

(No Model.)

2 Sheets—Sheet 1.

J. LANE.  
STOP ACTION FOR REED ORGANS.

No. 411,453.

Patented Sept. 24, 1889.

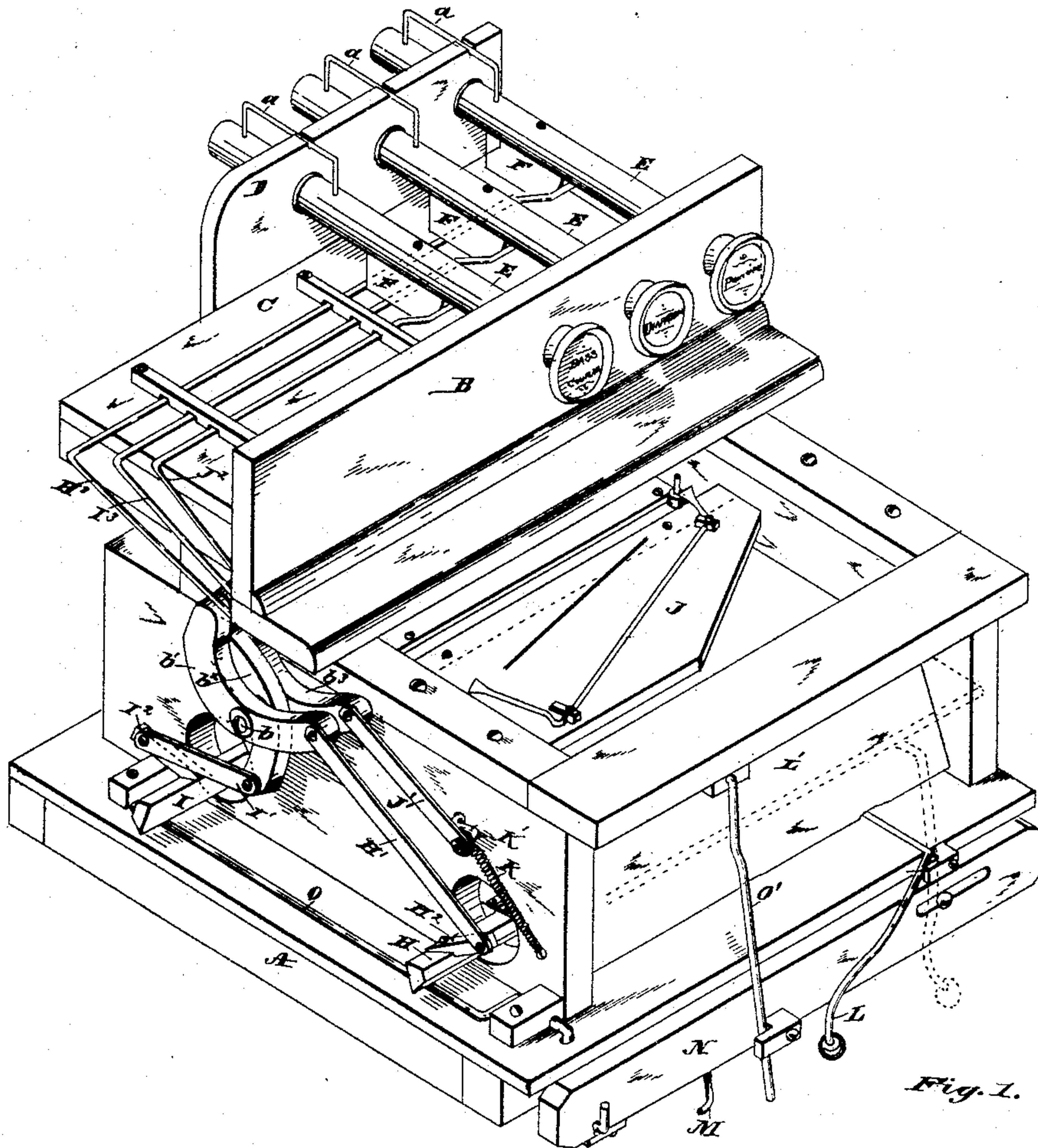


Fig. 1.

