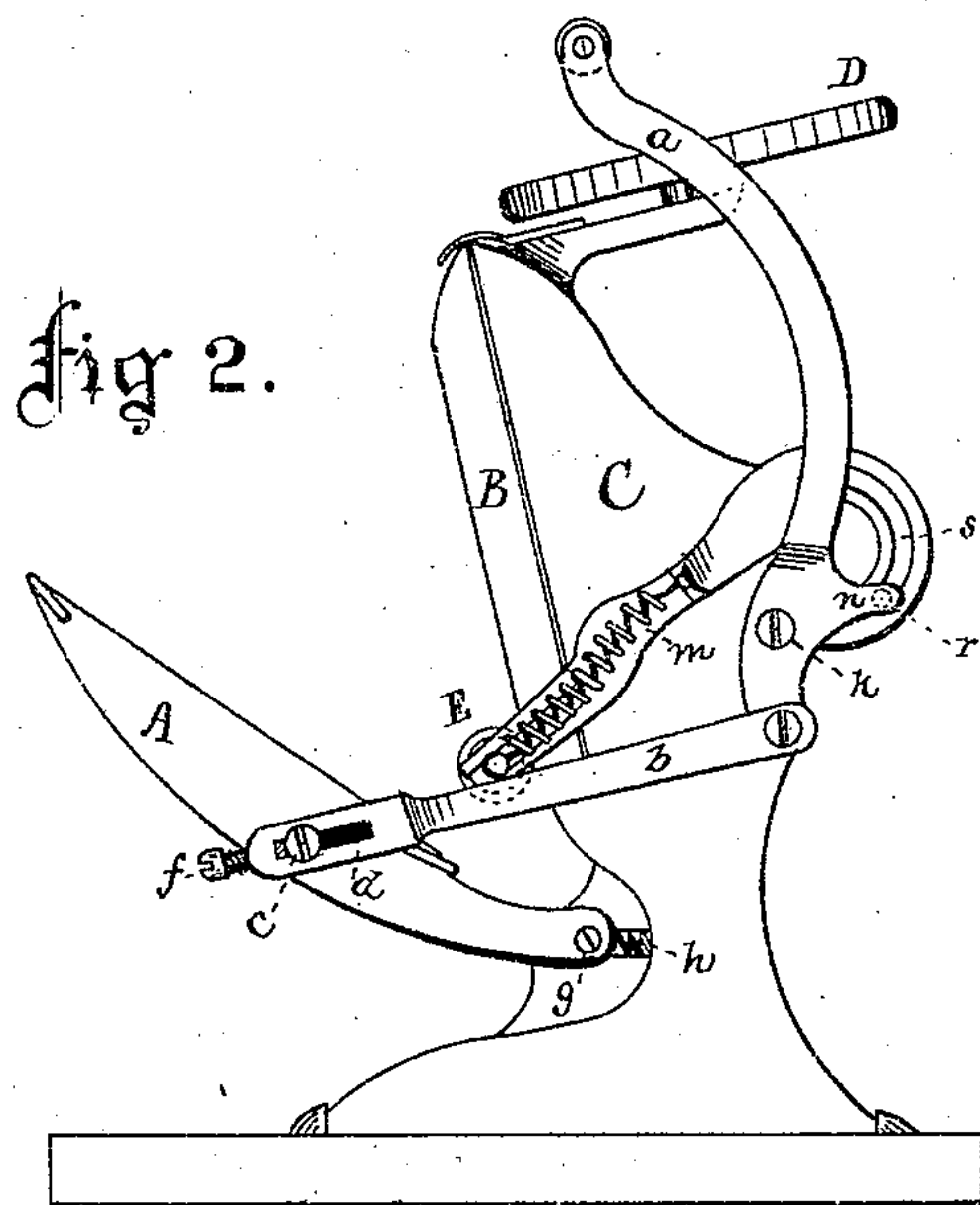
