J. Kirk.

Registering Arm's for Printing Press.

No. 55774. Patented Jun. 19. 1866.

Fig. 1.

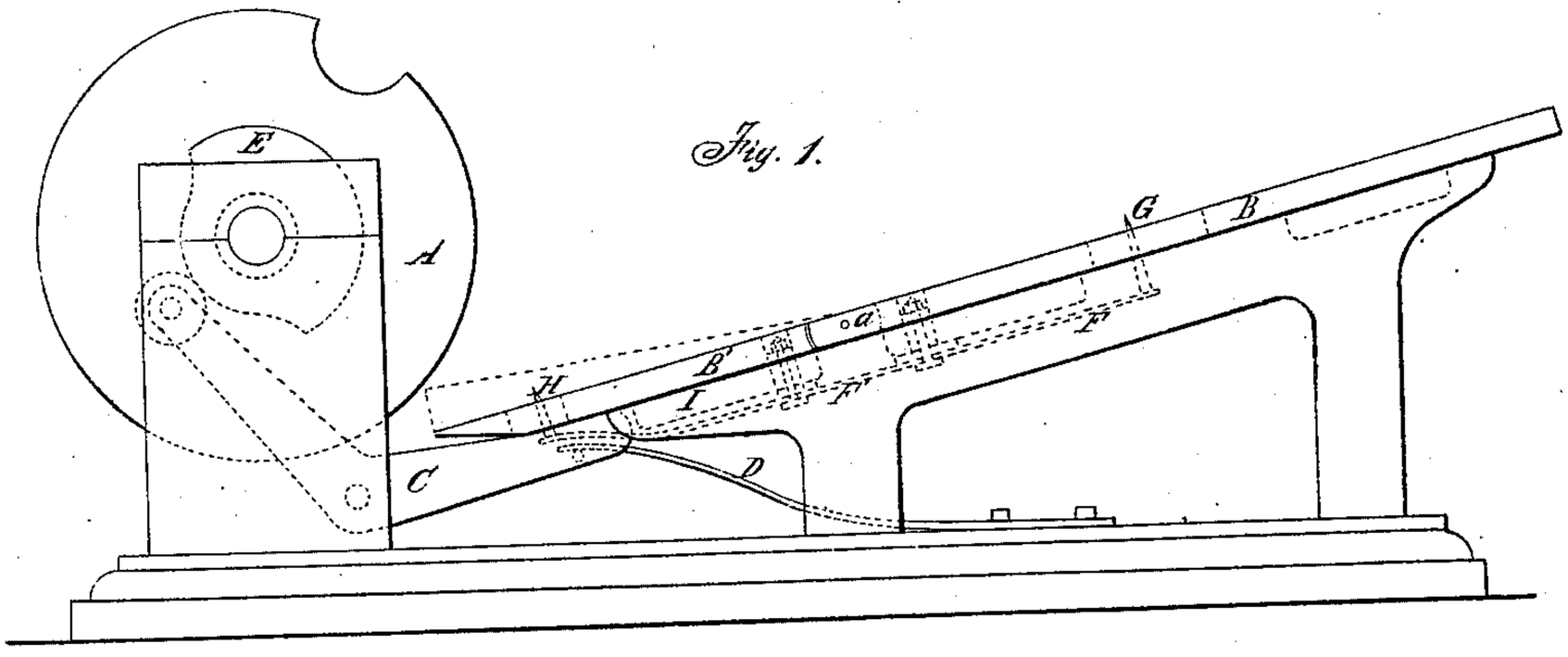
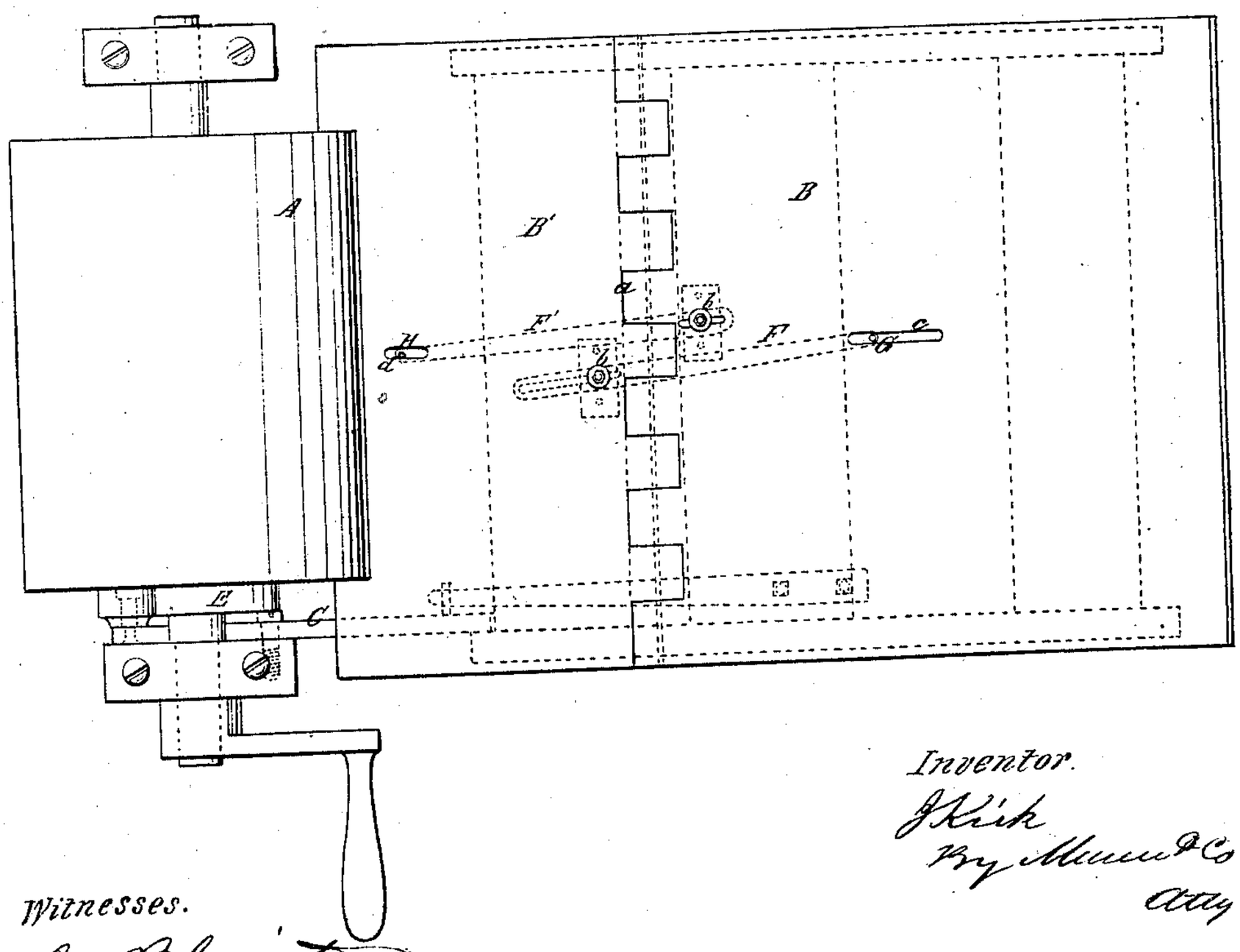


