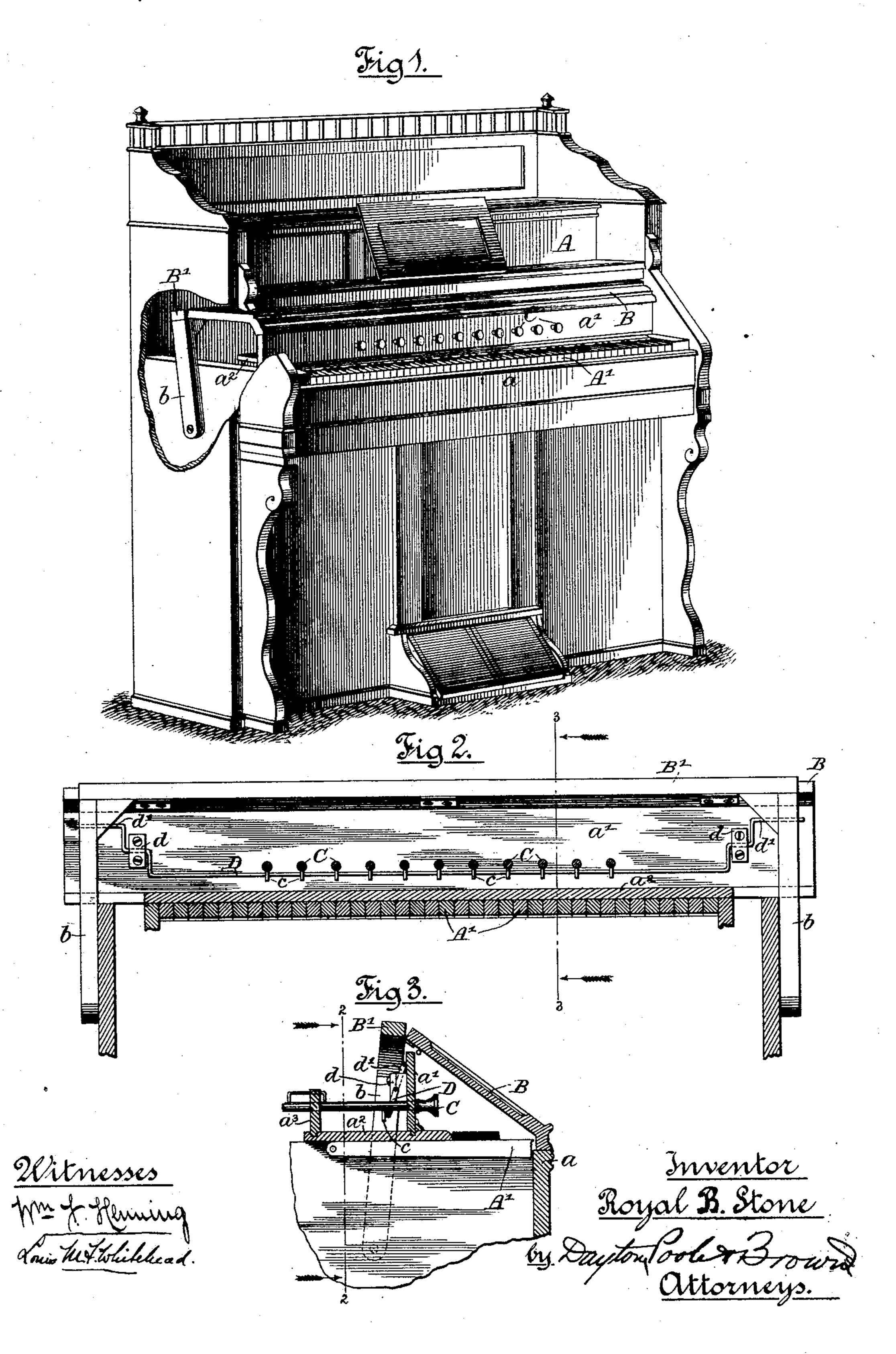
R. B. STONE. ORGAN ATTACHMENT.

No. 415,425.

