

1,024,950.

F. RENEK.
PIANO CASING.
APPLICATION FILED JAN. 31, 1911.

Patented Apr. 30, 1912.

3 SHEETS-SHEET 1.

Fig. 1.

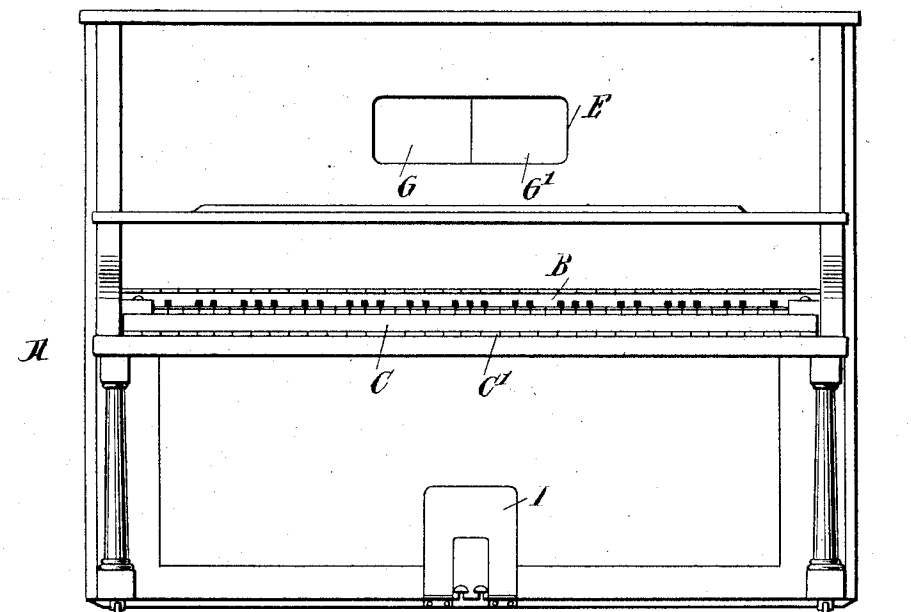
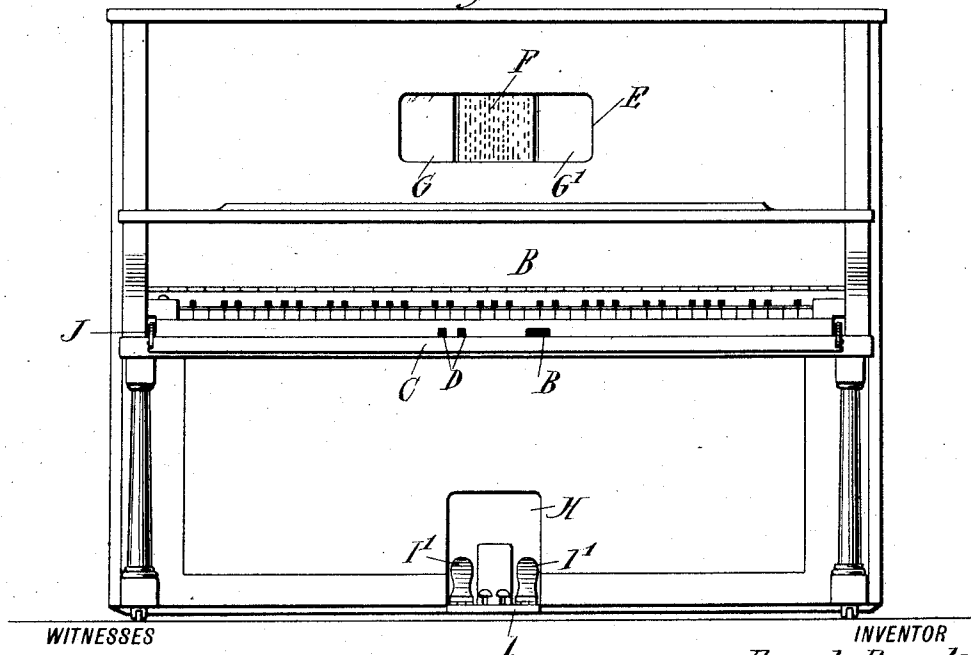


Fig. 2.



