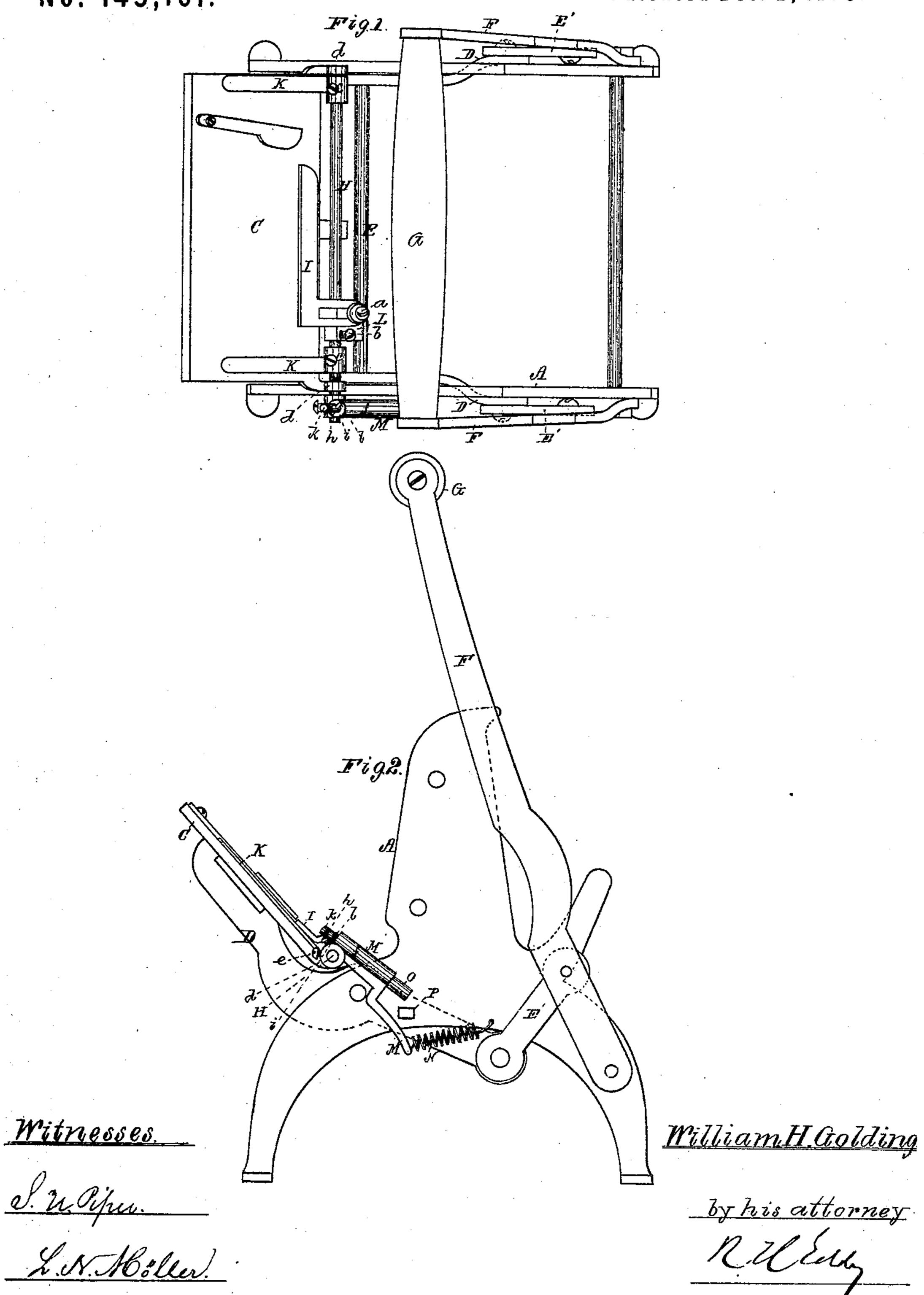
W. H. GOLDING. Printing-Presses.

No. 145,101.

Patented Dec. 2, 1873.



