(No Model.)

2 Sheets—Sheet 1.

S. A. SPENCER.

CARD FEEDING ATTACHMENT FOR PRINTING PRESSES.

No. 314,203. Patented Mar. 17, 1885.

Fig. 1.

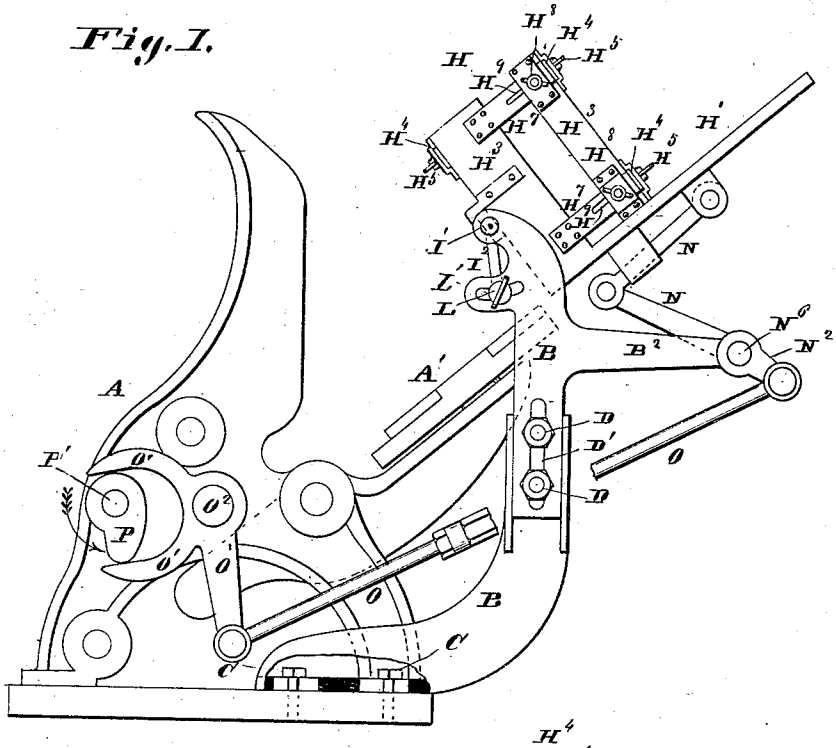
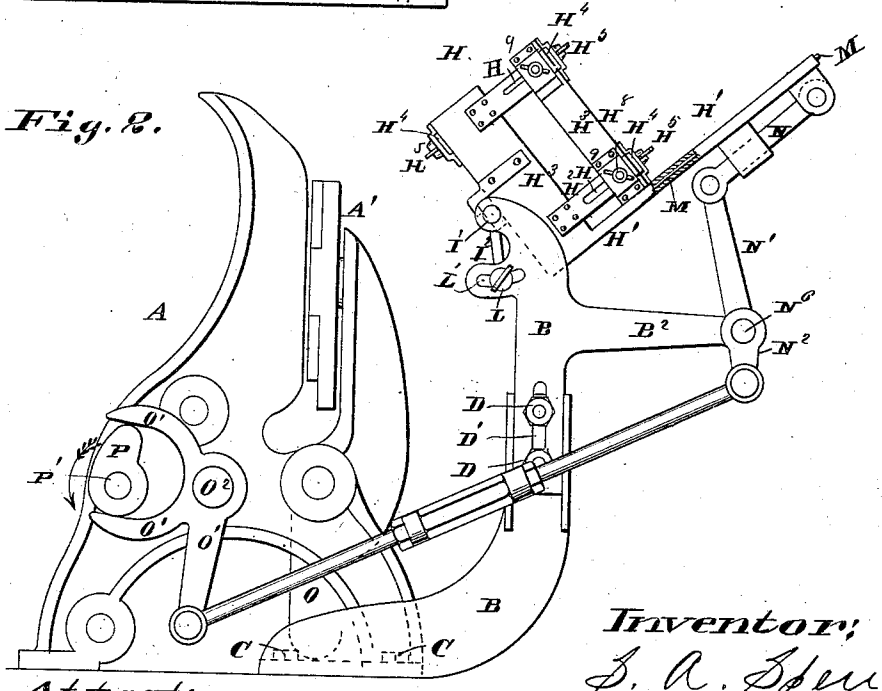


Fig. 2.



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(No Model.) 2 Sheets—Sheet 2.

S. A. SPENCER.

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Fig. 3.

