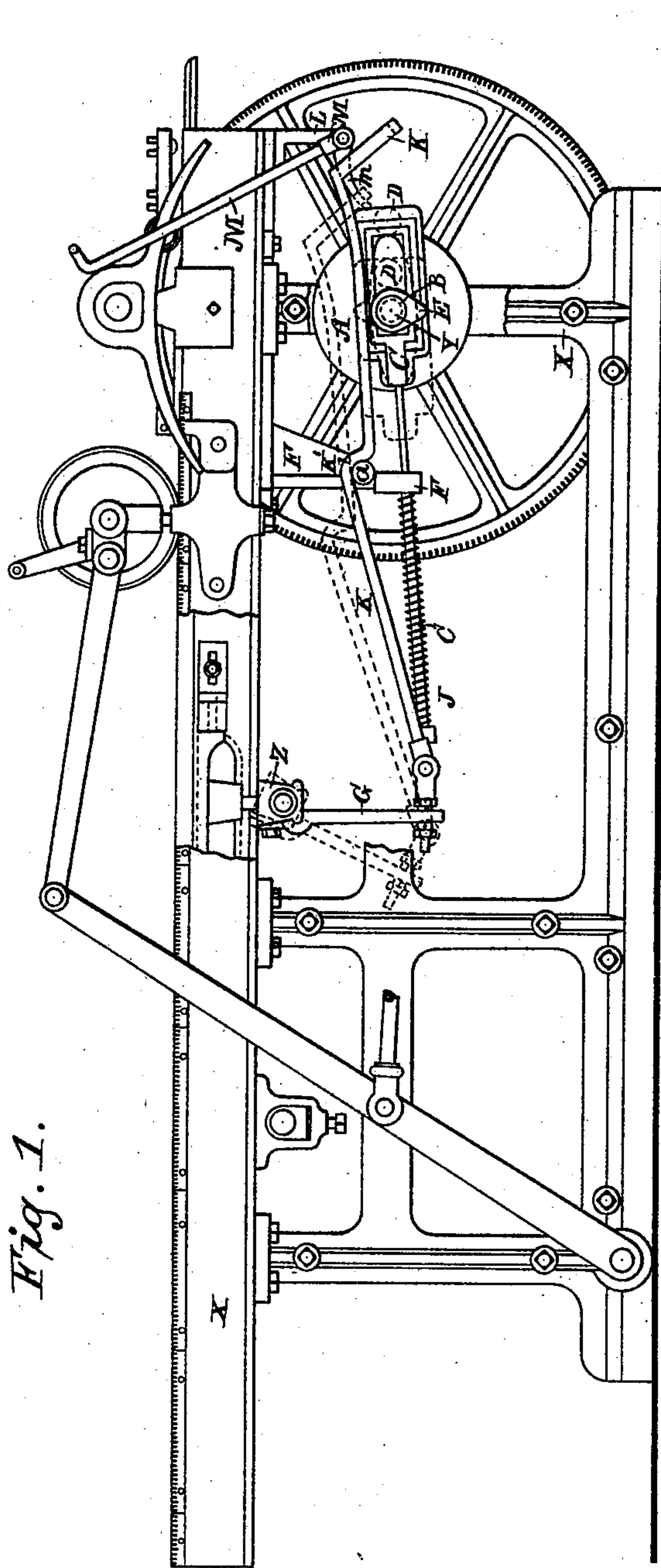


Fig. 1.

WITNESSES

Ed. C. Newman,
Lloyd. B. Wright.

INVENTOR

John T. King.

By *his* Attorneys

Baldwin Hopkins & Weston.

(No Model.)