Witnesses

*E. Henry Lane*  
*Edw. Smith*

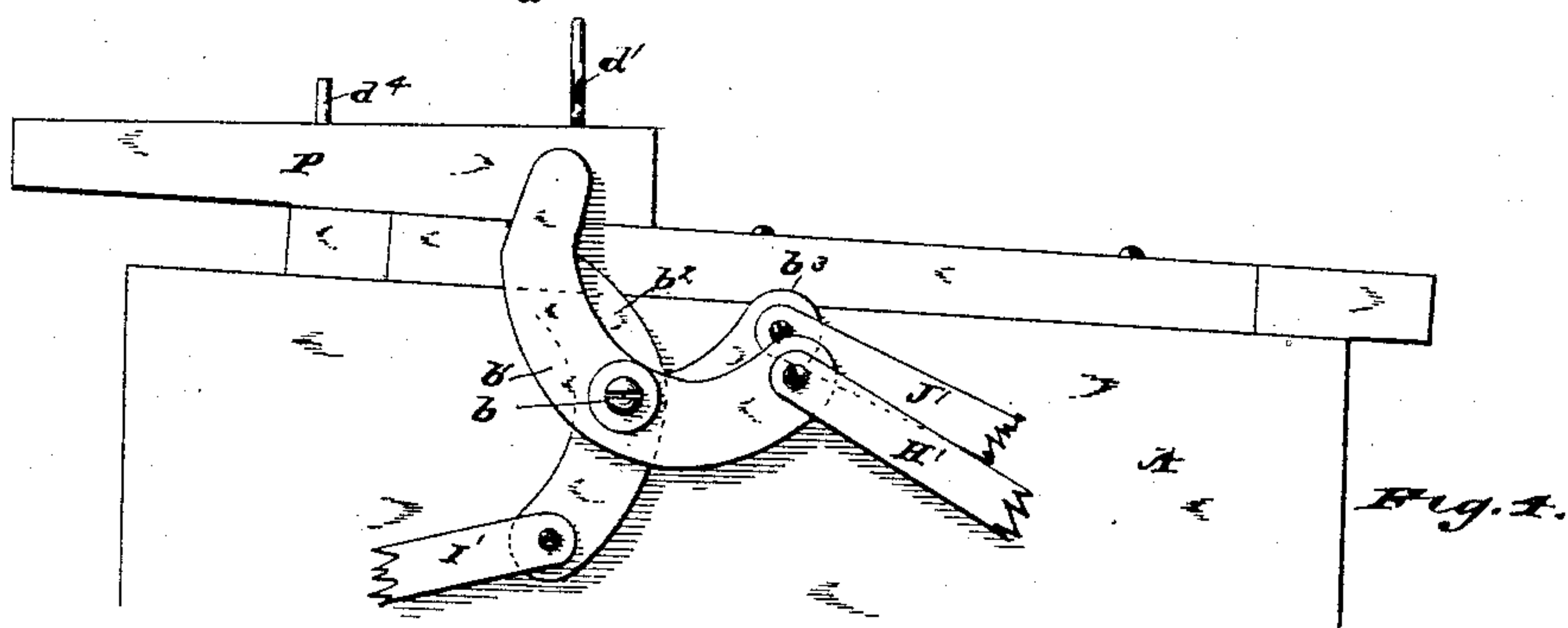
