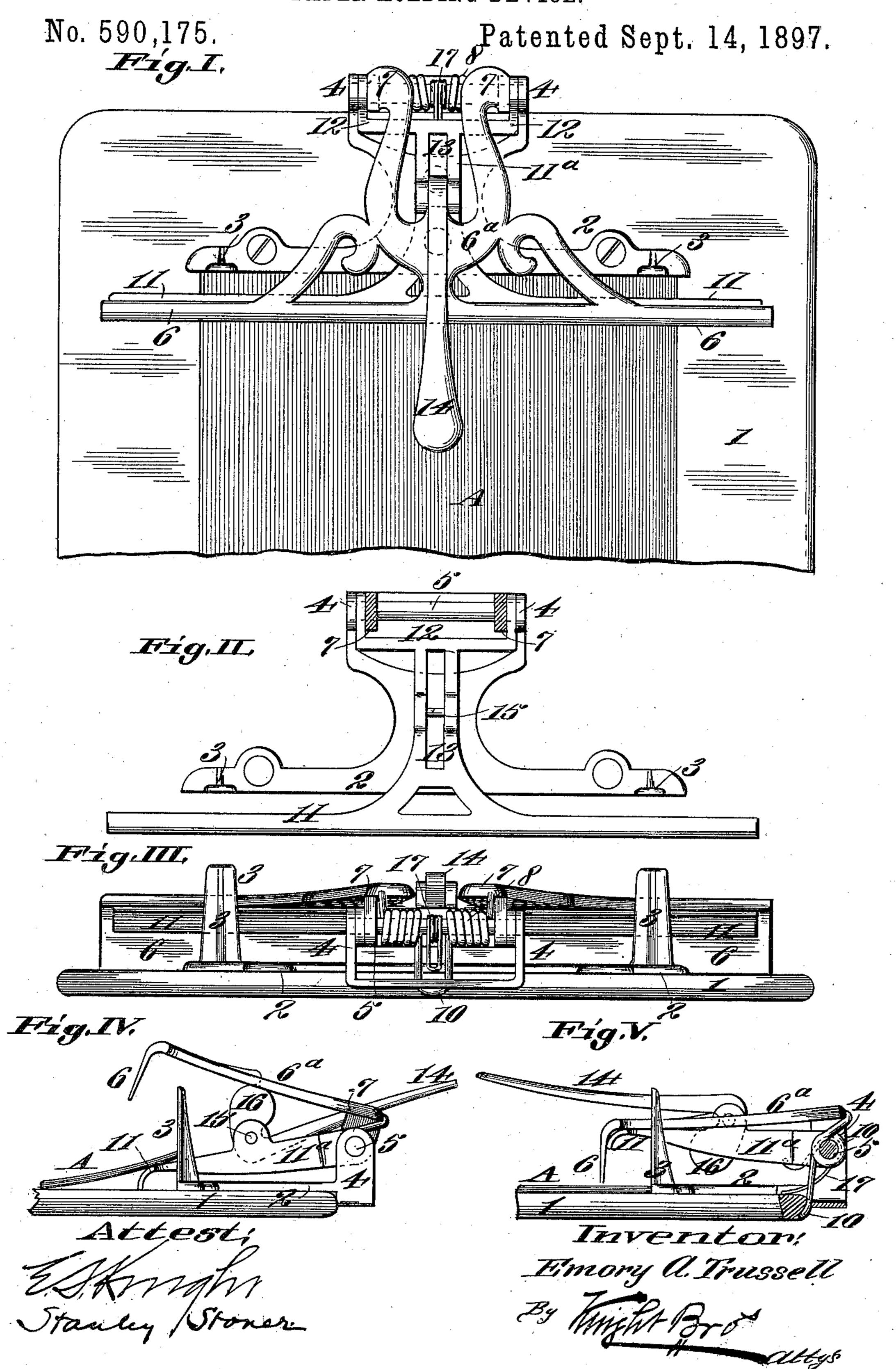
E. A. TRUSSELL. PAPER HOLDING DEVICE.



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No. 590,175.

Patented Sept. 14, 1897.

Fig, VI.