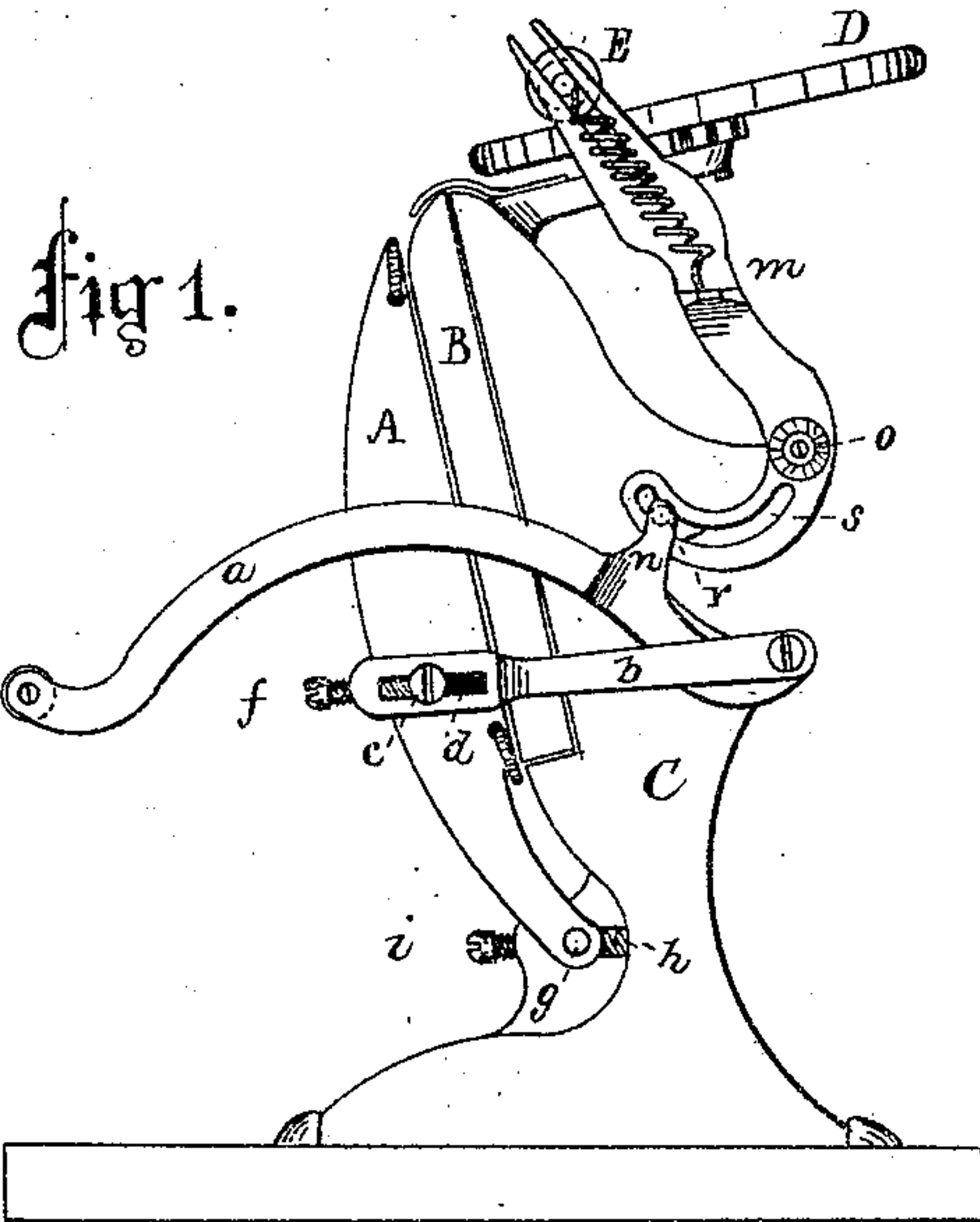