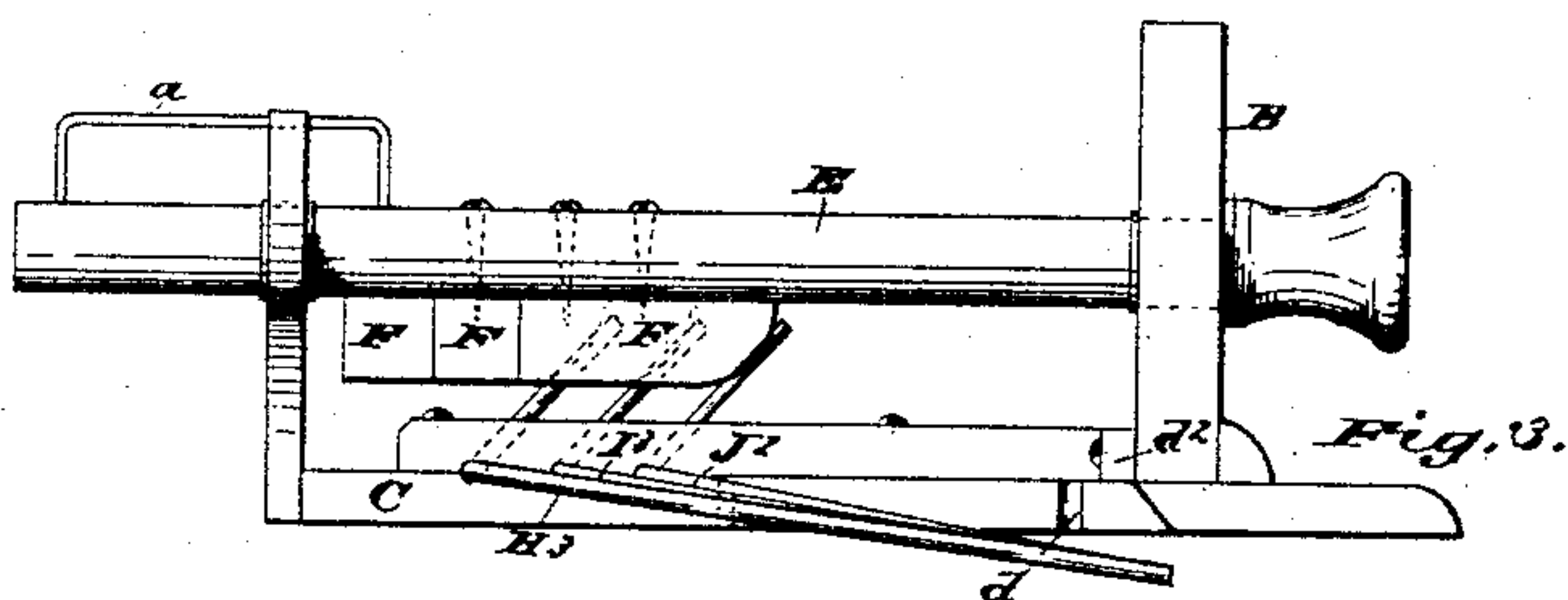
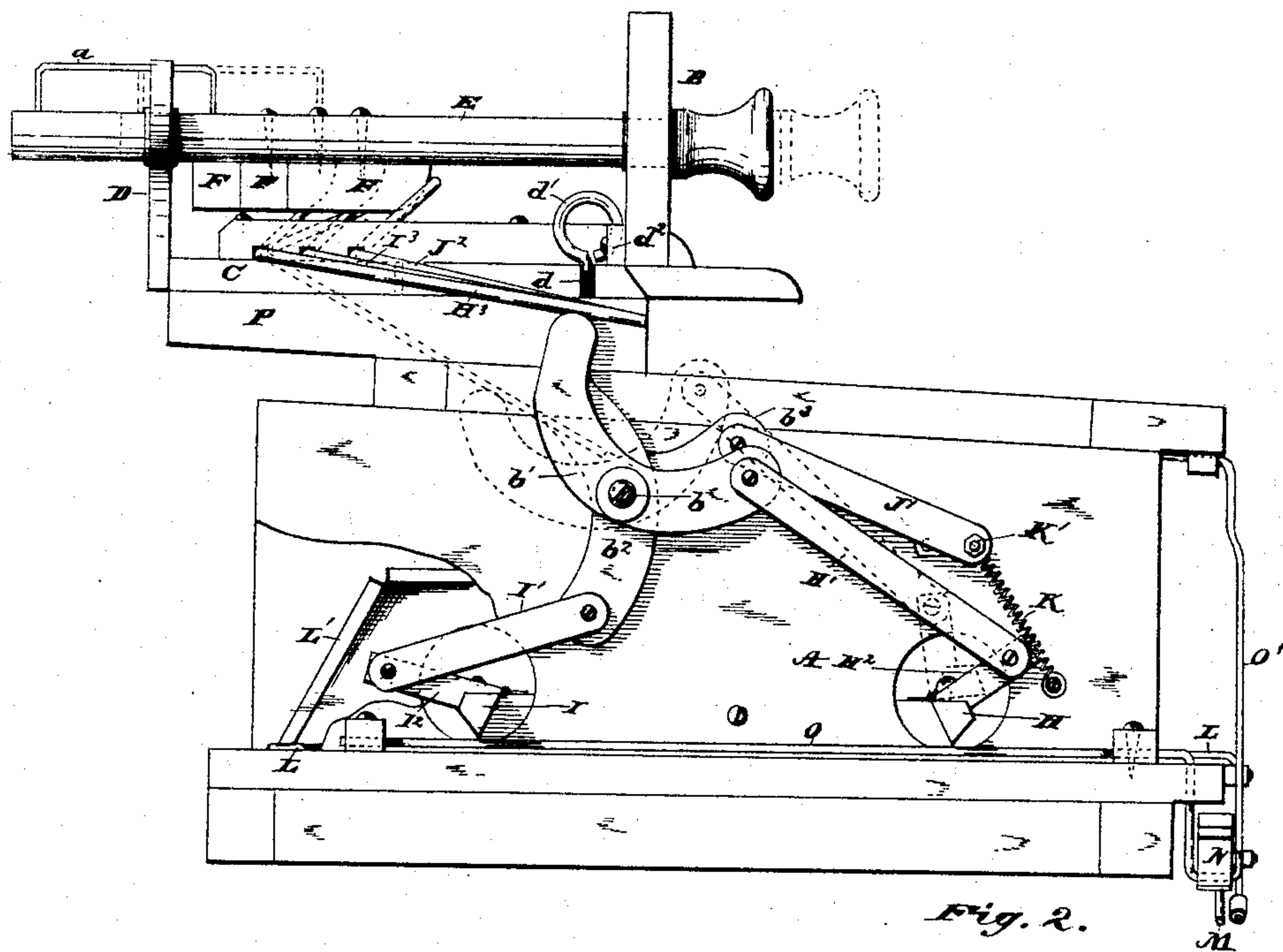
Inventor