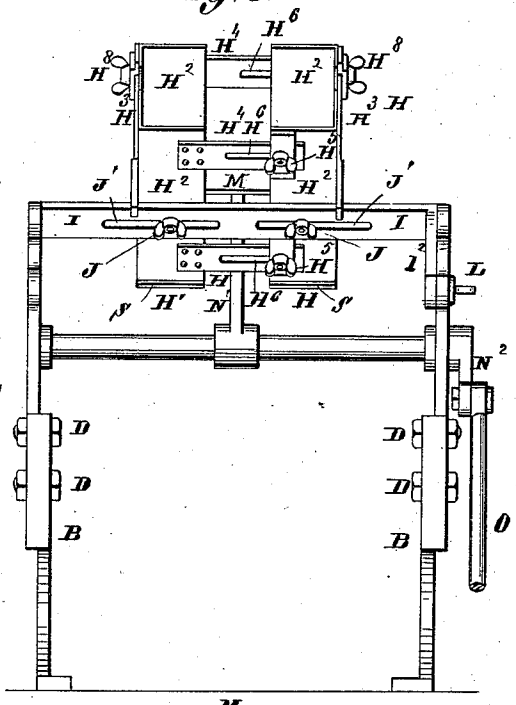


Fig. 5.

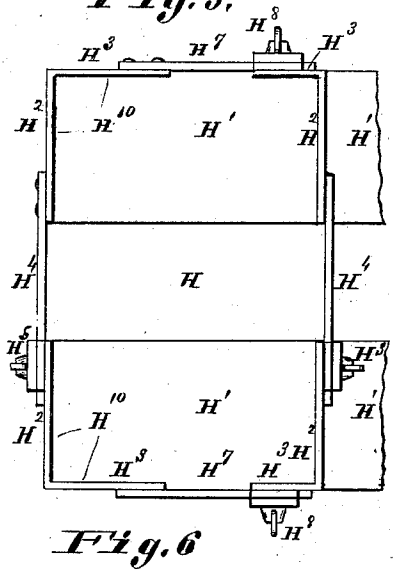


Fig. 6

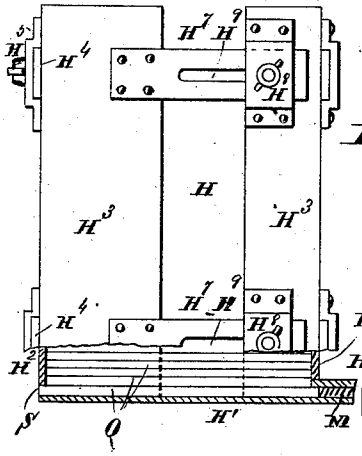
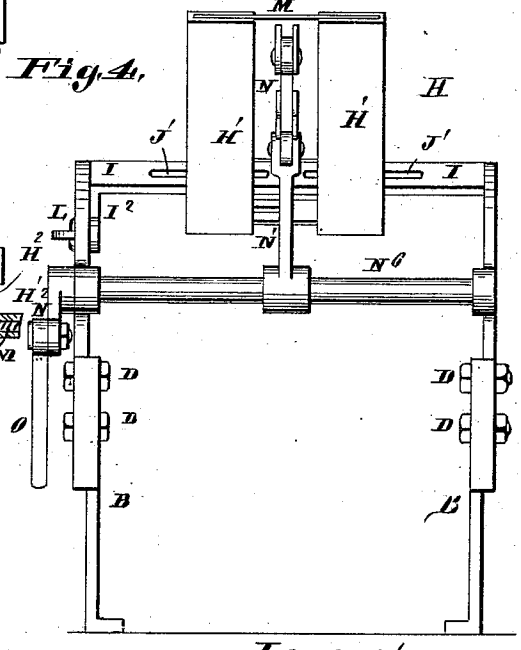


Fig. 4.



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UNITED STATES PATENT OFFICE.

SHERMAN A. SPENCER, OF ST. LOUIS, MISSOURI.

CARD-FEEDING ATTACHMENT FOR PRINTING-PRESSES.

SPECIFICATION forming part of Letters Patent No. 314,203, dated March 17, 1885.

Application filed April 19, 1884. (No model.)

To all whom it may concern:

Be it known that I, SHERMAN A. SPENCER, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Card-Feeding Attachments for Printing-Presses, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figures 1 and 2 are side elevations showing the parts in different positions. Fig. 3 is a front view of the attachment. Fig. 4 is a rear or back view of same. Fig. 5 is an enlarged top view of the box, and Fig. 6 is an enlarged side view, part in section, of same.

My invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Referring to the drawings, A represents a printing-press of any common construction, with a platen, A′, as usual.

