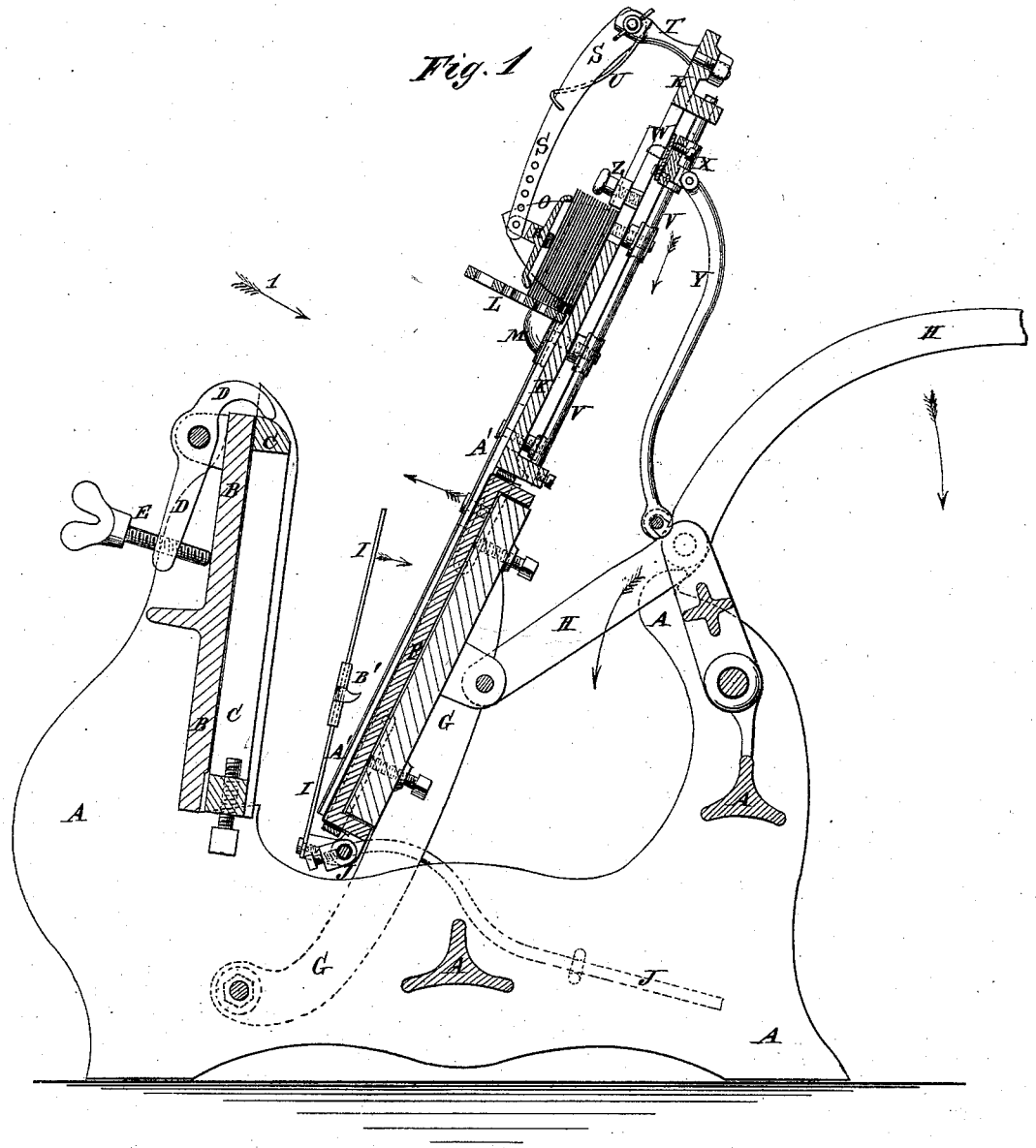
2 Sheets—Sheet 1.

W. M. CLARK.

FEEDING APPARATUS FOR CARD PRINTING-PRESS.