WITNESSES

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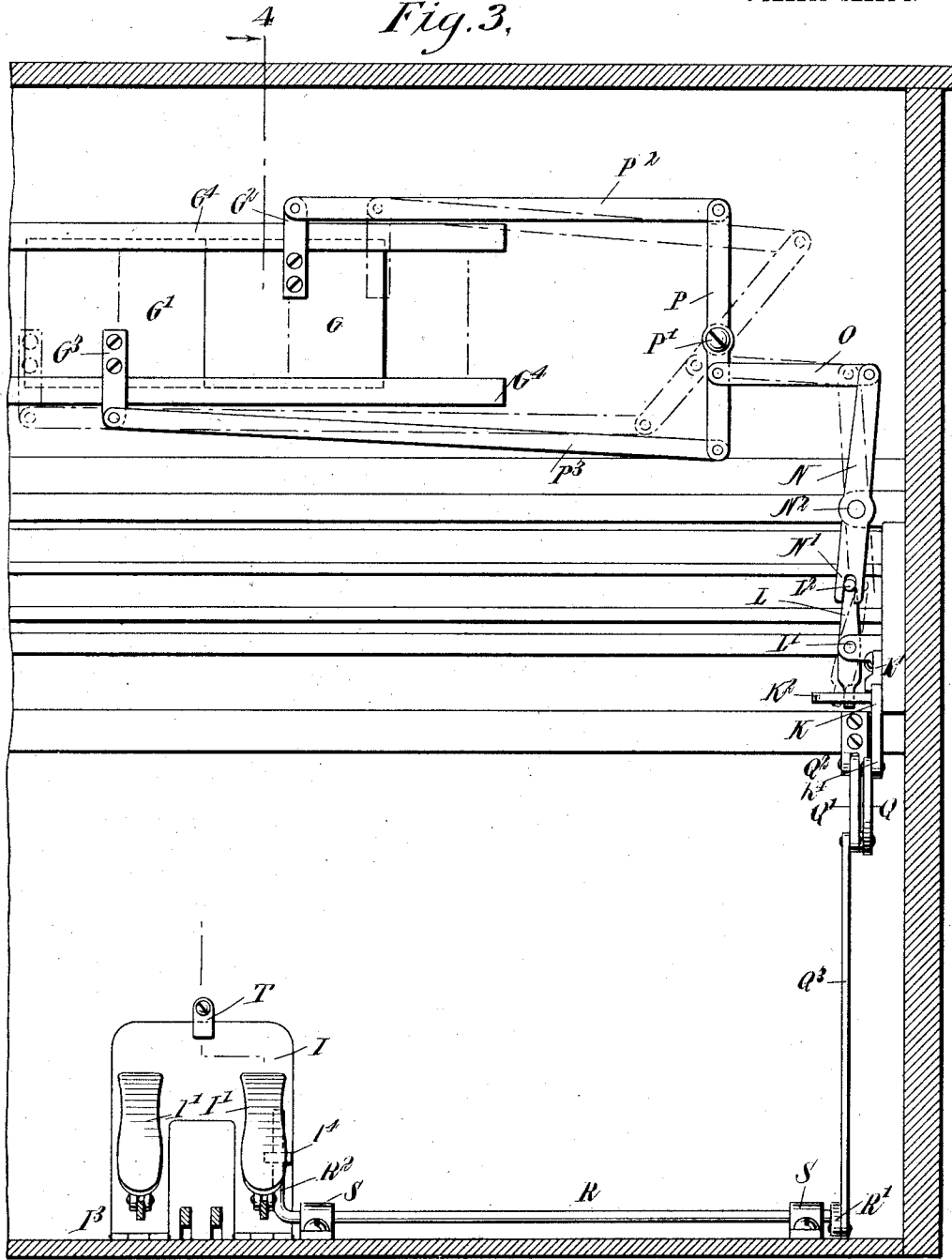
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3 SHEETS-SHEET 2.

Fig. 3.



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3 SHEETS—SHEET 3.

