

No. 724,401.

PATENTED MAR. 31, 1903.

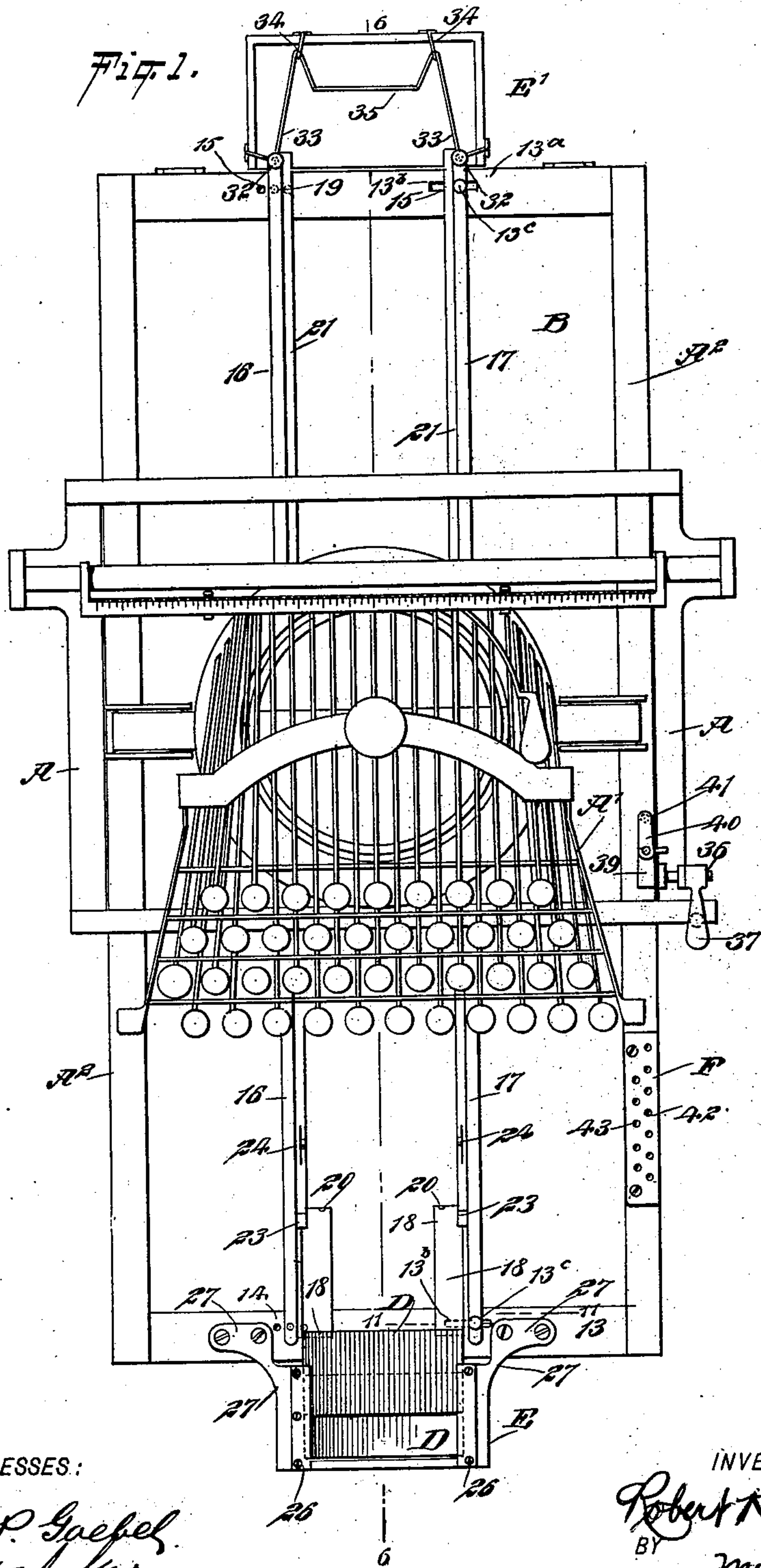
R. K. SLAUGHTER.

CARD CONTROLLING ATTACHMENT FOR TYPE WRITING MACHINES.

APPLICATION FILED FEB. 26, 1900.

NO MODEL.