No. 182,104. Patented Sept. 12, 1876.

Fig. 1



WITNESSES:

A. W. Almqvist

John Goetzals

INVENTOR:

Wm. M. Clark

BY

Munn & Co

ATTORNEYS.

2 Sheets—Sheet 2.

W. M. CLARK.

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Fig. 2

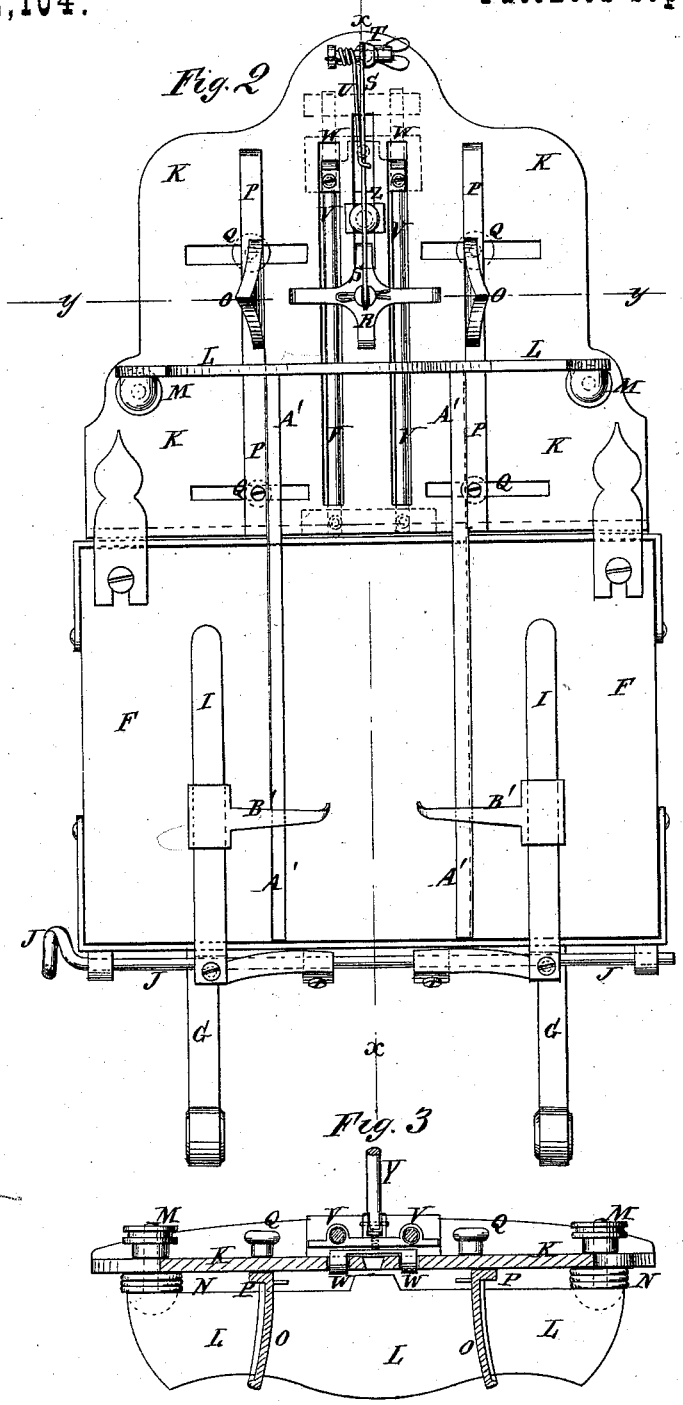

Fig. 3

WITNESSES:

A. W. Almqvist

John Goetthals

INVENTOR:

Wm. M. Clark

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM M. CLARK, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN FEEDING APPARATUS FOR CARD-PRINTING PRESSES.

Specification forming part of Letters Patent No. **182,104**, dated September 12, 1876; application filed April 25, 1876.