Fig. 4,

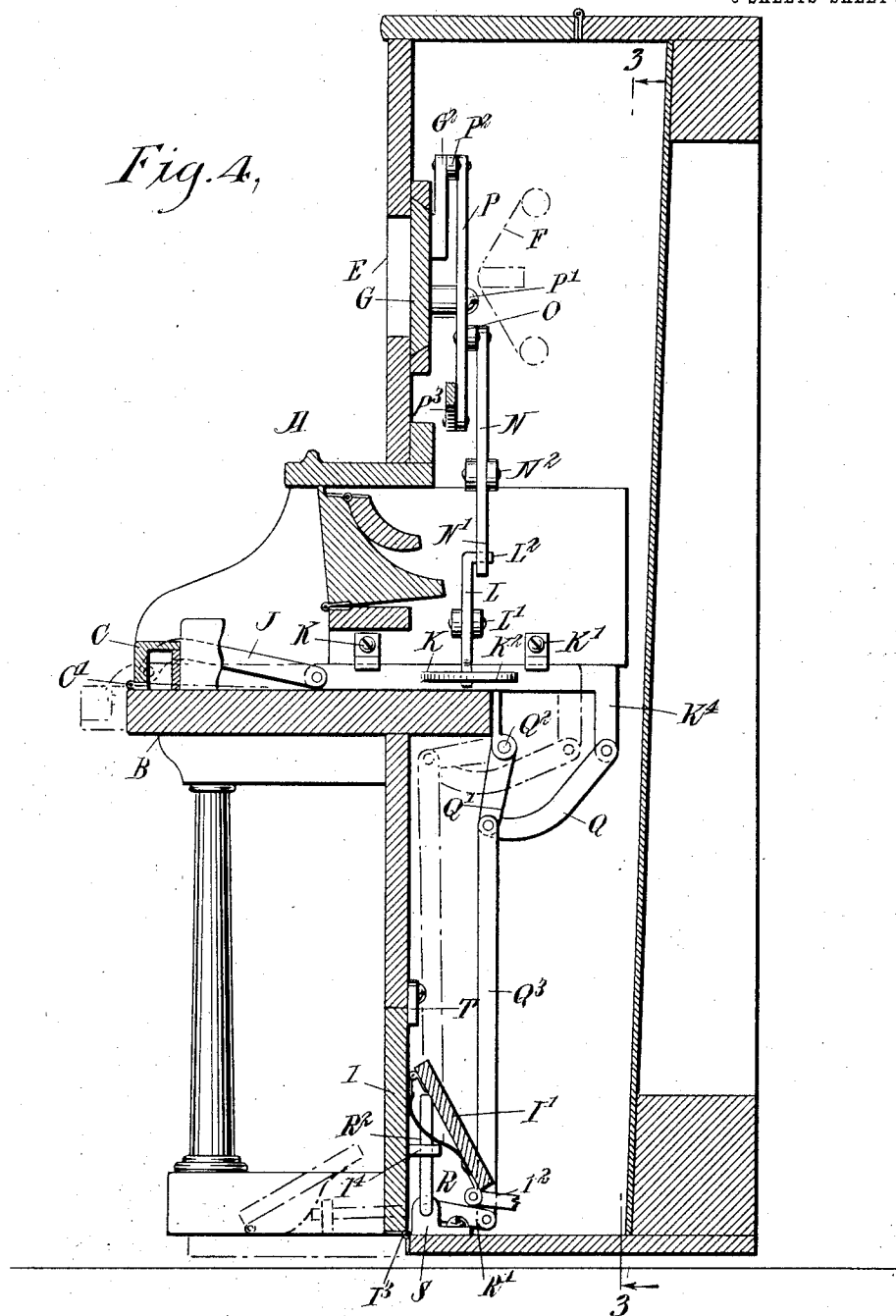
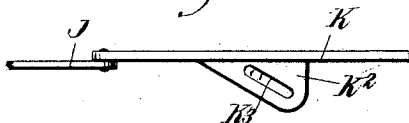


Fig. 5.



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PIANO-CASING.

1,024,950.

Specification of Letters Patent.

Patented Apr. 30, 1912.