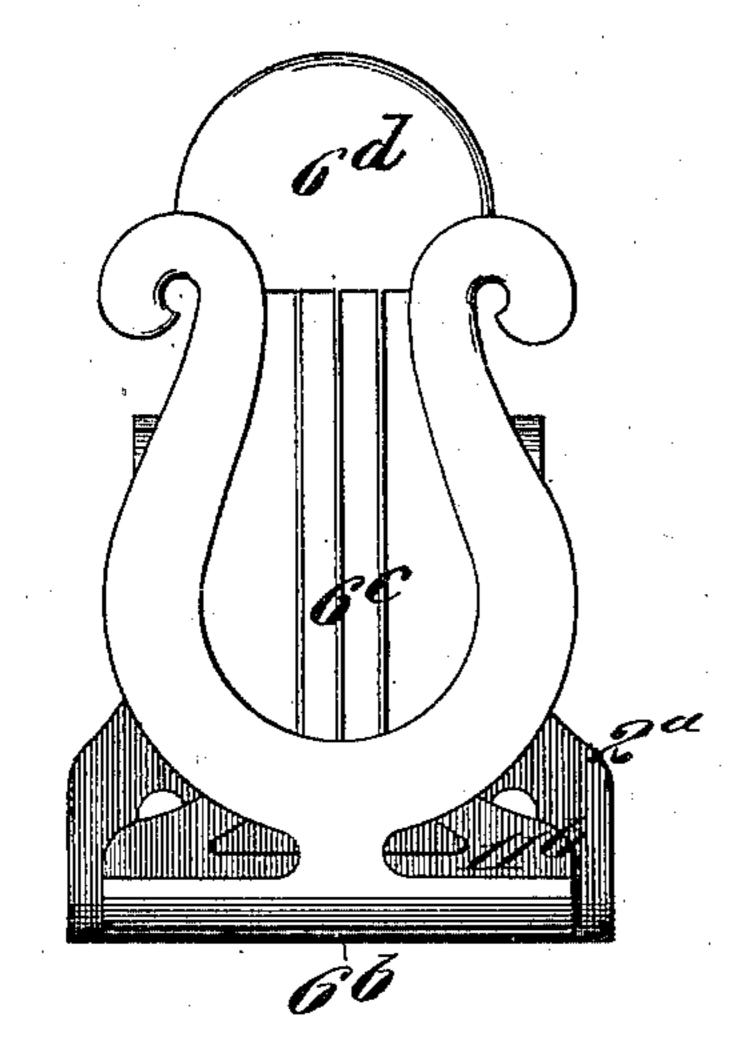
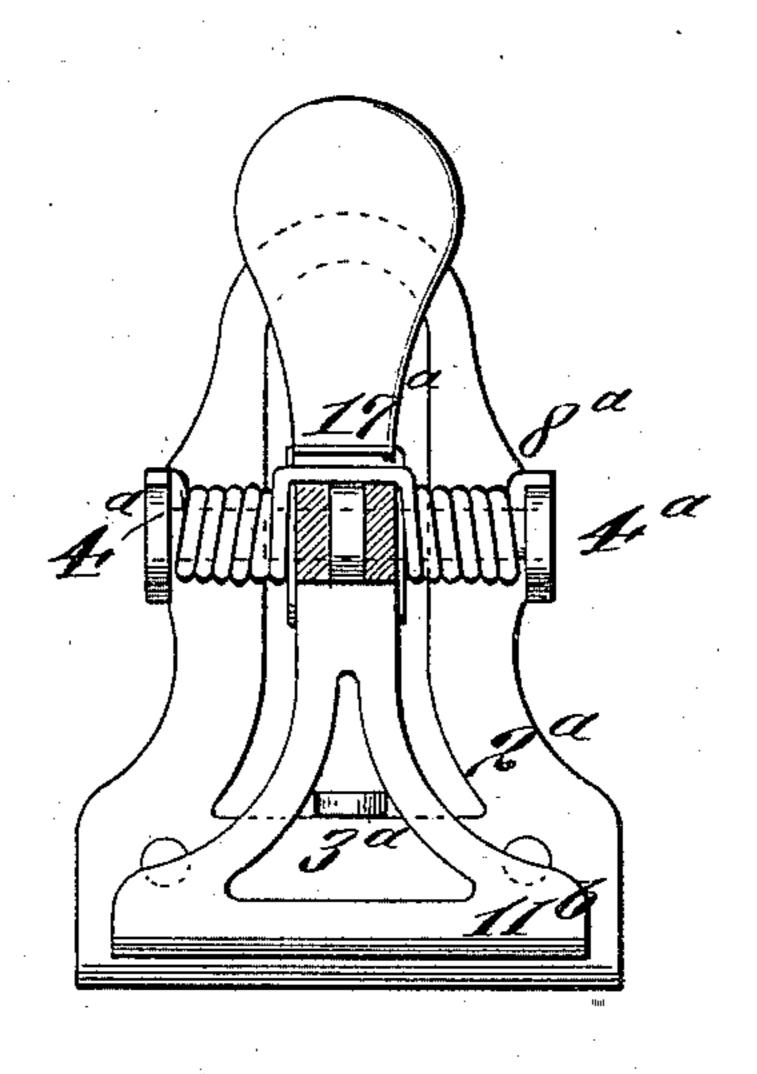
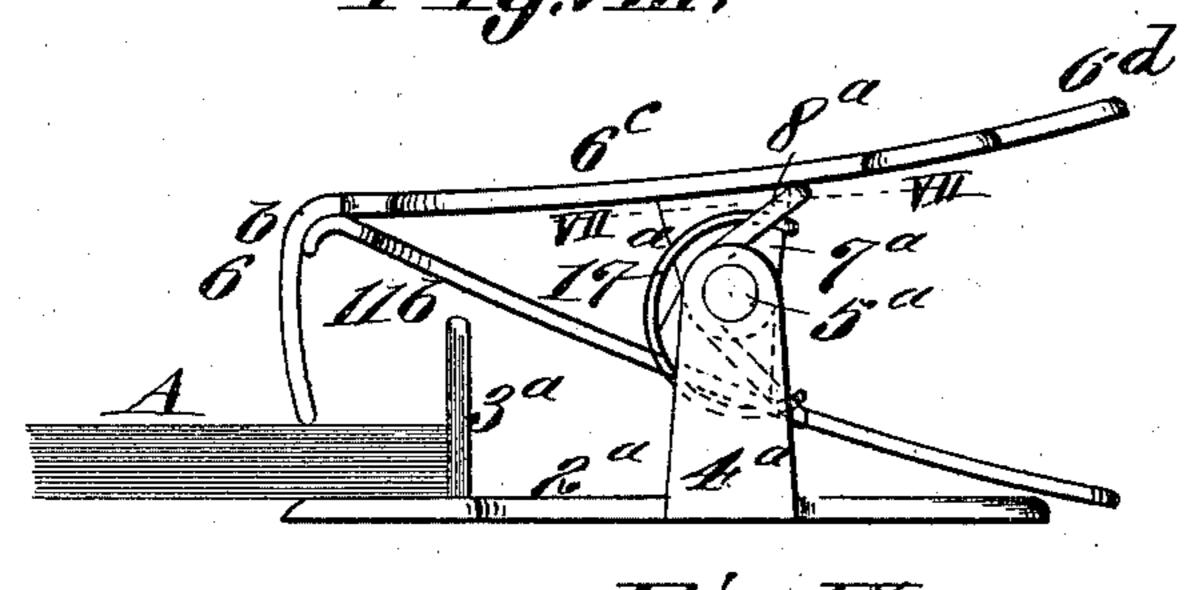