3 SHEETS—SHEET 1.



WITNESSES:

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J. H. Decker

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ATTORNEYS

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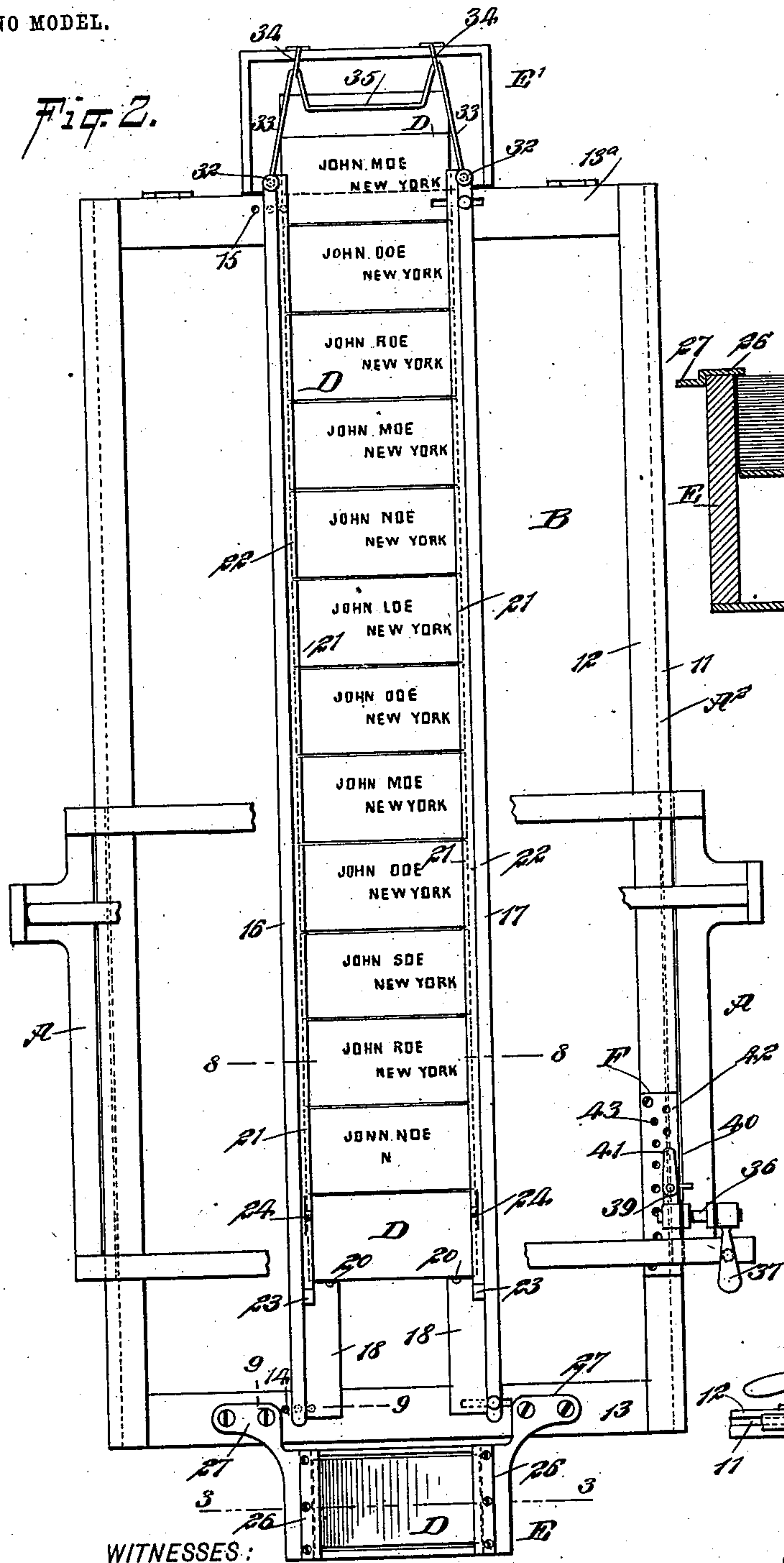
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3 SHEETS—SHEET 2.

NO MODEL.

Fig. 2.



WITNESSES:

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Fig. 3.

