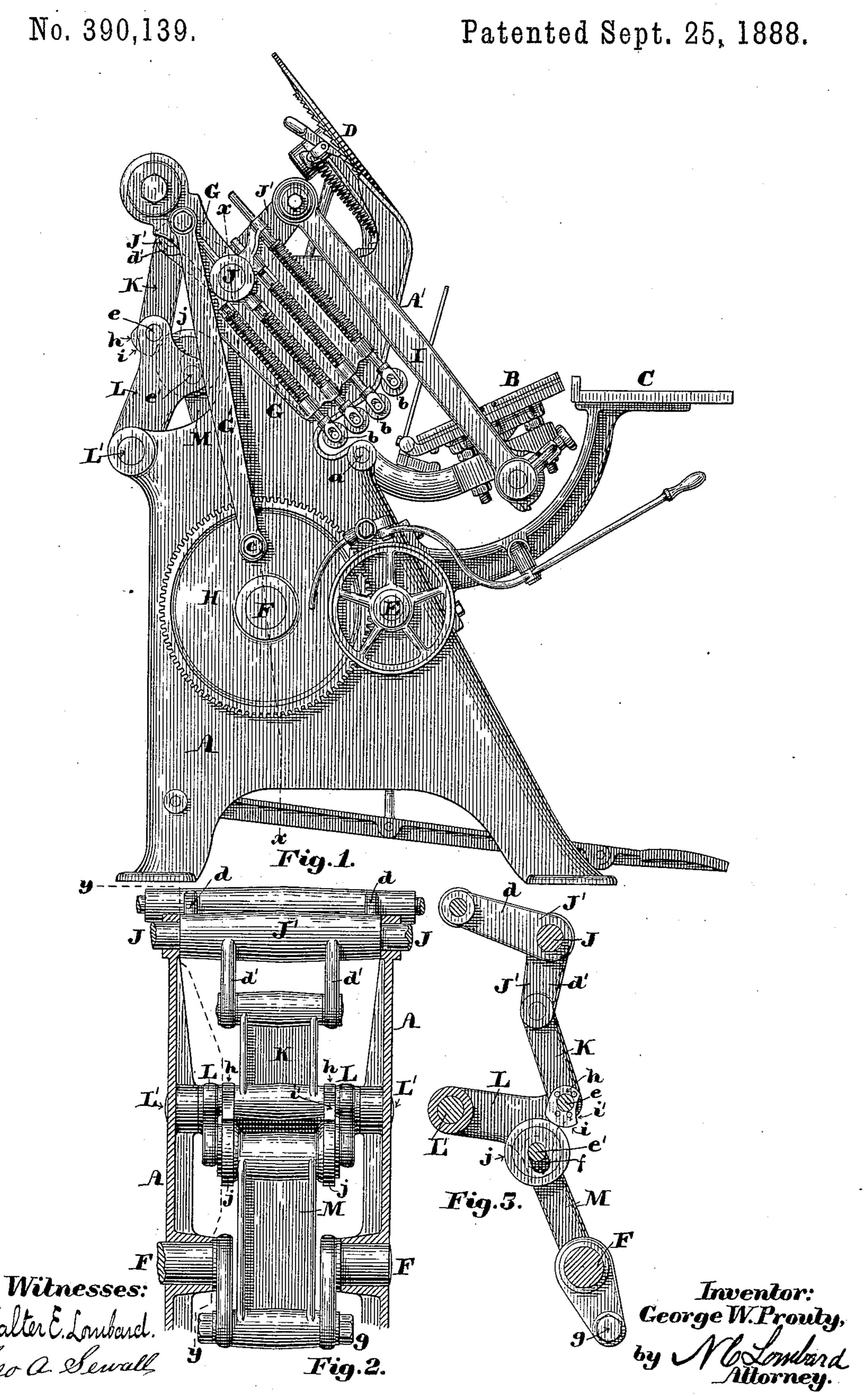
G. W. PROUTY.

PRINTING PRESS.



United States Patent Office.

GEORGE W. PROUTY, OF BOSTON, MASSACHUSETTS.

PRINTING-PRESS.

EPECIFICATION forming part of Letters Patent No. 390,139, dated September 25, 1888,

App'ication filed November 7, 1887. Serial No. 254, 479. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. PROUTY, of Boston, in the county of Suffolk and State of [Massachusetts, have invented a new and useful | 5 Improvement in Printing-Presses, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to printing-presses, and to that class of such presses usually termed 10 "job presses," and that have fixed beds and vibrating platens; and it consists in certain novel features of construction, arrangement, and combination of parts for imparting to the platen a vibratory motion to and from the bed 15 or type-form, with a dwell or standstill when farthest removed from said bed or form, all of which will be readily understood by reference to the description of the drawings, and to the claims to be hereinafter given, and in which 20 my invention is clearly pointed out.