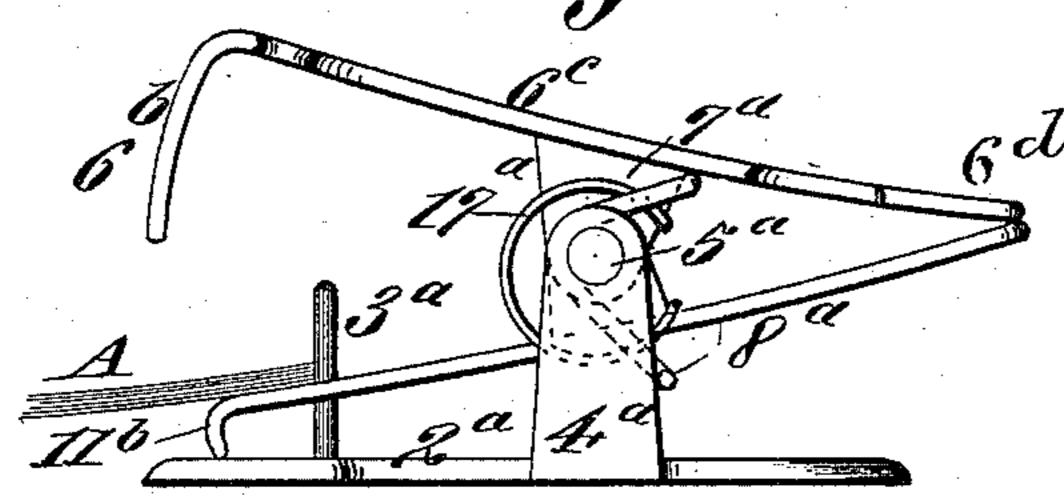
Fig.VII



Fzg.VIII.



HTGIX.



Stanley Stoner

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UNITED STATES PATENT OFFICE.