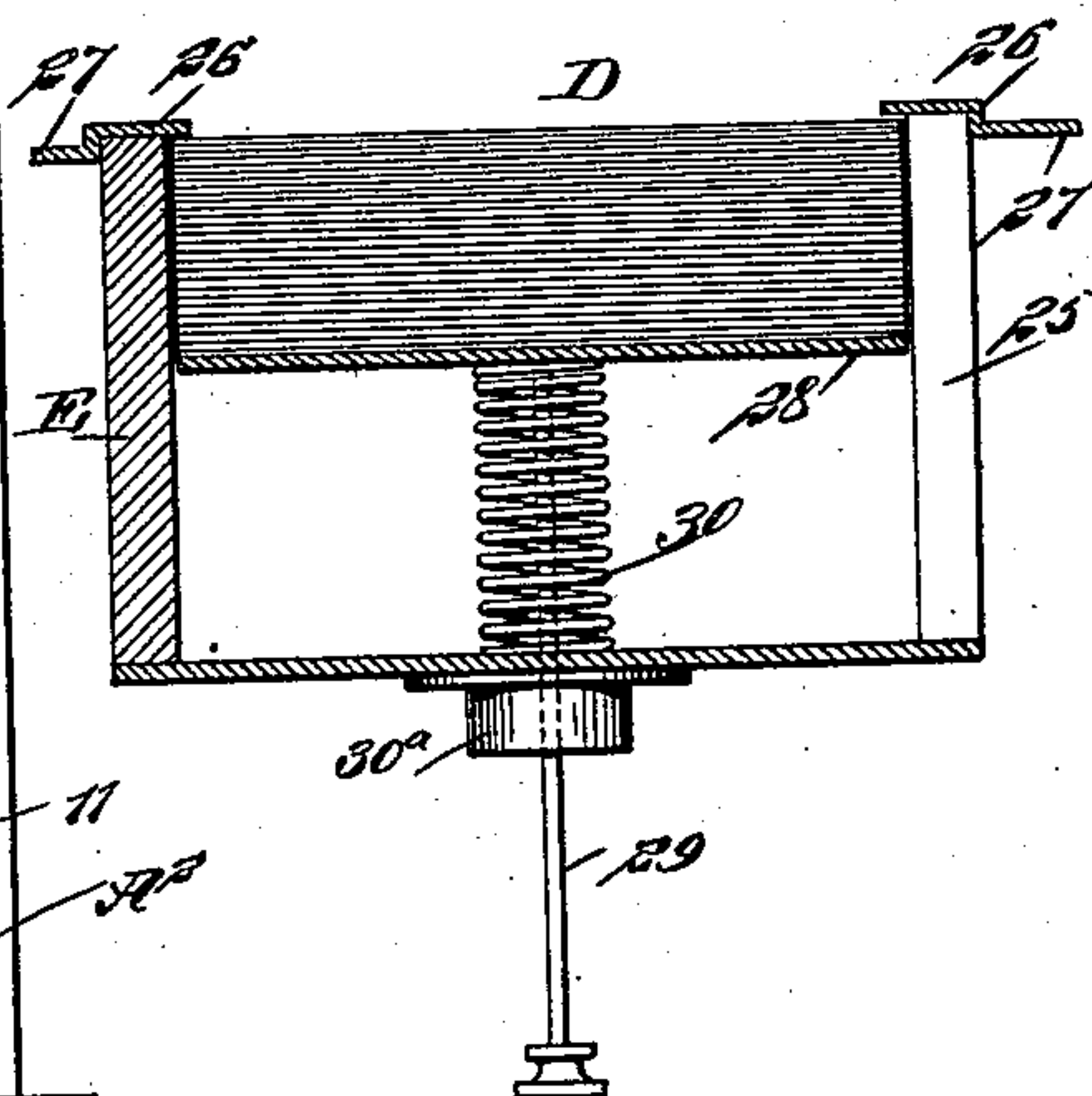


Fig. 4.