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# UNITED STATES PATENT OFFICE.

JOHN LANE, OF MASSILLON, OHIO.

## STOP-ACTION FOR REED-ORGANS.

SPECIFICATION forming part of Letters Patent No. 411,453, dated September 24, 1889.

Application filed March 29, 1889. Serial No. 305,309. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN LANE, a citizen of the United States, residing at Massillon, in the county of Stark and State of Ohio, have  
5 invented certain new and useful Improvements in Stop-Actions for Reed-Organs; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon, in which—

Figure 1 is an isometrical view. Fig. 2 is an end view showing the two frames properly  
15 attached together and a portion of one of the end pieces broken away to illustrate the rear swell-board. Fig. 3 is an end view of the stop-frame. Fig. 4 is an end view of a portion of the bottom or lower frame, showing the location of the operating-bars.

The present invention has relation to stop-actions for reed-organs; and it consists in the different parts and combination of parts hereinafter described, and particularly pointed  
25 out in the claims.

Similar letters of reference indicate corresponding parts in all the figures of the drawings.

In the accompanying drawings, A represents the bottom or lower frame, which consists of a base, end pieces, and the top. This bottom or lower frame A is substantially of the form shown in the drawings, and is constructed with reference to properly attaching  
35 the different parts belonging thereto. The top or upper frame consists of the stop-board B, the lever-board C, and the guide-board D, said parts being located and arranged substantially as illustrated in Figs. 1, 2, and 3.  
40 For the purpose of preventing the stops E from rotating, and at the same time limiting the movements of said stops, the staples *a* are provided and are located substantially as illustrated in Fig. 1. To the bottom or under sides of the stops E are securely attached  
45 the operating-blocks F, said blocks being located substantially as illustrated in the drawings. For the purpose of causing the operating-blocks F to act upon the levers, their front or forward ends are rounded or inclined.  
50 To one of the end pieces of the bottom or