Application filed January 31, 1911. Serial No. 605,792.

To all whom it may concern:

Be it known that I, FRANK RENEK, a citizen of the United States, and a resident of the city of New York, Astoria, borough of Queens, in the county of Queens and State of New York, have invented a new and Improved Piano-Casing, of which the following is a full, clear, and exact description.

The invention relates to player pianos and similar musical instruments, and its object is to provide a new and improved piano casing having a mechanism for opening and closing the panel and for moving the pedals for the bellows into an active or a folded position, on the operator opening or closing the casing for the controlling mechanism of the player piano.

The invention consists of novel features and parts and combinations of the same, which will be more fully described hereinafter and pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a front elevation of the piano casing showing the controlling levers covered, the panel closed and the pedals for the bellows in folded position; Fig. 2 is a like view of the same and showing the controlling levers uncovered, the panel open for the insertion or removal of the music roll, and the pedals of the bellows in position for use; Fig. 3 is an enlarged sectional rear face view of the same, on the line 3—3 of Fig. 4; Fig. 4 is a cross section of the same on the line 4—4 of Fig. 3; and Fig. 5 is a plan view of the cam slide.

The piano casing A of a player piano or similar instrument, is provided at the keyboard B with a covering C for covering and uncovering the various controlling devices D on the player piano, and the said piano casing A is also provided at the front upper portion with an opening E for gaining access to the music roll F (see Fig. 2) to permit of removing the same from the casing and replacing the same by another music roll, and the said opening E is controlled by a panel made in sections G, G', mounted to slide toward and from each other to close or open the opening E. The piano casing A is further provided at its front lower portion with an opening H, adapted to be closed by a pedal board I, carrying the

pedals I', connected by links I² with the bellows of the player piano. The pedal-carrying board I is pivotally connected by hinges I³ with the bottom of the piano casing, so as to permit of swinging the board I downwardly and forwardly into open position to permit of actuating the pedals I', or the said board I can be swung upward into vertical position for closing the opening H.

The panel sections G, G' and the pedal board I are controlled from the covering C, in such a manner that when the covering C is swung by the operator into a closed position, as shown in Figs. 1 and 4, then the panel sections G and G' are moved into a closed position and the pedal-carrying board I is swung upward into a closed position. When the covering C is swung into an open position by the operator, then the panel sections G and G' are moved into an open position, as shown in Fig. 2, and the pedal-carrying board I is swung forwardly and downwardly to permit the operator to actuate the pedals I'.

The covering C is connected at its front lower edges by hinges C' with the bottom of the keyboard B, and one end of the said covering C is pivotally connected by a transversely-extending link J with a cam slide K mounted to slide on the bottom of the keyboard B and also in guideways K' attached to the corresponding side of the piano casing A (see Figs. 3 and 4). The slide K is provided with a sidewise-extending arm K² having an inclined slot K³ (see Fig. 5) engaged by the lower end of a lever L, fulcrumed at L' to the piano casing, and the upper end of the said lever L is provided with a pin L² engaging the forked lower end N' of a lever N, fulcrumed at N² on the front of the piano casing A, and the upper end of this lever N is pivotally connected by a link O with a vertically-disposed lever P, fulcrumed at P' on the front of the piano casing A. The ends of the lever P are pivotally connected by links P², P³ with arms G², G³ held on the back of the panel sections G, G', mounted to slide in guideways G⁴ arranged on the rear face of the front of the piano casing A. When the several parts are in the position shown in Figs. 3 and 4, then the covering C and the panel sections G, G' are in closed positions, and when the operator swings the covering C forwardly and downwardly, then the link J imparts a forward sliding motion to the

slide K, which by the slot K³ imparts a swinging motion to the lever L, the motion of which is transmitted to the lever N, and the latter by the link O imparts a swinging
 5 motion to the lever P, which by the links P², P³ moves the panel sections G and G' outwardly away from each other, so that the panel sections G, G' move into the open position shown in Fig. 2.

10 When the covering C is swung upward and rearward into a closed position to cover up the controlling devices D then a rearward sliding motion is given to the slide K by the link J, and the motion of the slide K
 15 is transmitted by the mechanism described to the panel sections G and G', to move the same into a closed position.