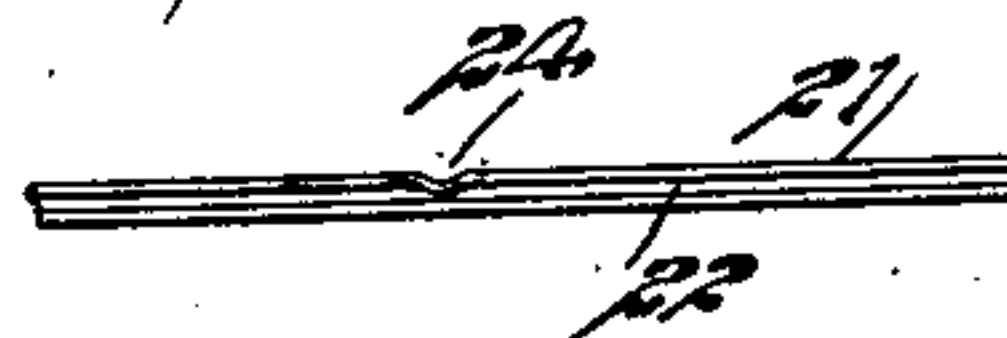
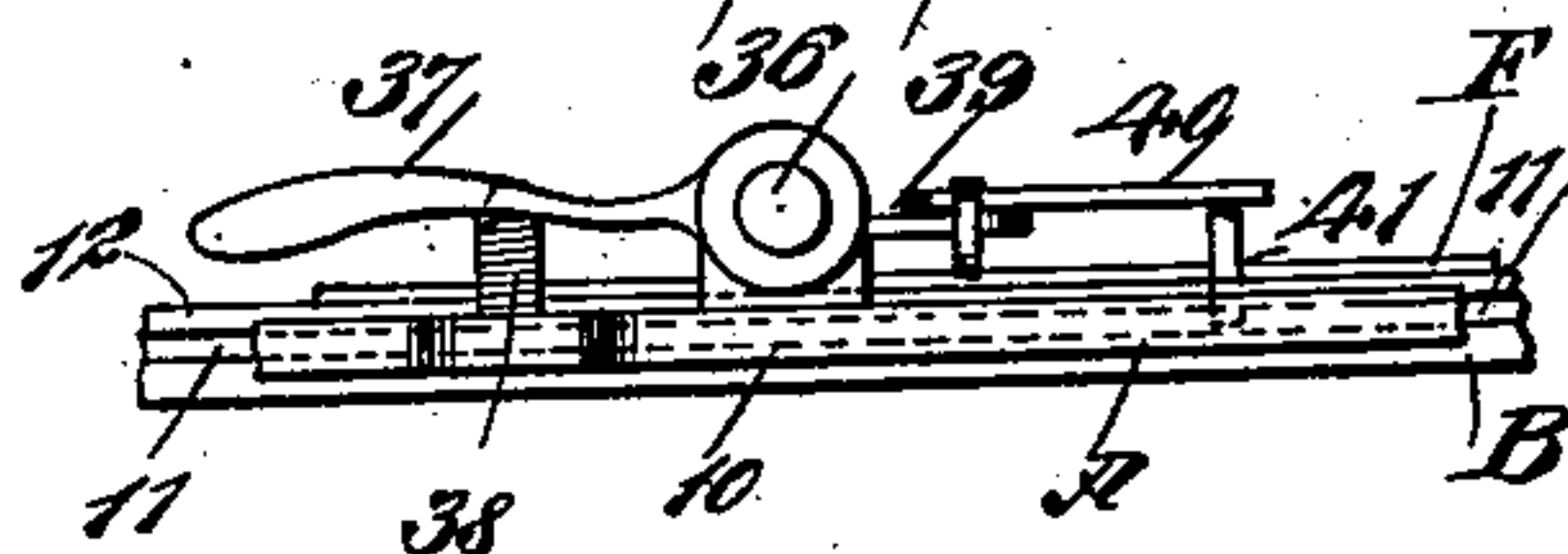


Fig. 5.



