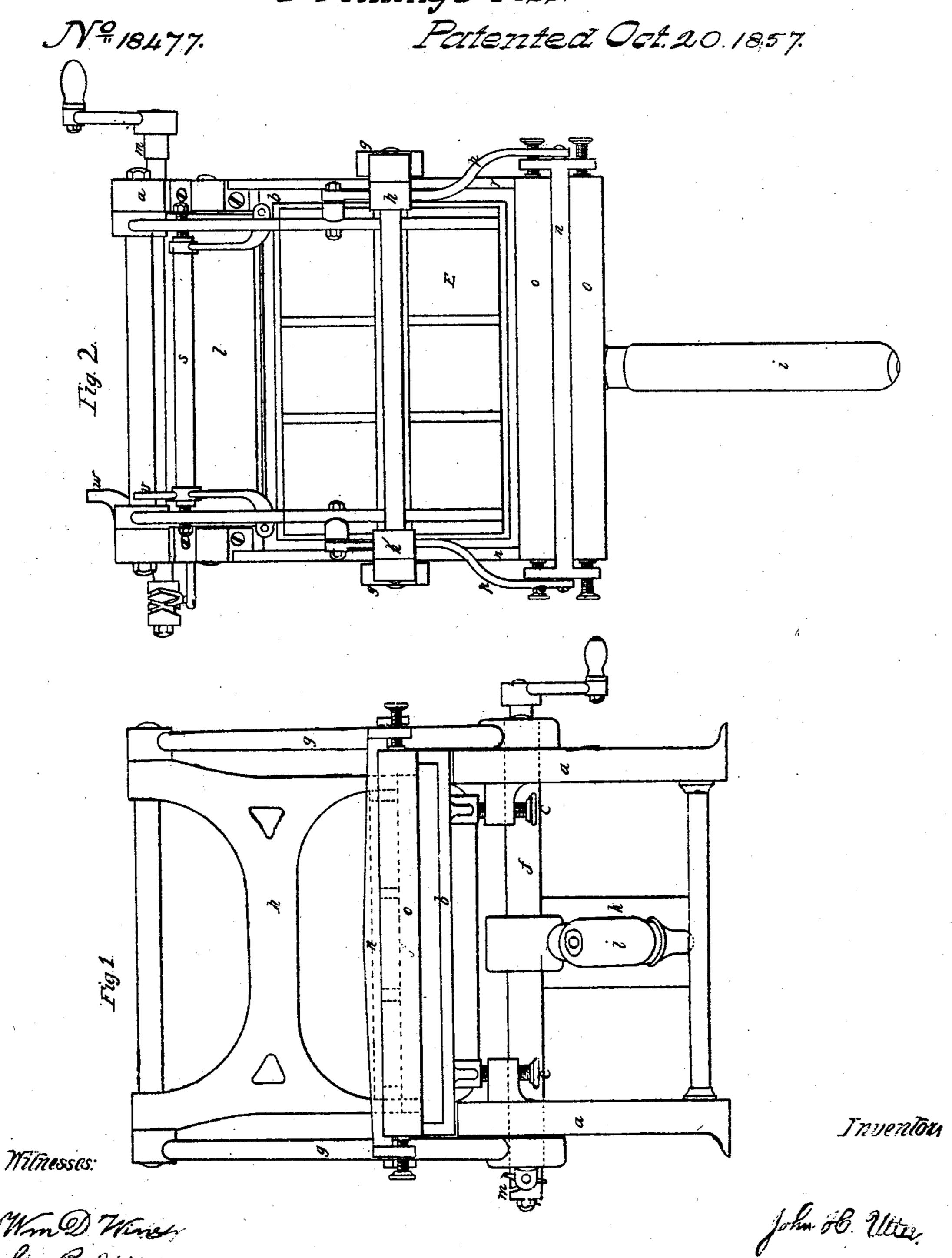
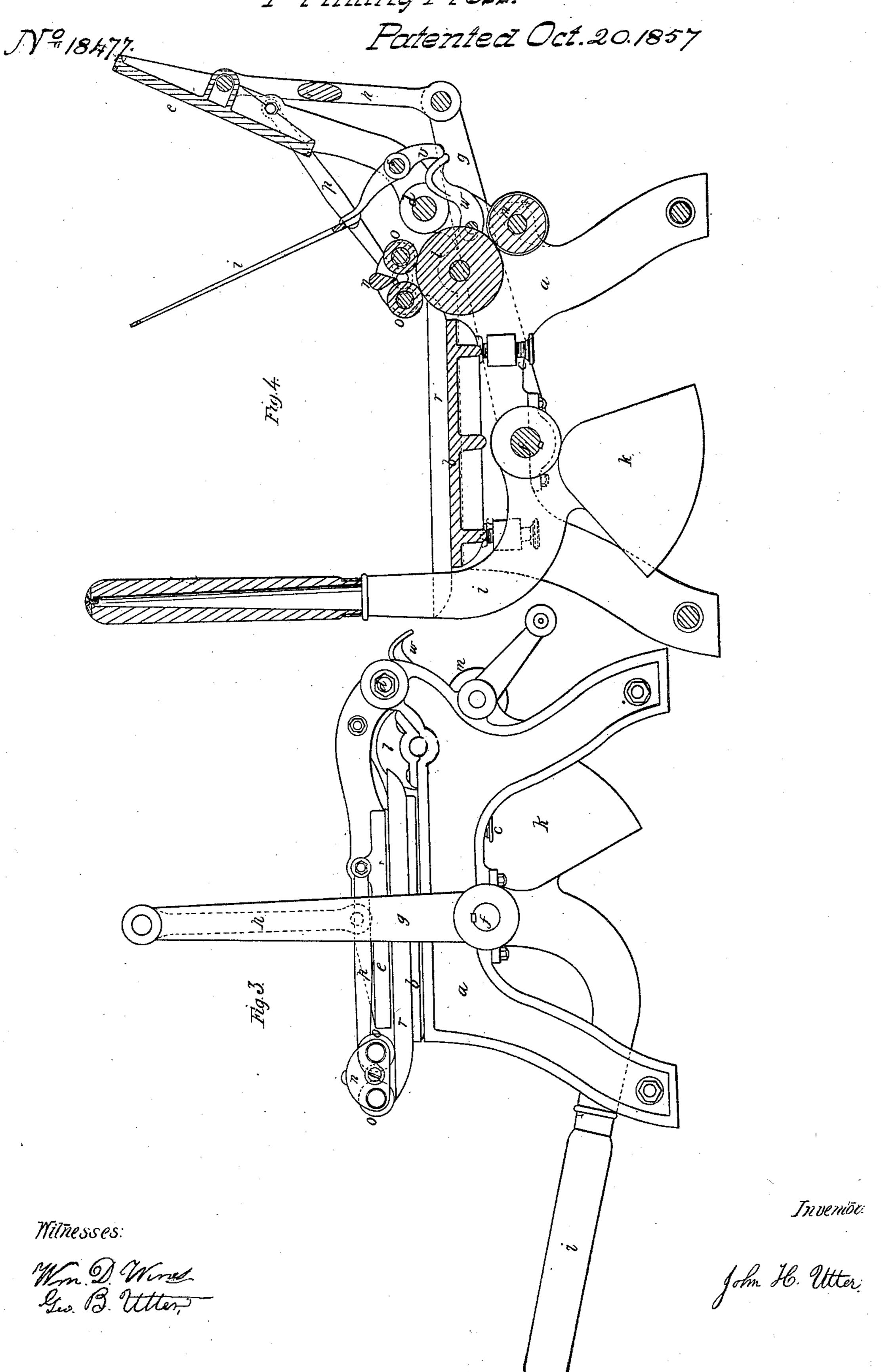
J.J. Mer. Street. 2,8 treets. Printing Press.