EMORY A. TRUSSELL, OF ST. LOUIS, MISSOURI, ASSIGNOR TO SIEBER & TRUSSELL MANUFACTURING CO., OF SAME PLACE.

PAPER-HOLDING DEVICE.

SPECIFICATION forming part of Letters Patent No. 590,175, dated September 14, 1897.

Application filed June 9, 1897. Serial No. 640,006. (No model.)

To all whom it may concern:

Be it known that I, EMORY A. TRUSSELL, a resident of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Paper-Holding Devices, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part

of this specification.

My invention relates to a device for holding sheets of paper, the device being of a construction capable of receiving the insertion of a quantity of sheets, one or more at a time, and holding those first inserted firmly while the subsequently-inserted sheets are being inserted. The device is capable of employment upon a clip-board or as a paper-holding clip without a board, or it is capable of employment in connection with bookbinding-machines, such as shown and described in my application for Letters Patent of the United States, filed February 15, 1897, under Serial No. 623,552.

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

in the claims.

Referring to the drawings, Figure 1 is a top view of my improvement applied to a clipboard. Fig. 2 is a top view of the base-frame 30 and secondary clip-bar, showing the pivotarms of the main clip-bar in section, the controlling-spring and operating-lever being omitted. Fig. 3 is a rear view of the device shown in Fig. 1. Fig. 4 is a side view showing the main clip-bar elevated and the secondary bar depressed. Fig. 5 is a side view showing the main clip-bar depressed and the secondary bar elevated. Fig. 6 is a face view of a modified form of the device. Fig. 7 illus-40 trates a section taken on line VII VII, Fig. 8, and shows the parts beneath said line in face view. Fig. 8 is a side view of the modified form with the main clip-bar depressed and the secondary bar elevated. Fig. 9 is a side view showing the bars in the reverse position from that shown in Fig. 8.

In the drawings, and referring first to Figs. 1 to 5, inclusive, 1 designates a clip-board, to which is secured a base-frame 2. On the 5° frame 2 are uprights 3, that form stops to

limit the extent of insertion of the sheets of paper when placed in the device. At the rear portion of the base-frame are hanger-arms 4, in which a shaft 5 is mounted.

6 designates the main clip-bar, provided 55 with arms 7, that are pivoted to the shaft 5.

On the shaft 5 is a spring 8, wound in opposite direction from the central portion of said shaft, having a central loop 10, that bears against the board 1, and having its ends restoring in contact with the arms 7, whereby the pressure of the spring is caused to be exerted upon the clip-bar 6 for the purpose of throwing it downward.

11 designates a secondary clip-bar, having 65 arms 12, pivoted to the shaft 5. This secondary bar is provided with a slot 13, in which an operating-lever 14 is pivotally mounted

upon a pin 15.

The operating-lever is provided with a cam 70 16, that a backward throw of the lever moves into contact with and rides against the under side of the frame 6ª of the main clip-bar 6, thus causing the main clip-bar to be elevated, and the pressure of the spring 8 upon the main 75 clip-bar forms a pressure upon such main bar sufficient to cause the secondary bar to be depressed on the main bar being elevated by the cam. When the operating-lever is again thrown forward, the spring 8 forces the main 8c bar downward and the secondary bar is elevated by means of a spring 17 on the shaft 5, which spring bears against the rear portion of the frame 11^a of the bar 11 and is in contact with the board 1.

In the operation of the device the operating-lever is thrown rearwardly, as seen in Fig. 4, and one or more sheets of paper A are inserted with their ends resting upon the bar 11 and against the stops 3, which limit the extent of their insertion. The operating-lever is then thrown forward into the position shown in Fig. 5, in which action the main bar 6 first comes into contact with the sheets of paper and holds them firmly into contact with the 95 board 1. When the bar 6 has reached contact with the sheet or sheets of paper inserted, which it does before the lever has reached the limit of its forward movement, the spring 17 causes the secondary bar 11 to be elevated, 100

thus freeing it from the paper previously resting upon it, and it ascends to the position in which it is shown in Fig. 5. When it is desired to insert additional sheets of paper, the 5 operating-lever is again thrown backward, and before the main clip-bar leaves contact with the inserted paper the secondary bar reaches contact therewith and holds the inserted paper firmly while the additional paper to is inserted in the same manner as before and the main bar is descending upon the paper,

as before described.