To all whom it may concern:

Be it known that I, WILLIAM M. CLARK, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and Improved Feeding Apparatus for Card-Printing Presses, of which the following is a specification:

Figure 1 is a vertical section of my improved device, taken through the line *x x*, Fig. 2, and shown as applied to a printing-press. Fig. 2 is a detail front view of the platen and its attachments. Fig. 3 is a detail cross-section of the same, taken through the line *y y*, Fig. 2.

The object of this invention is to furnish an improved attachment for printing-presses to feed cards into the press automatically, and to discharge them when they are printed, and which shall be simple in construction, easily applied to the press, and reliable in operation.

The invention will first be described in connection with the drawing, and then pointed out in the claims.

A represents the frame. B is the bed. C is the chase. D is the hook-lever, and E is its set-screw, for locking the chase to the bed. F is the platen. G are the arms that pivot the platen F to the frame A. H is the lever by which the platen F is operated. I are the gripers by which the card is held to the platen while being printed, and J is the bent rod to which said gripers are attached, and which is held by, and works in, keepers attached to the frame A. K is a plate or frame, which rests upon, and is secured to, the upper edge of the platen F by slotted lugs and screws, in such a position that the face of the plate K and of the platen F may be in the same plane. To the lower part of the plate K is attached a flange or shelf, L, the middle part of the inner edge of which is at such a distance from the face of the said plate K that one card, and only one, can pass between them at a time. The shelf L is secured to the plate K by screws and thumb-nuts M, and rubber washers N are placed upon the said screws, between the edge of the shelf L and the plate K, so that the distance between said parts may be adjusted to the thickness of the cards to be printed. O are guides for the ends of the cards to rest against, and which are made flaring for convenience in putting in the cards. The guides O are attached to bars P, which are secured in place by screws Q, which pass through short transverse slots in the plate K, so that the guides O can be adjusted at a distance apart equal to the length of the cards. The cards are held down against the plate K by a spider or four-armed plate, R, which is pivoted at its center to the lower end of the bar S, the upper end of which is pivoted to a stud, T, attached to the upper part of the plate K. The spider R is pressed down upon the cards by a spring, U, attached to the stud T, and which presses upon the bar S. To the lower side of the plate K are attached two rods, V, upon which slide two hooks, W, connected by a coupling-bar, X. The hooks W project through slots in the plate K, and rise so far above the surface of said plate that as they move downward they will strike the upper edge of the lowest card and push it out beneath the edge of the shelf L. To the bar X is pivoted the upper end of the connecting-rod Y, the lower end of which is pivoted to the lever H, so that a card may be fed down by the movement of the lever H, to carry the platen F forward. The upper edges of the lower cards rest against a stop, Z, secured adjustably in a slot in the plate K by a screw and nut, so that it may be adjusted to the breadth of the cards. The stop Z prevents the lower card from being moved upward by the friction of the hooks W as they pass up. As the card passes down beneath the shelf L, its ends pass beneath the flanges of the bars A′, attached to the bars P, and projecting downward along the platen to guide the card to the place where it is to be printed. As the card reaches the place where it is to be printed it is stopped by the inwardly-projecting curved points of the arms B′, which receive its lower edge. As the platen is drawn back, the curved points B′ raise the card slightly as its lower edge slips from them, so as to release it, should it stick to the platen, and allow it to drop from the press. The arms B′ slide upon the gripers I, so that they may be adjusted as the width of the card may require.

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

1. The combination of the plate K, the adjustable shelf L, the adjustable guides O, the spider and its spring-bars R S U, and the flanged guide-bars A′, to hold the cards and guide them into place upon the platen F, substantially as herein shown and described.

2. The adjustable arms B′, provided with inwardly-projecting curved points, serving the purpose both of stops for the card and to raise the card slightly from the face of platen, as set forth.

WILLIAM M. CLARK.

Witnesses:

EDWIN K. LUNDY,

HERBERT J. H. PICKERING.