Patented Oct. 20.1857.



Wm D Wines

J.H. Ister. Sheets. 2 Sheets Printing Press. Patented Oct. 20.1857



UNITED STATES PATENT OFFICE.

JOHN H. UTTER, OF NEW YORK, N. Y.

PRINTING-PRESS.

Specification of Letters Patent No. 18,477, dated October 20, 1857.

To all whom it may concern:

Be it known that I, John H. Utter, of the city and State of New York, have invented certain new and useful Improvements in Printing-Presses; and I do hereby declare the following to be a true and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a front view; Fig. 2, a plan; Fig. 3, a side elevation, and Fig. 4, a vertical section with the parts in position for receiving the sheet; the same letters refer-

ring to like parts in all the figures.

The nature of my invention consists in so combining a series of levers with a swinging platen, that one motion of the hand lever performs all the operations of printing, with the exception of feeding and flying the sheets, namely: inking the form, turning down the platen and giving the impression; together with a new method of actuating the inking rollers and the frisket.

The press is constructed as follows: The bed b, is supported in a horizontal position upon a frame-work, a, of suitable form and dimensions, and is capable of being adjusted for the purpose of varying the impression by means of four setscrews, c, upon which it rests. At a suitable point, d, in the frame is hinged a platen, e, in such a manner that it is capable of being turned from a horizontal position to an angle suitable for receiving the sheet, as shown in Fig. 4; this platen serves the purpose of the platen and "tympan" in common hand presses, and has the "blanket" attached to its surface.

Under the center of the bed, and across the frame, is placed a shaft, f, upon each 40 end of which is a lever, g. These levers are connected to a piece, h, which acts as a lever and has one of its ends attached to the platen, or they may be each attached to separate levers which are similarly attached to 45 the platen in a line which, at the moment of giving the impression, will be directly over and parallel with the shaft, f. There are also, upon shaft f, a hand lever, i, by which it is operated, and a weight, k, for the purpose of balancing the platen. The arrangement of these levers is such, that when the hand lever, i, is carried from the

position shown in Fig. 4 to that shown in Fig. 3, the platen, e, is turned over upon the "form" which is placed upon bed, b, and 55 as the levers g and h, come into the same plane they exert a powerful progressive leverage at the moment it is wanted for giving the impression. When the hand lever, i, is returned to its former position, the platen 60 is also carried back, ready to receive another sheet.

The inking apparatus is peculiar, and is constructed as follows: There is a cylinder, l, hung in the frame, in contact with which 65 is a vibrating roller, m, which receives its motion from a crank. In a framework, n, are hung two inking rollers, o, o, by means of centers or other equivalent device. These rollers lie upon the cylinders, l, when the 70 platen is in the position shown in Fig. 4, and receive their supply of ink therefrom. The framework, n, is attached to the platen, e, by means of connections, p, in such a manner that when said platen is brought into the 75 horizontal position, the framework with its rollers is pushed before it, traveling upon bearers, r, on each end of the bed, inking the form, assuming the position shown in Fig. 3 while the impression is being given, 80 and returning to the cylinder as the platen assumes its former position.

Between the legs of the platen is hung a shaft, s, to which is attached a "frisket," t, which is closed upon the platen by a spiral 85 spring not shown in the drawing, and is opened by means of a cam, w, attached to the frame, acting upon a toe, v, on shaft s, or it may be operated by any equivalent device giving the same motion. Said frisket 90 is for the purpose of holding the sheet to the platen during its movement, and removing it from the type after the impression is given.

The manner of operation is as follows: 95
The operator turns roller m, by means of its crank, thus distributing the ink, and then lays a sheet of paper upon the platen, e. He now grasps the lever, i, and brings it down to nearly a horizontal position. As the 100 platen is brought over, the frisket, t, meets it before it reaches the perpendicular position, and they together turn over upon the type,—rollers o, o, meantime inking the

form,—and the impression is given by the levers g and h. Lever, i, is now raised to its former position carrying back the platen, inking rollers, and frisket, when toe, v, strik-5 ing cam w, opens the frisket and releases the sheet which is removed and the same ${
m process repeated.}$

I do not wish to be confined to a horizontal bed, as I also intend making it perpen-10 dicular, in which case I may attach power to lever i, or g. Neither do I wish to be confined to one platen, as I can also use two, operating alternately, one attached to each side of the bed. I also contemplate arrang-15 ing it so that the ink will be distributed by the motion of the press; but intend it to be chiefly used as above described.

I do not claim, broadly, actuating the platen by means of the impression levers, as 20 that has been previously done, neither do I claim giving an impression by means of the leverage herein described, but

What I do claim as my invention and desire to secure by Letters Patent, is:—

1. The combination of the swinging 25 platen, e, levers g, h, i, and shaft f, when ar-

ranged as set forth.

2. I claim connecting the inking rollers to the swinging platen, by means of rods p, or their equivalent, in such a manner that 30 the movement of the platen around its center of motion shall cause the inking rollers to pass across the type, when arranged and operating substantially in the manner herein $\operatorname{described}$.

3. I claim giving the frisket a motion in an opposite direction to that of the platen during a portion of its movement, by the means and for the purpose specified.

JOHN H. UTTER.

Witnesses:

WM. D. WINES, Geo. B. Utter,
John M. Mosher.