Figure 1 of the drawings is a side elevation of a printing-press embodying my invention, with the several parts in position for feeding the paper to the platen. Fig. 2 is a sectional 25 elevation of so much of the same as is necessary to illustrate my improvement, the cutting plane being on line x x on Fig. 1, and the several parts being in position for giving the impression; and Fig. 3 is a vertical section on

30 line y y on Fig. 2.

In the drawings, A is the main frame of the machine, having cast therewith or secured thereto at A' the bed. (Not shown.)

B is the platen, pivoted at a to said frame. C is the feed-table; D, the ink-distributing table; b b b b, the inking-rollers; E, the main driving-shaft; F, the crank-shaft; G, the inking-roller-carrying frame, operated by the link G' and the crank-pins c, set in the gear-wheels

40 H, as shown; and I is one of the draw-rods for operating the platen through the oscillations of the rocker-shaft J and the elbow-lever J', carried thereby, to the arm d of which said rod I is pivoted, as shown. To the arm d' of

45 the elbow-lever J' is pivoted one end of the link K, the opposite end of which is pivoted to the lever L, mounted upon the rocker-shaft L', and carrying near its free or movable end, but to one side of the rod e, connecting said

50 lever to the link K, the rod e', which passes

of the pitman M, the lower end of which has a bearing upon the crank-pin g of the crankshaft F, all as shown in Figs. 2 and 3.

The lower end of the link K has firmly se- 55 cured upon each side thereof a cam, h, a portion of the periphery of which, as at i, is concentric to the axis of the pivotal connection of said link to the lever L, and against which the periphery of the ring-like truck j, mounted 60 upon a hub, one at each side of the pitman M, and surrounding the slot f, impinges when the parts are in positions shown in Fig. 3, and along which said trucks roll while the platen is moving away from the bed, and effectually 65 locks the pivot or rod e' in the outer end of the slot f a sufficient time to insure the downward movement of the platen until the axes of the lever L and the pivotal connections of the link K with the levers L and J' are in 70 line, as shown in Fig. 1, which occurs before the crank-pin g has reached the upper deadpoint in its revolution relative to the pitman M. At this point the trucks j pass from the concentric surfaces of the cams h to the con- 75 cave surfaces i' of said cams, and the pitman M will continue to move upward until the crank-pin g has reached the dead-point in its revolution and the lower end of the slot f has come into contact, or nearly so, with the rod 80 e, as shown in dotted lines in Fig. 1, without affecting the position of the platen, the peripheries of the trucks j moving freely past the cut-away or concave sides of the cams h, thereby permitting a movement of the pitman 85 without moving the platen. As the crank-pin q continues its revolution beyond its upper dead-point, the pitman is moved downward until the upper end of the slot f comes in contact with the rod e' without moving the platen, 90 so that the platen remains in a state of rest during the upward and downward movements of the pitman M for a distance equal to the lost motion in the slot f, which slot may be made of greater or less length, according to 95 the length of time that it is desired to have the platen remain at rest for the purpose of feeding the paper.

It will be observed that at the time the upper end of the slot f comes in contact with roo the rod e' to move the platen toward the bed through the slot f, formed in the upper end | the pivotal connection of the link K with the

lever L has to move through quite a long distance to move the platen a very small distance, and hence said platen is moved from its state of rest without shock or jar.

5 What I claim as new, and desire to secure by Letters Patent of the United States, is-

1. In combination with the crank-shaft, platen, and draw-bars of a printing-press, a pivoted lever provided with two pivots or bearing-rods at or near its free or movable end, a pitman connecting one of said pivots or bearing-rods with the crank-pin of said crankshaft and slotted to permit an endwise movement of said pitman upon said bearing-rod, 15 an elbow-lever connected by one arm to the platen draw-bars, a link connecting the other arm of said elbow-lever to the other pivot or

bearing-rod of the pivoted lever, and a locking device consisting of a cam-shaped disk rig-20 idly secured to the lower end of said link, and constructed and arranged to bear upon the upper end of said pitman during a portion of the revolution of the crank-shaft, and thereby maintain the pivotal connection to the slotted

end of the pitman at the outer end of the slot 25 and during another portion of the revolution of the crank-shaft to assume a position to allow said pitman to continue its movement without acting upon said cam to give the required dwell to the platen.

2. In combination with the crank-shaft, platen, and draw-bars of a printing-press, the pitman M, provided with the slot f, the pivoted lever L, provided with the pivot or bearing-rods e and e', the elbow-lever J', the link 35 K, the cams h, fixed on said link K, and the trucks j j, all constructed, arranged, and adapted to operate substantially as and for the purposes described.

Intestimony whereof I have signed my name 40 to this specification, in the presence of two subscribing witnesses, on this 5th day of Novem-

ber, A. D. 1887.

GEORGE W. PROUTY.

Witnesses:

N. C. LOMBARD, WALTER E. LOMBARD.