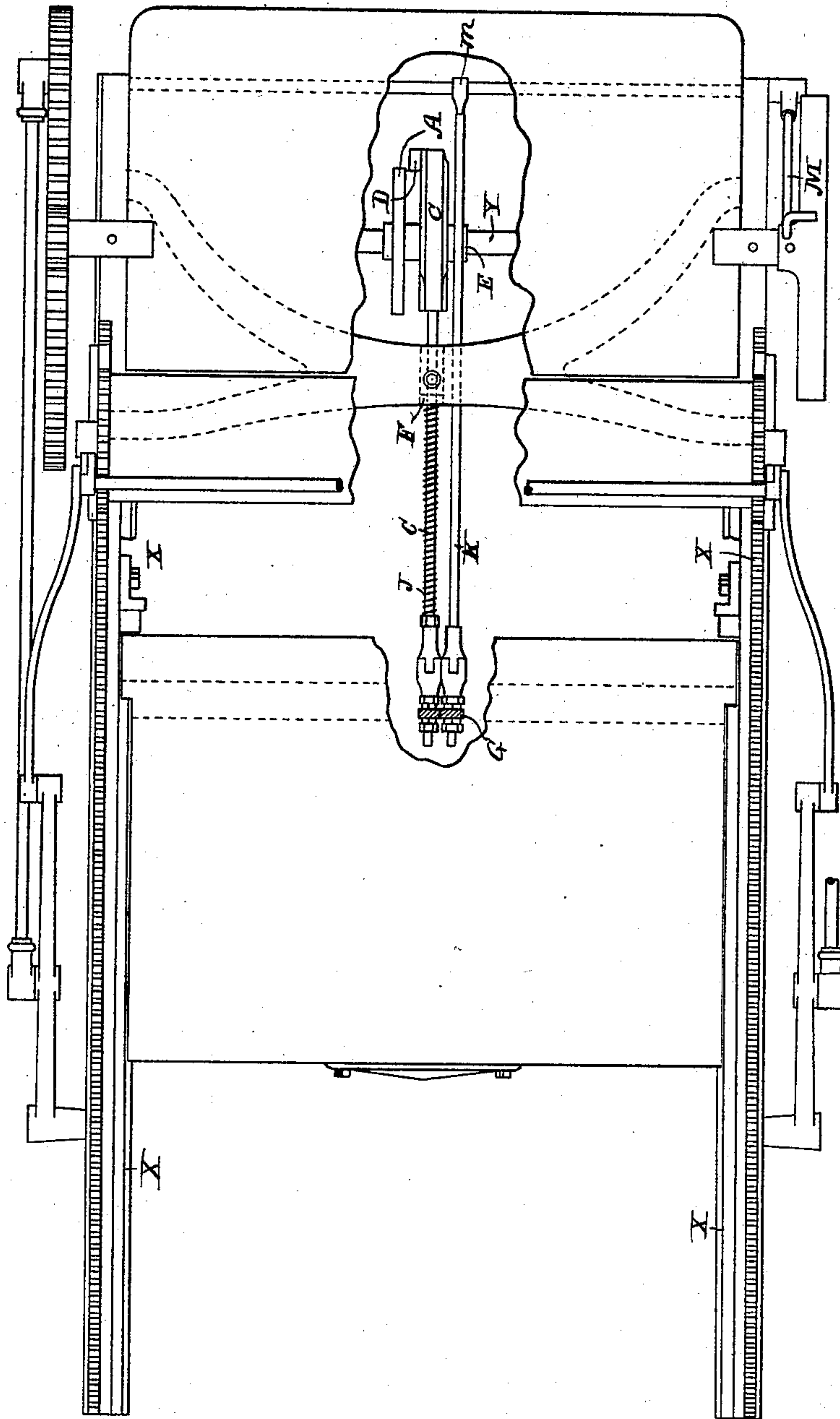
2 Sheets—Sheet 2.

J. T. KING.
PRINTING MACHINE.

No. 361,423.

Patented Apr. 19, 1887.

Fig. 2.



WITNESSES

Ed. A. Newman,
Lloyd B. Wright

INVENTOR

John T. King.

By *his* Attorneys

Baldwin Hopkins & Ryton.

UNITED STATES PATENT OFFICE.

JOHN T. KING, OF MADISON, WISCONSIN, ASSIGNOR TO WALKER & CO., OF
SAME PLACE.

PRINTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 361,423, dated April 19, 1887.

Application filed August 30, 1886. Serial No. 212,192. (No model.)

To all whom it may concern:

Be it known that I, JOHN T. KING, of the city of Madison, in the county of Dane and State of Wisconsin, have invented certain Improvements in Printing-Machines, of which the following is a specification, reference being had to the accompanying drawings.

My improvements relate to printing-presses in which there is a type-bed that is alternately raised and lowered—that is to say, raised to make the impression on the paper carried over it by a reciprocating roller-cylinder, and then lowered while the cylinder returns.

The object of my improvements is to provide means for automatically locking or securing the type-bed firmly in place when raised to make the impression, and automatically unlocking it at the proper time for lowering it, which means shall be capable of operation to unlock by hand at the will of the pressman during any portion of the advance of the paper-carrying cylinder to receive the impression.

My improvements are illustrated as applied to the kind of press known as the "Prouty" press, shown in United States Patents Nos. 206,826 and 249,989, which it is not necessary to describe in detail.

It will be understood that the type-bed rests on suitable rocking supports, (such, for example, as shown in the last-named patent,) whose movement, by connection with the rotating parts at the proper times, slightly raises and lowers the bed, as is done on a similar principle in many presses of this general class.

In the drawings, Figure 1 is a side elevation partly broken away, and Fig. 2 is a plan view partly broken away.

Referring to the letters upon the drawings, X indicates the main frame; Y, one of the main driving-shafts, which makes a revolution at each impression; and Z, a part of the rocking support of the type-bed.

A indicates a cam fixed on the shaft Y. Besides this cam on the shaft is a loose anti-friction roller, B, which works within the slot in the sliding rod C. On a pin projecting from one side of the slotted end of the rod C is a loose anti-friction roller, D, located in the path of the cam A.

E indicates a smaller cam, also fixed on the shaft Y, and adjusted and timed so as to bear against the under side of lock-rod K at the proper time to raise and release that rod.

F indicates a downwardly-projecting bracket or lock-post, which carries at its lower end lock-roller *a*. Projecting downward from the rock-bar on which the type-bed rests is an arm, G, to the lower end of which are pivoted, in any usual way, the lock-bar K and the sliding rod C. Around the cylindrical part of the rod C is a coiled spring, J, which is stopped at one end against the part F and at the other against a shoulder or collar on the other end of the rod. The rod K extends back over roller *a* and rests upon it, either locked, by means of the angle or abrupt bend K' near its middle, or unlocked.

L indicates a bracket, to which is pivoted, by means of a projecting pin, a trip rod or lever, M, with an angle-arm, *m*, working in a slot in the free end of rod K, and adapted to raise that end of the rod by hand whenever the pressman desires.

The operation is as follows: As the cam A comes in contact with roller D, rod C will be forced back against the tension of its spring to such a position that rod K, moving with it, will be locked. At the same time arm G will be moved so as to raise the type-bed to proper position for printing, and the bed will remain locked in that position until cam E raises rod K and unlocks it, when spring J will act to throw rods C and K and arm G and lower the type-bed. By reference to the full and dotted lines in Fig. 1 these movements will be understood. Should occasion require, the pressman can take hold of lever M at any time while the impression is being made and raise rod K and unlock it, which will lower the type-bed and stop the impression.

This locking mechanism can be readily adapted to presses in which the type-bed rises and lowers perpendicularly instead of by a rocking motion.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination, in a printing-press, of a type-bed that rises and lowers to make and avoid impression, the rods C and K, the cams

A and E, operating them, respectively, the roller *a*, spring J, and arm G, all substantially as set forth.

5 2. The combination, in a printing press, of a type-bed that rises and lowers to make and avoid impression, the rods C and K, the cams A and E, operating them, respectively, the roller *a*, spring J, arm G, and lever M, all substantially as set forth.

In testimony whereof I have hereunto subscribed my name.

JOHN T. KING.

Witnesses:

W. G. WALKER,

S. S. HANKS.