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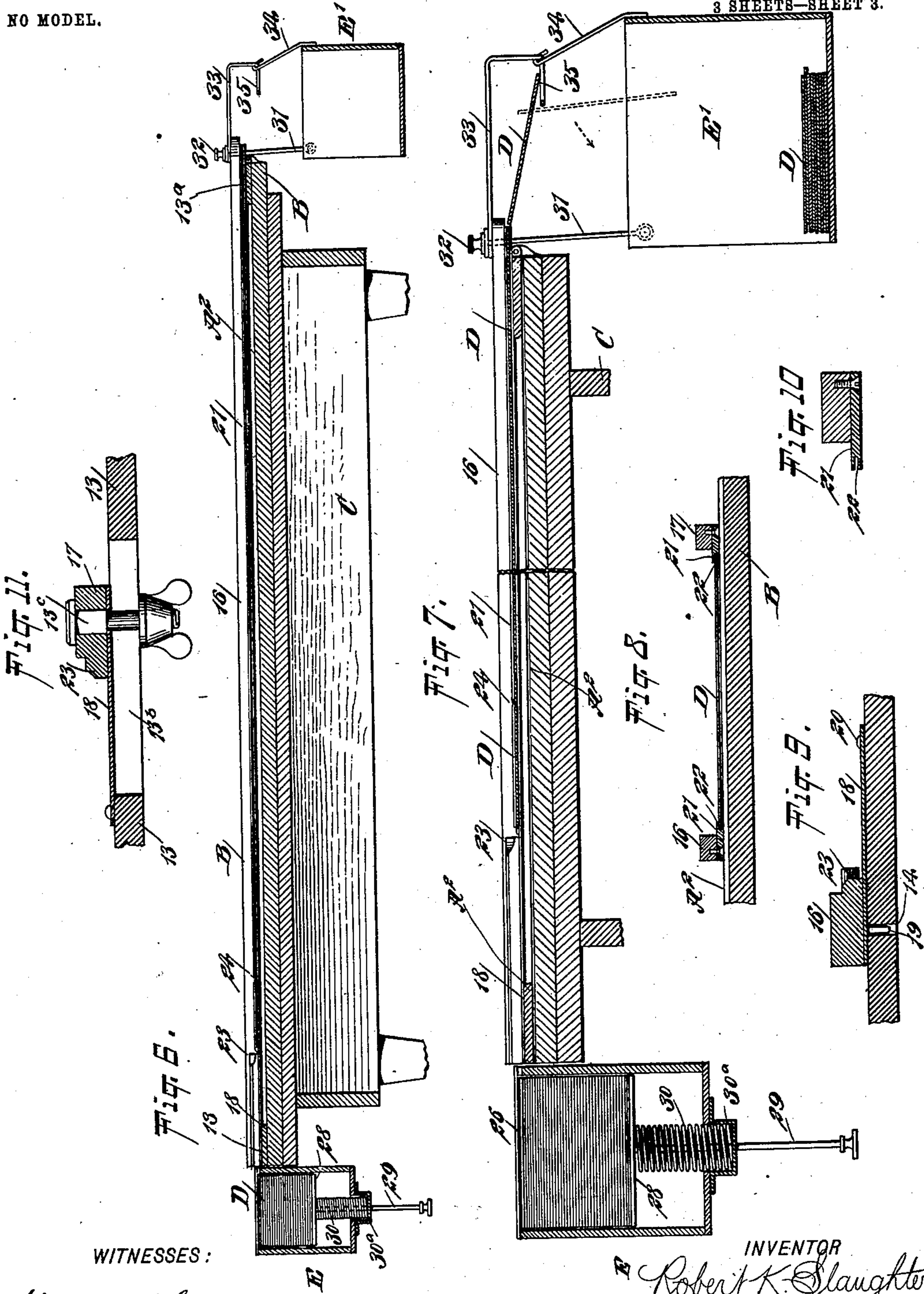
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CARD CONTROLLING ATTACHMENT FOR TYPE WRITING MACHINES.

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NO MODEL.

3 SHEETS—SHEET 3.



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UNITED STATES PATENT OFFICE.

ROBERT KEMP SLAUGHTER, OF BROOKLYN, NEW YORK, ASSIGNOR TO THE
ELLIOTT & HATCH BOOK TYPEWRITER COMPANY, OF NEW YORK, N. Y.

CARD-CONTROLLING ATTACHMENT FOR TYPE-WRITING MACHINES.

SPECIFICATION forming part of Letters Patent No. 724,401, dated March 31, 1903.

Application filed February 26, 1900. Serial No. 6,537. (No model.)

To all whom it may concern:

Be it known that I, ROBERT KEMP SLAUGHTER, a citizen of the United States, residing at the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Card-Controlling Attachment for Type-Writing Machines, of which the following is a full, clear, and exact description.

10 The object of my invention is to provide an attachment for type-writing machines, including an interchangeable line-spacer, so constructed that the machine may be set to print upon lines any desired distance apart.