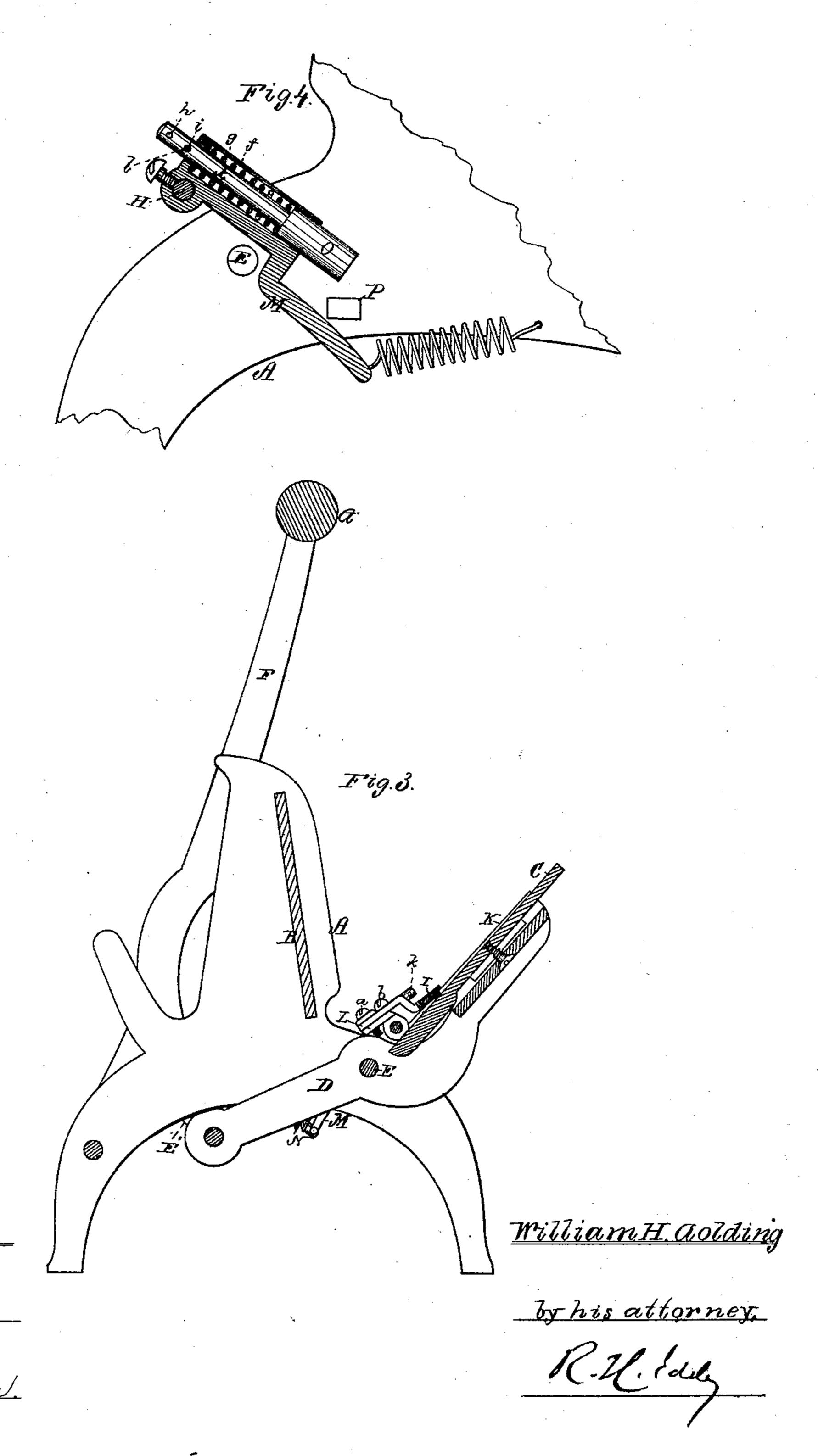
2 Sheets--Sheet 2.

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Witnesses.

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AM. PHOTO-LITHOGRAPHIC CO.N.Y. (OSBORNE'S PROCESS)

United States Patent Office.

WILLIAM H. GOLDING, OF CHELSEA, MASSACHUSETTS.