lower frame A is securely attached the pin or bar *b*, upon which pin or bar are located the segmental operating-bars *b'*, *b*<sup>2</sup>, and *b*<sup>3</sup>. Said segmental bars are located substantially as  
55 shown in Fig. 1 and assume the positions shown in said Fig. 1 when all of the stops E are pushed or forced inward to their limit. The segmental bar *b'* is for the purpose of operating the mute-bar H by means of the  
60 connecting-bar H', the arm H<sup>2</sup>, and the lever H<sup>3</sup>. The segmental bar *b*<sup>2</sup> is for the purpose of operating the mute-bar I by means of the connecting-bar I', the arm I<sup>2</sup>, and the lever I<sup>3</sup>. The segmental bar *b*<sup>3</sup> is for the purpose  
65 of operating the octave-coupler J by means of the connecting-bar J' and the lever J<sup>2</sup>. For the purpose of closing the octave-coupler J automatically, and at the same time assisting in holding the coupler J down or in a closed  
70 position, the spring K is provided, one end of which is attached to one of the end pieces of the bottom or lower frame A, and the opposite end of said spring is attached to the arm or crank K'.  
75

It will be seen that by my peculiar and novel arrangement all of the parts above described are operated by pulling or drawing the stops E and that all of their actions are direct. The knee-swell lever L is attached to  
80 a suitable cross-bar located in about the center of the lower frame A, and is bent or curved so as to operate the front and back swell-boards. It will be seen that as the knee-swell lever L is pushed or forced to the right it will  
85 assume the position shown by the dotted lines in Fig. 1 and carry with it the front and rear swell-boards L'. It will be seen that by this peculiar arrangement the swell-boards are independent and can be raised or lowered by  
90 any other device or attachment, such as a suitable stop.

When it is desired to convert or change the instrument proper into what is commonly known as a "grand organ," the left knee-  
95 swell M is pushed or forced to the left, which carries the section-bar N. To the section-bar N is attached the lever-bar O, which bar passes directly under the ends of the mute-bars H and I, thereby elevating said mute-  
100 bars in unison and to the proper position to bring out the full power of the instrument.



As the section-bar is moved to the left it carries with it the octave-lever  $O'$ , which elevates the octave-coupler J. It will be seen that the mute-bars H and I can be operated independent of their stops by means of the left knee-swell and the attachments belonging thereto. It will be seen that the segmental bars  $b'$ ,  $b^2$ , and  $b^3$  can be placed upon either end of the bottom or lower frame A, or, if desired, said segmental bars may be distributed and a part of them placed upon both ends of the bottom or lower frame. To the top of the bottom or lower frame are attached the bars P, which are for the purpose of supporting the stop-frame and its different attachments. The lever-board C is provided with the slots  $d$ , which are for the purpose of receiving the thumb-screws  $d'$ , said thumb-screws being located substantially as illustrated in the drawings. To the stop-board B are securely attached the blocks or stops  $d^2$ , which are for the purpose of limiting the thumb-screws  $d'$  to a quarter-turn, thereby preventing said thumb-screws from becoming displaced and at the same time permitting said thumb-screws to be turned in such a position that their heads will pass through the slots  $d$  when it is desired to remove the top or upper frame. For the purpose of assisting in holding the top or upper frame in proper position, the dowel-pins  $d^4$  are provided.

Having fully described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the bottom or lower frame A, the top or upper frame consisting of the stop-board B, the lever-board C, and the guide-board D, the stops E, provided with the staples  $a$  and the operating-blocks F, the levers  $H^3$ ,  $I^3$ , and  $J^2$ , and the segmental bars  $b'$ ,  $b^2$ , and  $b^3$ , located side by side and upon the pin or bar  $b$ , substantially as and for the purpose specified.

2. The combination of the bottom or lower frame provided with the thumb-screws  $d'$ , the lever-board provided with the slots  $d$ , and the stop-blocks  $d^2$ , substantially as and for the purpose specified.

3. The combination of the bottom or lower frame having independently attached thereto the knee-swell lever L, adapted to elevate the front and rear swell-boards  $L'$ , the section-bar N, having attached thereto the lever-bars O and adapted to elevate the mute-bars H and I independent of stops, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN LANE.

Witnesses:

E. A. C. SMITH,  
FRED. W. BOND.