B represents the frame of my attachment, connected to the bed-plate of the press by bolts C, or by other suitable means. Either the bed-plate or else the frame is preferably slotted to receive the bolts to admit of the frame being adjusted to or from the platen of the press, (see Fig. 1,) and the frame is preferably made in two parts, as shown, connected by bolts D, fitting in slots D′, to permit the card-box to be raised or lowered to suit presses of different heights.

H represents the box for holding the cards, consisting of bottom pieces, H′, side pieces, H^2, and end pieces, H^3. The side pieces are each made in two parts, connected by strips H^4, riveted or otherwise secured to one of the parts and made fast to the other part by set-screws H^5, fitting in slots H^6 in the strips, and the end pieces are likewise made in two parts, each connected in the same way by strips H^7 and set-screws H^8, the strips having slots H^9 to receive the set-screws. Each part of the side pieces is preferably made in one piece with the adjoining part of the end pieces, as shown in Fig. 5, and two of these parts—as, for instance, those marked H^{10}, Fig. 5—are secured to the bottom pieces, H′, and the box is thus held together, while it may be adjusted either as to length or width to suit cards of different sizes. In adjusting the box a block of the length and width of the cards to be printed may be employed, which would be removed after the set-screws are tightened up.

The box is supported on a bar or cross-piece, I, to which it is secured, preferably by set-screws J, fitting in slots J′ in the bar, (see Fig. 3,) to admit of the box being shifted to the right or left, as may be desired.

The bar has round bearings I′ on its ends, fitting in holes in the upper ends of the frame B, and on one end of the bar is an arm, I^2, that receives a set-screw, L, passing through a curved slot, L′, in the frame B, (see Figs. 1 and 2,) and thus the inclination of the box can be changed as may be desired and held to any adjustment.

The bottom pieces, H′, of the box extend back beyond the box proper, and behind the box they are thicker than beneath it, and are slotted or grooved to receive a sliding plate, M, which is connected by a link, N, to an arm, N′, on a shaft, N^6, journaled in projections B^2 of the frame B.

The shaft has a crank, N^2, on one end, connected by means of pitman O to one member of a bell-crank lever, O′, journaled on a stud, O^2, on the frame of the printing-press. The other member of the bell-crank lever consists of a yoke or fork or equivalent device, (as a ring,) which receives a cam, P, on a driving-shaft, P′, of the press.

Thus when the machine is put in motion the plate M is pulled down through means of its described connection with the shaft P′, through and over the bottom of the box, forcing out a card, Q, (see Fig. 6,) onto the platen A′, which is at this time in the position shown in Fig. 1, and then as the platen makes its movement the plate recedes and again advances and forces out another card by the time the platen gets back to the position shown in Fig. 1, and thus the operation goes on continuously, the cards being removed from the platen by any well-known automatic device. When the plate recedes, the cards move down by gravity, assisted by a weight, if desired, the distance of the thickness of the card forced out, so that another card is in position to be forced out by the plate. The front or lower

part of the box has an opening, as shown at S, Figs. 3 and 6, to allow the cards to be forced out by the plate.

The pitman O is made in two parts suitably connected, so that its length can be changed to correspond with the adjustment of the frame B.

The arm N′ can be shifted on the shaft N⁶ as the box H is moved laterally, as described.

I claim as my invention—

1. In a card-feeding attachment for printing-presses, the combination of the box, sliding plate, and mechanism, substantially as described, for operating the plate, the box being made in sections connected by slotted strips and set-screws, and having an elongated slotted bottom to receive the plate, substantially as set forth.

2. In a card-feeding attachment for printing-presses, the combination of the box, sliding plate, and mechanism, substantially as described, for operating the plate, the box being secured to an adjustable bar, by which the inclination of the box can be changed, substantially as set forth.

3. In a card-feeding attachment for printing-presses, the combination of the box, sliding plate, and mechanism, substantially as described, for operating the plate, the box being secured to a bar supported by the frame of the attachment, and having an arm with a set-screw working in a slot in the frame, substantially as and for the purpose set forth.

4. In a card-feeding attachment for printing-presses, the combination of the box, sliding plate, bell-crank lever, eccentric, pitman, crank, shaft to which the crank is secured, arm secured to the shaft, and link connecting the arm to the plate, substantially as set forth.

5. In a card-feeding attachment for printing-presses, the combination of the box, sliding plate, mechanism, substantially as described, for operating the plate, and the sectional adjustable frame for supporting the parts, all substantially as shown and described, for the purpose set forth.

SHERMAN A. SPENCER.

In presence of—
GEO. H. KNIGHT,
SAML. KNIGHT.