15 A further object of the invention is to provide an attachment for type-writing machines especially adapted for rapidly feeding postal cards, index and other cards, envelopes, and the like in position on the platen, where
20 they may be printed upon and automatically carried over the platen and deposited in a receptacle at an edge of the platen or otherwise conveniently located.

Another object of the invention is to provide
25 an attachment of the character set forth which will not require the machine to be raised after cards have been placed in a supply-receptacle and fed to guide devices, since thereafter, by the customary action of the
30 machine, the cards may be printed and automatically conducted to and deposited wherever desired.

The invention consists in the novel construction and combination of the several
35 parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

40 Figure 1 is a plan view of a type-writing machine of that character which is slid over a platen and in which the body of the machine may be raised and lowered at will, the platen having the attachment applied thereto, the attachment also appearing in plan. Fig. 2 is a plan view of the platen and frame and a portion of the bed of the type-writing machine, also a plan view of the attachment, illustrating the manner in which
50 it operates. Fig. 3 is a vertical section on

the line 3 3 in Fig. 2 through the supply-receptacle adapted to receive the cards or other articles to be printed upon. Fig. 4 is an inner edge view of that portion of the guide-plates which is adapted to receive the cards or envelopes while being printed, illustrating a means for retaining the cards in position. Fig. 5 is an edge view of a portion of the frame of the type-writing machine and a portion of the bed, showing in side elevation the interchangeable line-spacing mechanism shown in plan in Fig. 2. Fig. 6 is a longitudinal vertical section taken through the platen and through the attachment, the section being on the line 6 6 of Fig. 1. Fig. 7 is a view similar to Fig. 6, drawn on a larger scale. Fig. 8 is a transverse section through the platen and through the attachment, the section being taken practically on the line 8 8 of Fig. 2. Fig. 9 is a section through a portion of the attachment and a portion of the frame of the machine, the section being taken on the line 9 9 of Fig. 2. Fig. 10 is a transverse section through one of the guard-rails and guide-plates, and Fig. 11 is a section on the line 11 11 of Fig. 1.

A represents the bed of the type-writing machine; A', the body of the machine supported by the said bed.

A² represents the frame upon which the machine travels and which is hinged at its rear end to the rear portion of the platen B, and C is the support for the entire device.

The bed A of the machine is provided with longitudinal ribs 10 upon its inner side edges, adapted to enter and slide in longitudinal grooves 11, produced in the outer side edges of the sides 12 of the frame A², the sides 12 of said frame being connected at the front and at the rear by cross-bars 13 and 13^a. Apertures 14 are made in the front cross-bar of the frame at one side of the center thereof, and similar apertures 15 are produced in like manner in the rear cross-bar 13^a of the frame.

Two parallel guard-rails 16 and 17 are employed. These rails extend from the front to the rear cross-bar of the frame A², one at each side of the center, and at the forward portions of the guard-rails 16 and 17 tracks 18 are located, which tracks are in the form of plates and extend in direction of each other

from the inner edges of the guard-rails, the guard-rails being located upon the said track-plates, as shown in Fig. 9. The guard-rail 16 is shown provided at its ends with a pin 19, (see Fig. 9,) and these pins are adapted to enter any one of the apertures 14 and 15 in the frame. This adjustment of the guard-rails 16 is made in order that the space between the rails may be made wide or narrow to receive cards or envelopes D of any required length. Although the rail 16 may be adjustable, as stated, it may be stationary, or even when adjustable the opposing rail 17 is also adjustable, and this latter rail is preferably the one which is adjusted to accommodate cards of different widths. This is usually accomplished by producing a slot 13^b in the front cross-bar 13, as shown in Fig. 11, and a corresponding slot in the rear cross-bar 13^a, and set-screws 13^c are passed through the rail 17 and slots 13^b and are provided at their lower ends with thumb-nuts or their equivalents. In this manner the rail 17 may be conveniently and quickly adjusted to any necessary position. Each track-plate is provided at its rear end upon its upper surface with a slight projection 20, (shown in Figs. 1, 2, and 9,) the said projection being adapted to engage with the forward edge of the card or envelop D that is being printed upon. Each guard-rail is attached to the upper face of a guide-plate 21, and these guide-plates extend from the rear portions of the track-rails 16 to the rear ends of the guard-rails, and they likewise extend beyond the inner longitudinal faces of the guard-rails 16 and 17, as is shown best in Fig. 2. A longitudinal groove 22 is produced in the inner longitudinal edge of each guide-plate 21, as is shown best in Fig. 10, and, as illustrated in Figs. 2 and 8, the ends of the envelopes or cards D enter these grooves 22 and are adapted to slide therein. The cards are to be fed to the guide-plates over the track-rails 18, and as it may happen that the edges of the cards or envelopes may be slightly curled, and thus prevent them from cleanly entering the grooves 22, guides 23, inclined in direction of the grooves 22, are formed upon the inner faces of the guard-rails 16 and 17, as best shown in Figs. 6, 7, and 9. It is necessary that the card or envelop which is to be printed upon and which at that time is at the forward end of the guide-plates, as shown in Fig. 2, should be held from slipping. To that end a depression is made in the upper edge of the guide-plates, forming an offset 24 in the upper wall of the grooves 22 in said guide-plates, which offsets bind sufficiently against the card or envelop to be printed to hold it stationary; but the said offsets do not offer sufficient resistance to prevent the printed card from being readily pushed rearward in the grooves of the guide-plate by the next card which is entered into said grooves in position to be printed.