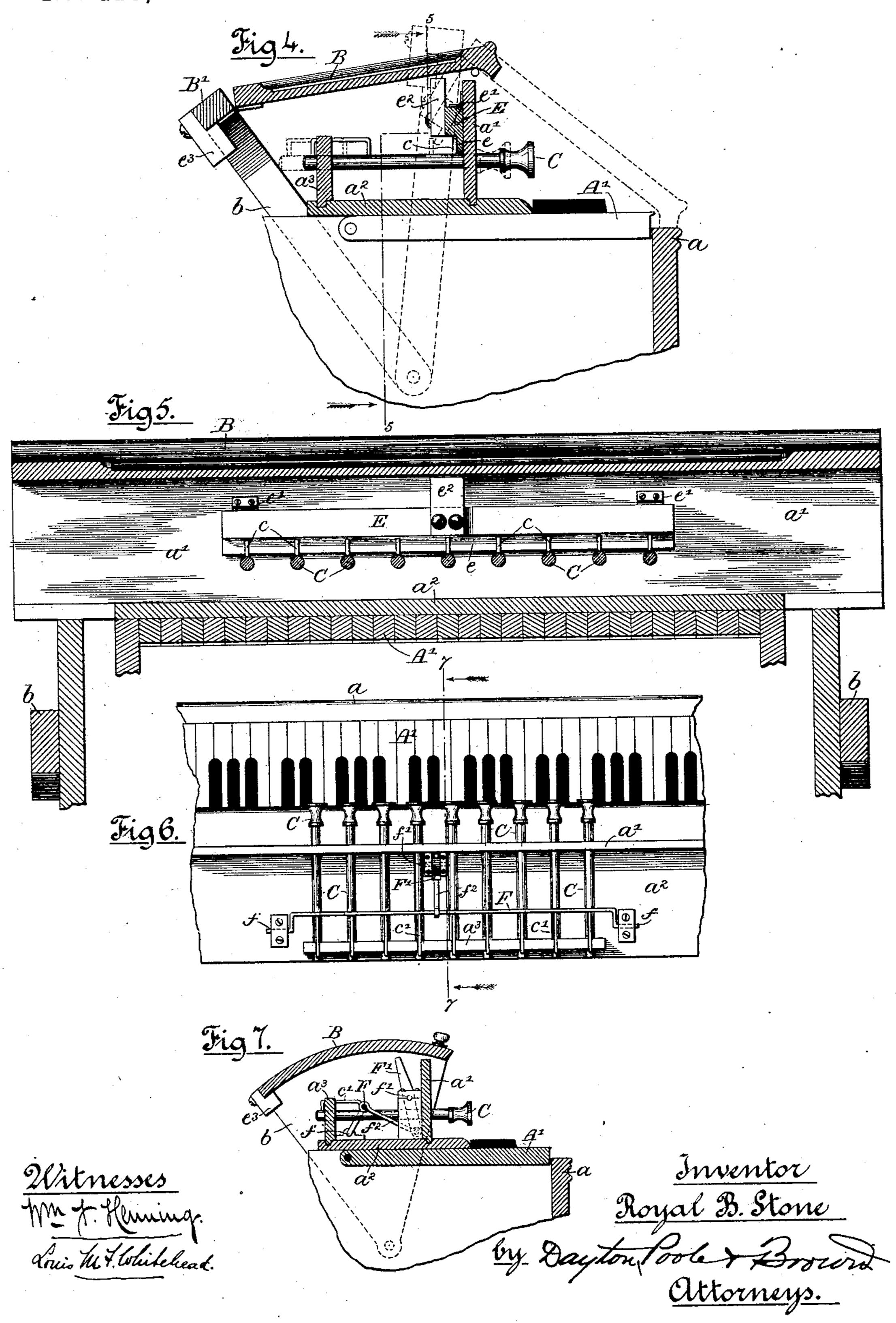
Patented Nov. 19, 1889.



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United States Patent Office.

ROYAL B. STONE, OF MONMOUTH, ILLINOIS.

ORGAN ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 415,425, dated November 19, 1889.

Application filed October 4, 1888. Serial No. 287,188. (No model.)

To all whom it may concern:

Be it known that I, ROYAL B. STONE, of Monmouth, in the county of Warren and State of Illinois, have invented certain new and useful Improvements in Organ Attachments; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to an improvement in reed, pipe, or other organs, and more particularly to the construction whereby the stops of an organ are automatically closed by the action of the "fall or lock board," as the lid is sometimes called.

In the construction of organs it is customary to close the reed-cells or a set of reed-cells 20 by a felt or leather faced board called a "mute," which mute is connected with a certain stop or stops. These mutes are usually from twelve to twenty inches in length, and if held open for any considerable length of 25 time—that is, lifted off or away from the reedcells—they will have a tendency to become slightly warped, and thus their usefulness is destroyed. Again, if the mute is left open an unusual amount of dust may freely pass into 30 the reed-cells, settle upon the reeds, and thus impair its sounding properties. Mice not infrequently cause much damage to the reedcells when the mutes are opened so that they may enter the cells. Again, moths or other 35 small animals may freely enter the reed-cells if the mutes are raised for any length of time. It is very common for persons after using an organ to close the lid with all the stops drawn out as when in use.