In the modified form of device shown in Figs. 6 to 9, inclusive, 2ª designates the base-15 frame, provided with a stop 3a and hangerarms 4a. 6b designates the main clip-bar. The frame 6° carries arms 7°, that are pivotally mounted upon the shaft 5a, supported in the hanger-arms 4a. The rear end of the frame 20 6° is provided with a finger-hold 6d. The main clip-bar 6b is depressed by means of a spring 8a, the ends of which bear against the hangerarms 4^a, while its central loop bears against the frame 6°. The secondary clip-bar 11^b is 25 pivotally connected to the shaft 5° and is controlled by a spring 17^a, that bears against the frame of the main clip-bar and against the secondary bar, by means of which spring the secondary bar is held normally with its for-30 ward end elevated, as shown in Fig. 8. In so far as regards the reciprocating action of the clip-bars the operation and function of device shown in Figs. 1 to 5, inclusive, and 6 to 9, inclusive, is identical.

In the operation of the modified form the papers may be inserted by elevating the main bar and placing it in the position shown in Fig. 8, or by grasping the rear finger-holds of both bars the secondary bar will be depressed, 40 as shown in Fig. 9, and the main bar will be elevated. The papers may then be inserted upon the secondary bar, as illustrated in Fig. 9, in the same manner as described with relation to the main form of device, and on the 45 lowering of the main bar by its release from the grasp of the operator the secondary bar will ascend under the pressure of the spring 17^a.

In the employment of the device shown in Figs. 1 to 5, inclusive, the sheets of paper 50 may be all removed at once by throwing the lever 14 rearwardly and depressing it, thus elevating both of the bars and relieving the papers from their pressure. A body of sheets may also be inserted by operating the parts 55 in the same manner.

In the form of device shown in Figs. 6 to 9, inclusive, the same result may be accomplished by elevating both of the bars 6a and

11^a simultaneously.

I claim as my invention—

1. In a paper-holding device, the combination of a base, a pair of spring-controlled paper-gripping bars, the gripping portion of one of which is arranged forward of the gripping 65 portion of the other, said bars being arranged to be alternately moved toward and from said

base, and means through which said bars may be alternately moved, one toward said base and the other away from said base; substantially as described.

2. In a paper-holding device, the combination of a base, a pair of spring-controlled paper-gripping bars, the gripping portion of one of which is arranged forward of the gripping portion of the other, said bars being arranged 75 to be alternately moved toward and from said base, and a lever through means of which said bars may be alternately moved one toward said base and the other away from said base; substantially as and for the purpose set forth. 80

3. In a paper-helding device, the combination of a base, a main bar, a spring adapted to throw said bar toward said base, a secondary bar located in the rear of said main bar, and a spring adapted to elevate said second- 85 ary bar, substantially as and for the purpose

set forth.

4. In a paper-holding device, the combination of a base, a main bar, a spring adapted to throw said bar toward said base, a second- 90 ary bar located in the rear of said main bar, a spring adapted to elevate said secondary bar, and means for elevating said main bar, substantially as and for the purpose set forth.

5. In a paper-holding device, the combina- 95 tion of a base, a main bar, a spring adapted to throw said bar toward said base, a secondary bar located in the rear of said main bar, a spring adapted to elevate said secondary bar, and a lever arranged to elevate said main 100 bar, substantially as and for the purpose set forth.

6. In a paper-holding device, the combination of a base, a main bar, a spring adapted to throw said bar toward said base, a second- 105 ary bar located in the rear of said main bar, a spring adapted to elevate said secondary bar, and a lever provided with a cam adapted to elevate said main bar, substantially as and

for the purpose set forth.

7. In a paper-holding device, the combination of a base, a main bar pivotally connected to said base, a spring adapted to throw said main bar toward said base, a secondary bar pivotally connected to said base, a spring 115 adapted to elevate said secondary bar, and a lever arranged to elevate said main bar and depress said secondary bar, substantially as and for the purpose set forth.

8. In a paper-holding device, the combina- 120 tion of a base, a main bar pivotally connected to said base, a spring adapted to throw said bar toward said base, a secondary bar pivotally connected to said base, a spring adapted to elevate said secondary bar, and a lever pro- 125 vided with a cam arranged to elevate said main bar and throw said secondary bar toward said base, substantially as and for the purpose set forth.

9. In a paper-holding device, the combina- 130 tion of a base, a main bar pivotally connected to said base, a spring adapted to throw said

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bar toward said base, a secondary bar pivotally connected to said base, a spring adapted to elevate said secondary bar, a lever arranged to elevate said main bar and throw said secondary bar toward said base, and stops adapted to limit the extent of insertion of a sheet of paper beneath said main bar or both of

said bars, substantially as and for the purpose set forth.

E. A. TRUSSELL.

In presence of— E. S. KNIGHT, E. C. MOORE.