A receptacle E is located at the forward end

of the frame A² of the machine. This receptacle, as shown in Fig. 3, is closed at three sides and at the bottom; but one side 25 is open, so that a pack of cards or envelopes may be readily introduced into the receptacle. The upper edge of the receptacle E is raised slightly above the upper face of the frame A², and at opposite sides 25 of the receptacle, at the top, a plate 26 is secured, which extends inward and prevents the cards or envelopes when pushed upward from leaving the receptacle. The plates 26 are provided with flanges 27, through the medium of which the receptacle E is secured to the frame, as shown in Fig. 2.

A follower 28 is held to slide in the receptacle E. A rod 29 is attached to this follower and extends downward through an opening in the bottom of the receptacle, and a spring 30 is coiled around the said rod, the upper end whereof bears against the follower 28, while the lower end is preferably made to enter a socket 30^a, formed at the bottom of the receptacle E, as is best shown in Figs. 3, 6, and 7. It will be observed that the spring 30 serves to force upward the cards or envelopes that have been placed in the receptacle E, and the spring 30 is of sufficient strength to carry the undermost card or envelop in position to be readily slid over the frame A² upon the tracks 18 and from thence to the guide-plates 21.

A second receptacle E' is supported from the rear portion of the frame A², and both of the receptacles E and E' face the space between the guard-rails 16 and 17. The rear receptacle E', which is adapted as a repository for the printed matter, is open at the top and at one side, preferably the side which faces the front of the machine. The rear receptacle E' is usually supported by rods 31, attached to its forward portion, which rods are carried up through the guard-rails and are provided at their upper ends with nuts 32. The said nuts also serve to hold a yoke 33, which extends rearward and connects with bails 34, attached to the rear portion of the receptacle E', and the yoke 33 is provided at its rear portion with a horizontal extension 35, that is carried over the upper portion of the receptacle E', as is best shown in Figs. 1, 2, 6, and 7. As the printed matter is fed from off the platen by the introduction of the matter to be printed the printed matter in falling into the repository E' will strike the projection 35 from the yoke 33, as shown in dotted lines in Fig. 7, and in falling will drop flat into the repository, generally with the printed side uppermost.

In connection with the device or attachment above described I preferably employ what I term an "interchangeable line-spacer," and the object of this device is to insure the machine printing upon lines at certain distances apart without the necessity of the operator raising the machine to ascertain if the registry is correct. This attachment consists