The rear end of the slide K is provided with a depending arm K⁴ pivotally connected by a link Q with an arm Q', fulcrumed on a bracket Q² attached to the rear
 20 end of the bottom of the keyboard B, and the said arm Q' is pivotally connected by a link Q³ with an arm R' of a bell crank lever R journaled in brackets S attached to the bottom of the piano casing A. The bottom R²
 25 of the bell crank lever R slidably engages a bearing I⁴ attached to the pedal board I. Now when the several parts are in the position shown in Figs. 3 and 4, then the covering C is in a closed position and the pedal
 30 board I is folded into vertical position against a stop T held on the casing A. When the operator swings the covering C forwardly and downwardly, as previously mentioned, then a rearward sliding motion
 35 is given to the slide K by the link J, and the slide K now imparts a swinging motion to the arm Q' by the link Q, and the arm Q' imparts a rocking motion to the bell crank lever R by the link Q³ and the bell crank lever R swings the pedal board I forwardly so
 40 that the pedal board I and the pedals I' move into an extended position for use by the operator. When the covering C is swung upwardly and rearwardly into a closed position then the movement of the parts just mentioned is reversed, that is, the
 45 bell crank lever R swings the pedal board I into a folded position against the stop T.

From the foregoing it will be seen that when the operator imparts a swinging motion to the covering C, a simultaneous motion is given to the panel sections G and G' and the pedal-carrying board I, that is, when the covering C is swung into a closed
 55 position the panel sections G and G' are likewise moved into a closed position, and the pedal-carrying board I is moved into a folded position, and when the covering C is swung into an open position then the sections G and G' are opened and the pedal-carrying board I is swung downward into
 60 active position.

65 Having thus described my invention, I

claim as new and desire to secure by Letters Patent:—

1. In a player piano, having bellows and controlling mechanism, a casing for said player piano having a movable panel for the music roll opening, folding pedals for the bellows of the player piano, a movable covering for the controlling mechanism of the player piano, and means connecting the said movable covering with the said panel and pedals for simultaneously opening the panel and moving the pedals into active position on opening the covering and for closing the panel and swinging the pedals into folded position on closing the covering.

2. In a player piano having bellows and controlling mechanism, a casing for said player piano having a movable panel for the music roll opening, folding pedals for the bellows of the player piano, a movable covering for the controlling mechanism of the player piano, and means connecting the said panel, pedals and covering with each other whereby the movement of the said covering in one direction by an operator simultaneously moves the said pedals into active position and opens the panel, and the movement of the said covering by the operator in the other direction, simultaneously swings the pedals into folded position and closes the panel.

3. In a player piano having a controlling mechanism, a casing for the player piano, having a panel for the music roll opening made in slidably mounted sections, a pivoted covering for the controlling mechanism of the player piano, a slide connected with the said pivoted covering, and mechanism connecting the said panel with the said slide for opening the panel on opening the said pivoted covering and for closing the panel on closing the covering.

4. In a player piano having controlling mechanism and bellows, a casing for the player piano, having a sliding panel for the music roll opening, a pivoted covering for the controlling mechanism of the player piano, pedals for the bellows of the player piano, a hinged pedal-carrying board, the said casing being provided with an opening adapted to be closed by the said pedal-carrying board, and means connecting the said panel, covering and pedal-carrying board with each other, so that on moving the covering the said panel and the said pedal-carrying board and pedals move with it.

5. In a player piano having controlling levers and bellows, a casing for the player piano, provided with a panel made in sections mounted to slide toward and from each other, a pivoted covering for the controlling levers of the player piano, pedals for actuating the bellows of the player piano, a pedal-carrying board mounted to

swing to move the pedals into open or folded position, and means connecting the said covering with the said panel sections and the said pedal-carrying board, to simultaneously move the panel sections into an open or closed position, and to swing the pedals into an open or folded position on swinging the said covering into an open or closed position.