C. A. CADWELL.
Printing-Presses.

No. 153,215.

Patented July 21, 1874.



Witnesses:
 Joseph Shinn
 W. A. Dangerfield

Inventor:
 Charles A. Cadwell
 Per Parker H. Sweet, Jr. atty
 atty for James Shepard.

UNITED STATES PATENT OFFICE.

CHARLES A. CADWELL, OF SOUTHTINGTON, CONNECTICUT.

IMPROVEMENT IN PRINTING-PRESSES.

Specification forming part of Letters Patent No. **153,215**, dated July 21, 1874; application filed May 5, 1874.

To all whom it may concern:

Be it known that I, CHARLES A. CADWELL, of Southington, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Printing-Presses, of which the following is a specification:

My invention consists of certain combinations and arrangement of devices for adjusting the platen, and for inking the type, all as hereinafter described.

In the accompanying drawings, both figures are side elevations of a printing-press which embodies my invention.

In Figure 1 the press is represented with its parts in the position they assume when the platen is closed upon the bed, and in Fig. 2 when the platen is withdrawn.

The platen A, bed B, frame C, and ink-distributing disk D may be of any ordinary kind in common use. I prefer to operate the platen A by means of levers *a b* hung upon the frame C and platen A, and jointed at their connecting ends, as shown. The levers *a b* are arranged at each side of the press, although only those upon one side are shown, and the outer ends of the levers *a a* are connected together by a handle. The short levers *b b* are connected to the platen A by means of screws or bolts *c*, which pass through slots *d* in said lever into the platen A. Adjusting-screws *f* are arranged in the ends of the levers *b*, so that the body of the screws *c* bear upon the ends of the screws *f*; therefore adjusting the screws *f* either out or in will lengthen or shorten the levers *b*, as may be desired. At the lower end of the platen A is a rod, *g*, which extends from side to side of the platen, and is rigidly secured thereto. Said rod passes through slots *h* in the frame C, in front of which slots are adjusting-screws *i*, Fig. 1, the ends of which bear against the rod *g*. Suitable springs press the lower end of the platen forward, while the upper end is kept forward by its own weight. By turning the screws *f i*, the platen can be adjusted parallel with the bed B, and so as to impart more or less pressure, as may be desired. The levers *a* are hung upon the frame C by means of bolts *k*, Fig. 2. The ink-roller levers *m* are also hung upon the frame C by means of screws *o*, (see Fig. 1,) like levers being upon the opposite sides of the press. The

ink-roller E is hung in slots at the ends of the levers *m*, and retained in place by spiral springs, so that it may play out and in said slots as in ordinary self-inking presses. The opposite ends of the levers are provided with curved slots *s*, as shown, in which slots are pins *r*, formed upon the arms *n* of the levers *a*. The levers *m*, slots *s*, and pins *r* are of such shape and so arranged that when the platen is closed upon the bed the pins rest in the end of the slots which is farthest from the fulcrum of the levers *m*, and the ink-roller E is upon the forward side of the ink-distributing disk D, all as shown in Fig. 1.

Upon raising the levers *a* to release the platen the pins *r* throw the ink-roller E to the rear of the ink-distributing disk D, when the said pins strike the inner end of the curved slots *s*, in which position the pins *r* are about passing under the fulcrums *o* of the levers *m*, whereby the continuous movement of the levers *a* and pins *r* throw the ink-roller E forward to the front of the disk D, and downward over the bed B, the pins *r* again traversing the length of the slots *s* into the position shown in Fig. 2.

By depressing the levers *a*, the parts will retrace their movements into their former position, as shown in Fig. 1. Thus it will be seen that the pins *r* traverse the slots *s* four times, and the ink-roller moves over the disk D four times, for every impression made by the press.

The object of my invention is to provide a practical and efficient self-inking press at a reduced price.

So far as the self-inking apparatus is concerned, it is of course immaterial whether the levers *a* operate the platen or not; but so much of said levers as carries the pins *r* must be retained, and they can be connected in any proper manner to the mechanism employed to operate the platen, so as to move simultaneously therewith.

I claim as my invention—

In a printing-press, the ink-roller levers *m*, provided with the curved slots *s*, in combination with the pins *r* and levers *a*, all operating together, substantially as and for the purpose described.

CHARLES A. CADWELL.

Witnesses:

W. D. COOK,
JAMES SHEPARD.