in journaling a shaft 36 in suitable bearings at the front right-hand portion of the bed A of the type-writing machine, as illustrated in Figs. 1, 2, and 5. The shaft is provided with a lever 37 at its outer end that extends in direction of the operator and is held in normal position by a spring 38, placed beneath it, as shown particularly in Fig. 5, and at the opposite end of the said shaft 36 an arm 39 is secured, upon which arm a finger 40 is pivoted, carrying a pin 41. This pin is adapted to enter any one of two rows of apertures 42 and 43, produced in a plate F, which plate is secured in any suitable or approved manner to the upper face of the right-hand side member of the frame A² near the front, as is particularly shown in Figs. 1 and 2. Preferably the apertures in one row are opposite the central portion of the space between the apertures of the outer row, for example, and the distance between the apertures of the outer row preferably corresponds to the distance between the lines of printed matter to be produced on the card or envelop, and if it be desired to print closer upon any portion of the card or envelop than at other portions the pin 41 instead of being placed in an aperture 42 may be placed in an aperture 43, or the apertures 43 may be wider apart, so that the lines on one side of the envelop or card may be at greater distances apart than the lines on the opposite side. Each time that the body of the typewriter is moved back on the frame the lever 37 is depressed, and the pin 41 is carried out from the aperture in which it is placed. When the first line is to be printed, the pin is made to enter the first aperture in the line that is used, and when the machine is returned forward to print another line the pin 41 will automatically enter the second aperture, and so on until the desired number of lines have been printed. The plates F are interchangeable—that is to say, a number of plates may accompany the machine—each plate having the apertures arranged therein to insure the lines being a given distance apart.

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

1. In a card-controlling attachment for type-writing machines, the combination with a frame, upon which the machine is adapted to travel, and parallel and spaced rails extending from end to end of the frame, of track-plates at the forward ends of the rails and each provided at its inner end with an upwardly-extending projection, and grooved guide-plates extending from the track-plates to the rear ends of the said rails, substantially as described.

2. In a card-controlling attachment for type-writing machines, the combination with a frame upon which the machine is adapted to travel, and parallel and spaced rails extending from end to end of the frame, of track-plates at the forward ends of the rails, and grooved guide-plates extending from the

track-plates to the rear ends of the said rails and each having a projection on one wall of its groove, substantially as described.

3. In a card-controlling attachment for type-writing machines, the combination with a frame upon which the machine is mounted to travel, and parallel and spaced rails extending from end to end of the frame, of track-plates at the forward ends of the rails and each provided with an upwardly-extending projection at its inner end, and grooved guide-plates extending from the track-plates to the rear ends of the said rails and each having a projection on one wall of its groove, substantially as described.

4. In a card-controlling attachment for type-writing machines, the combination with a frame upon which the machine is adapted to travel, of spaced parallel guard-rails extending from the front to the rear of the frame, and guide-plates secured to the lower faces of the guard-rails and having longitudinal grooves in their opposing faces to receive the edges of the card or the like, said grooves having offsets formed in their upper walls, substantially as and for the purpose set forth.

5. In a card-controlling attachment for type-writing machines, the combination with a frame upon which the machine is adapted to travel, of parallel and spaced guard-rails extending from end to end of the frame, track-plates at the forward ends of the guard-rails, and grooved guide-plates extending from the track-plates to the rear ends of the guard-rails and provided with offsets in the upper walls of their grooves, substantially as described.

6. In a card-controlling attachment for type-writing machines, the combination with a frame upon which the machine is adapted to travel, of parallel and spaced guard-rails extending from end to end of the frame, track-plates at the forward ends of the rails, and grooved guide-plates extending from the track-plates to the rear ends of the guard-rails, the guard-rails being provided with guides inclined in direction of the grooves of the guide-plates, substantially as described.

7. In a card-controlling attachment for type-writing machines, the combination with a frame upon which the machine is adapted to travel, of parallel and spaced guard-rails adjustably secured to the ends of the frame, track-plates at the forward ends of the guard-rails and extending inwardly therefrom toward each other, guide-plates extending from the track-plates to the rear ends of the guard-rails, and having longitudinal grooves in their opposing edges, and a supply-receptacle at the forward end of the frame and provided with a spring-pressed follower, substantially as described.

8. In a card-controlling attachment for type-writing machines, the combination with a frame upon which the machine is mounted to travel, of spaced and parallel grooved guides carried by the frame, for receiving the

edges of a card or the like, and a receptacle-supporting yoke projecting from the rear end of the frame, said yoke having a horizontal and inwardly-projecting extension adapted
5 to be engaged by the printed card, substantially as described.

9. In a card-controlling attachment for type-writing machines, the combination with a frame provided with a series of apertures,
10 and the bed of a type-writing machine mounted to slide on the said frame, of a shaft mounted on the bed of the machine, and hav-

ing a handle at one end and an arm at the other end, and a finger pivoted to said arm and provided with a pin for engaging one of
15 the apertures of the frame, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ROBERT KEMP SLAUGHTER.

Witnesses:

• J. FRED. ACKER,
EVERARD BOLTON MARSHALL.