Fig. 2.



Witnesses.

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UNITED STATES PATENT OFFICE.

JAMES KIRK, OF DOVER, DELAWARE, ASSIGNOR TO R. HOE & CO., OF NEW YORK CITY, N. Y.

IMPROVEMENT IN REGISTERING APPARATUS FOR PRINTING-PRESSES.

Specification forming part of Letters Patent No. **55,774**, dated June 19, 1866.

To all whom it may concern:

Be it known that I, JAMES KIRK, of Dover, in the county of Kent and State of Delaware, have invented a new and Improved Registering Apparatus for Printing-Presses; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of my invention. Fig. 2, a plan or top view of the same.

Similar letters of reference indicate corresponding parts.

In printing upon both sides of a sheet, whether for newspaper, book, or other work, it is essential that the impressions on the two sides of the sheet register or coincide with each other; and in order to effect this result pins or points are generally used, in giving the second impression, to fit into holes made in the sheet at the time the first impression is given it. Several plans have been devised for facilitating the adjustment of the sheets upon the pins or points and the withdrawal of the latter from the former in feeding the sheets to the press for the second impression, and the within-described invention relates to an improved means for accomplishing that object.

The invention consists in having the feed-board of the press composed of two parts connected by a joint, the upper part of the feed-board being fixed or stationary, and the lower part, opposite to or adjoining the finger or nipper cylinder, movable, the movable part of the feed-board having an arm attached to its under side, armed with a pin or point at its outer end, which works in a slot in the fixed part of the feed-board, and the latter also having an arm attached to its under side, armed with a pin or point at its outer end, which passes through a slot in the movable part of the feed-board, the latter being operated by the rotation of the finger or nipper cylinder, and all arranged in such a manner that the pins or points will project above the upper surface of the feed-board to receive the sheets when laid upon it, and the pins or points, by the movement of the lower part of the feed-board, be withdrawn from the sheet just previous to being grasped by the fingers or nippers of the cylinder.

A represents the finger-bar or nipper-cylinder of a printing-press, and B B′ are the two parts of the feed-board, connected by a joint, *a*. The upper part, B, of the feed-board is fixed or stationary, but the lower part, B′, is movable, or works on the joint *a*, and is operated by means of a lever, C, and a spring, D, the former being actuated by a cam, E, on the shaft of the cylinder A, so as to throw up the part B′ of the feed-board, the spring D throwing down the lever after the prominent portion of the cam leaves it, and B′ dropping by its own gravity.

To the under side of the movable part B′ of the feed-board there is attached, by a set-screw, *b*, an arm, F, the set-screw passing through an oblong slot in the arm, to admit of a certain degree of longitudinal adjustment of the latter. This arm F projects from the rear of the part B′ of the feed-board and has a pin or point, G, at its outer end, which projects up through an oblong slot, *c*, in the fixed part B of the feed-board.

To the under side of the part B there is attached a similar arm, F′, in a similar manner, and this arm has a pin or point, H, at its end, which passes up through an oblong slot, *d*, in the part B′ of the feed-board.

When the part B′ of the feed-board is down and rests upon the framing I of the feed-board the pins or points G H will project above the upper surface of the parts B B′ of the feed-board, through their respective slots *c d*, and the sheet may be adjusted on the feed-board accurately by having the holes made in the sheet when the first impression was given it fitted on the pins or points, which, by adjusting the arms F F′, may be placed in proper position for the holes.

When the cam E of cylinder A strikes the lever C the part B′ of the feed-board will be raised toward the cylinder A, and the front part of the sheet consequently relieved of or shoved off from the pin or point H of the arm F′, while the pin or point G of the arm F, in consequence of the latter being attached to the movable part B′ of the feed-board, will be drawn down out of the sheet, which at that moment is grasped by the fingers or nippers of

cylinder A and drawn from the feed-board, the part B′ of the feed-board being retained in an upward position sufficiently long to admit of the sheet being drawn from it without coming in contact with the pins or points. When the sheet is drawn off from the feed-board the prominent portion of the cam E will have just passed the lever C, and the part B′ of the feed-board drops, and the pins or points G H will be ready to receive a succeeding sheet.

This is an exceedingly simple arrangement, and one not liable to get out of repair or become deranged by use.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

A feed-board for printing-presses, composed of two parts connected by a joint, one part being fixed and the other part movable, so as to work on the joint, in connection with a fixed or stationary pin or point connected with the fixed part of the feed-board and a pin or point connected with the movable part of the same, all arranged to operate in the manner substantially as and for the purpose set forth.

JAMES KIRK.

Witnesses:
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ROBERT G. SMITH.