6. In a player piano having controlling devices and bellows, a casing for the player piano provided with a pivoted covering for the controlling devices of the player piano, the said casing having an opening at its front lower portion, pedals for the bellows of the player piano, a pedal board adapted to close the said opening, the said pedal board carrying the said pedals and hinged at its lower end to the bottom of said casing, and means connecting the said covering for the controlling devices with the said pedal-carrying board to swing the latter downward and outward and move the pedals into an open position on opening the covering, and to swing the said pedal carrying board upward into vertical position to close the said opening and move the pedals into a folded position on closing the covering.

7. In a player piano having controlling levers and bellows, a casing for the player piano provided with a panel made in sections mounted to slide toward and from each other, a pivoted covering for the controlling levers of the player piano, pedals for actuating the bellows of the player piano and mounted to swing into open or folded position, a slide, a link connecting the said slide with the said pivoted covering, a lever mechanism connecting the said slide with the said panel sections, and a lever mechanism connecting the said slide with the said pivoted pedals.

8. In a player piano having controlling devices and bellows, a casing for the player piano provided with a pivoted covering for the controlling devices of the player piano, pivoted pedals for the bellows of the player piano, a slide, a link connecting the said slide with the said pivoted covering, a lever, a link connecting the said lever with the slide, a bell crank lever connected with the said pedals, and a link connecting the said lever with the said bell crank lever.

9. In a player piano having controlling levers and bellows, a casing for the player piano provided with a panel made in sections mounted to slide toward and from each other, a pivoted covering for the controlling levers of the player piano, pedals for actuating the bellows of the player piano and mounted to swing into open or folded position, a slide having a cam slot, a link connecting the said slide with the said covering, a lever mechanism connected with the said panel sections and having a

member engaging the said slide slot, a lever, a link connecting the said lever with the said slide, a bell crank lever connected with the said pedals, and a link connecting the said lever with the said bell crank lever.

10. A piano casing for player pianos, provided with a panel made in sections mounted to slide toward and from each other, a pivoted member, a slide having a cam slot, a link connecting the said slide with the said pivoted member, and a lever mechanism connected with the said panel sections and having a member engaging the said cam slot.

11. A piano casing for player pianos provided with a pivoted member, a slide, means connecting the slide with the pivoted member, a lever arm, a connection between the lever arm and the slide, pedals mounted to swing into open or folded position, a bell crank lever connected with the said pedals, and a connection between the lever arm and the bell crank lever.

12. A piano casing for player pianos provided with a panel made in sections mounted to slide toward and from each other, a pivoted member, pedals mounted to swing into open or folded position, a slide having a cam slot, a connection between the pivoted member and the slide to move the slide on moving the pivoted member, a lever mechanism connected with the said panel sections and having a member engaging the slot in said slide, and a lever mechanism connecting the said slide with the pedals.

13. A piano casing for player pianos having a movable panel made in sections mounted to slide toward and from each other, a movable member manually operable, a slide connected with the movable member and having a sidewise extending arm provided with an inclined slot, a lever having its lower end engaging the said slot, the upper end of said lever being provided with a pin, a second lever having a forked lower end engaging said pin, a third lever having its ends connected by links with the panel sections, and a link connecting said third lever at one side of its fulcrum, with the upper end of said second lever.

14. A piano casing for player pianos having a movable member manually operable, pivoted pedals, a slide provided at its rear end with a depending arm, a link connecting the said slide with the said movable member, a lever arm fulcrumed at one end, a link connecting the other end of said lever arm with the depending arm of said slide, a bell crank lever connected with the said pedals, and a link connecting the said lever arm with an arm on the said bell crank lever.

15. A piano casing for player pianos having a pivoted member, manually operable, a panel made in sections mounted to

slide toward and from each other, pedals
mounted to swing into open or folded po-
sition, a slide provided with a depending
arm, a connection between the pivoted mem-
5 ber and the said slide to move the slide on
moving the pivoted member, a lever mecha-
nism connecting the said slide with the said
panel sections, a bell crank lever connected
with the pedals, a lever, a connection be-
10 tween the lever and the depending arm of

said slide, and a connection between the
said lever and the bell crank lever.

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

FRANK RENEK.

Witnesses:

THEO. G. HOSTER,

PHILIP D. ROLLHAUS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