IMPROVEMENT IN PRINTING-PRESSES.

Specification forming part of Letters Patent No. 145.101, dated November 2, 1873; application filed November 13, 1873.

To all whom it may concern:

Be it known that I, WILLIAM H. GOLDING, of Chelsea, of the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Printing-Presses; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a side elevation, and Fig. 3 a vertical section, of a press provided with my invention. Fig. 4 is a vertical section of the tubular arm and the tripper for actuating the gage and clamp shaft of the platen so as to cause it to move either the card-gage or the sheet-clamps up to or away from the platen at the proper periods, for supporting a card or sheet to be printed, and subsequently releasing such in order for its removal from the platen.

In the drawings, A denotes the press-frame, carrying the bed B, and provided with a platen, C. The supporting-arms D D of the platen are pivoted upon a horizontal cross-shaft, E, and at or near their ends to two toggles, E' E', which are also pivoted to two levers, F F, arranged as represented, and connected, at or near their upper ends, by a handle, G. By manual power applied to the said handle, the levers may be worked so as to cause the platen to be moved either toward or away from the bed.

My invention relates to mechanism for operating the shaft H of the card-gage I or sheet-clamps K K, which, in practice, are either directly or indirectly fixed to the said shaft, and are used separately or together, as occasion may require.

In the printing of cards it is customary to dispense with the clamps; but in the printing of thin sheets or billets they are used to hold the sheet to the platen, and especially draw from the type the sheet after an imprint of it.

The gage I is shown as held to a slider, L, by a clamp-screw, a, the slider L being, in turn, held to the shaft by another set-screw, b. The sheet-clamps K K turn upon the shaft, project from it, as shown, and are clamped to it by screws c c. The said shaft H turns freely within ears d d, projecting from the platen,

and has extended from it, and fixed to it by a set-screw, e, an arm, M. This arm, at its lower end, is fastened to one end of a helical spring, N, such spring being arranged as shown, and having its opposite end fastened to the frame A. The part f of the arm M is tubular and carries the tripper O, which slides freely in and through the said tubular part f, and projects from it in opposite directions, as shown. A helical spring, g, arranged within the tubular part f, and about the tripper, and suitably applied to it and the part f, serves to force the tripper downward. Two holes, h i, are made through the shank k of the tripper, through either of which holes a pin, l, is to be inserted, such pin, with the top of the part f, serving as a stop to arrest the downward movement of the tripper in the part f. Near to the tripper there projects from the frame A a stud, P.

When the tripper is used for actuating the gage I, the pin l is to be placed in or through the lower of the two holes hi; but when the clamps K K are to be worked, the pin is to be in the upper of such holes. If, now, we suppose the gage to be in use and the platen to be back or in its lowest position, the gage will be close up to the platen, so that a card laid upon the platen and resting upon the gage will be in a situation for being printed. Under this state of things the lower end of the tripper O will be directly over the stud P. Next, while the platen is being advanced toward the bed, the tripper will pass off and drop in rear of the stud, so that while the platen is in the act of being moved back or downward the tripper will be borne against the stud in a manner to turn the shaft H, so as to cause the gage to be borne away from the platen, to admit the card to drop between such gage and platen, or be discharged from the press. This having taken place, the tripper will be elevated above the stud, so as to enable the spring N, by its draft on the arm M, to cause the gage to fall back upon the platen in order to be ready for reception of another or the next card to be printed. On placing the pin in the upper of the holes of the tripper, the spring N, the stud P, and the tripper O, by their conjoint action during the advance of the platen, will turn the shaft H, so

as to force the clamps up toward the platen. During the retreat of the platen, the shaft will be so moved as to force the clamps away from the platen or sheet thereon.

What I claim as my invention for actuating, as set forth, the gage or clamp shaft H is—

The combination of the spring N, the stationary stud P, the tubular arm M, and the

tripper O thereof, provided with the stop-pin l, all being arranged and applied to the shaft H and the frame A in manner and to operate substantially as specified.

WM. H. GOLDING.

Witnesses:

R. H. EDDY, J. R. Snow.