The object of the present invention is to provide mechanism whereby the stops are automatically shut and the mutes closed by the shutting down or closing of the lock-board or lid.

The invention will be more fully understood by reference to the following description, the accompanying drawings, and the appended claims.

In the drawings I have illustrated in Fig-50 ure 1 a perspective view of an organ provided with my invention. Fig. 2 is a longitudinal vertical section of a portion of the organ, illus-

trating one means of carrying my invention into practice, this view being taken upon line 2 2 of Fig. 3. Fig. 3 is a vertical sectional 55 view of the same, taken at right angles to Fig. 2 and upon line 3 3 thereof. Fig. 4 is a vertical sectional view, similar to that of Fig. 3, illustrating another method of carrying my invention into practice. Fig. 5 is another 60 view, taken upon line 5 5 of Fig. 4, illustrating the last-mentioned form. Figs. 6 and 7 illustrate still another modified form of the invention, Fig. 6 being a plan view of a portion of the organ, and Fig. 7 being a vertical 65 sectional view taken upon line 7 7 of Fig. 6.

In the drawings, A represents the organ proper; A', the key-board; a, the lock-frame; a', the name-board, and a^2 the stop-action board; a^3 , the stop-support, which projects 70 upward from the stop-action board and at proper distance in the rear of the name-board a'.

B is the fall or lock board, secured at its upper end, preferably by hinges, to the lock-75 board frame B'. This frame B' consists of a horizontal part (to which the board B is hinged) and depending arms b b—one at each end—which arms are pivoted, preferably, to the sounding-board.

In Fig. 3 the lock-board frame B' is shown in its forward position, the lock-board B being closed, with its lower end resting upon the lock-frame a, while in Fig. 1 the lock-board B is raised and the frame B' is in its rearmost 85 position. When in this position the keys and the organ-stops are accessible to the player, as will be readily understood.

The stops C are secured movably in the name-board a' and the stop-support a^{s} and 90 are adapted to slide therein, as will be readily understood.

Referring now more particularly to Figs. 2 and 3, D is a bent rocking bar or rod secured in bearings d to the rear or back part of the 95 name-board a' and extending preferably the entire length thereof. The ends d' of the rod D project or are bent in such manner as to come in contact with the depending arms b b of the lock-board frame B'. The central portion of the rod D is adapted to engage the pins, lugs, or projections c severally placed upon or secured to the stops C in rear of the name-board and of said rod D. By this con-

struction it will be observed that when any of said stops C are moved outward to open the mute or mutes connected therewith the pin or lug c of said stop carries the rod D into the forward position and against the name-board a', thus throwing the ends d' of the rod in the opposite direction or to the rear. When the lid or fall-board B is closed, the depending portions b b of the frame B' engage or strike against the ends d' of the rod D and rock said rod in the bearings d into the position shown in Fig. 3, and by this action close all of the stops C which happen to be open at the time.

In Figs. 4 and 5 I have illustrated another form of mechanism for closing the stops C by the action of the fall-board B as follows: The pins, lugs, or projections c in this case extend upwardly from the stops C and engage the recessed portion e of a hinged board E, which latter is hinged at e' e' to the back of the name-board a'. Projecting from the upper portion of the board E and at a suitable angle thereto is the dowel-pin or projection e². Depending from the frame B' in such position as to register with said pin or projection e² is a block or stop e³. When the stop C is open, as

shown in Fig. 4, the pin c thereon moves the board E in position next to the name-board a', as shown in full lines in said Fig. 4. When the fall-board B is closed, the block e³ strikes the pin or projection e², and thus moves the board E upon its hinges into the position shown in dotted lines in said figure, which ac-

35 tion, through the medium of the recessed portion e and the pin c, closes any stops C which may be open.

In Figs. 6 and 7 I have illustrated still another form of stop-closing mechanism as follows: In this case I dispense with the pin c, and in lieu thereof I provide each stop with a yoke or stop-guide c', which guide is positioned upon said stops in such manner that its ends will enter the stops C on each side of the stop-support a^3 . Pivoted at ff to the stop-action board a^2 is the rocking rod or bar F, which rod extends over the tops of the stops C, and in such position as to be engaged by the guides or yoke c' on said stops when the latter are open. A lever F' is pivoted at

50 the latter are open. A lever F' is pivoted at f' to the lugs which rise from the stop-action board α², as clearly shown in Fig. 7, the lower end of which lever being connected to the rocking bar or rod F by means of the link f².
55 When any or all of the stops are open, the

forward end of the yoke c' engages the rocking bar F and throws the lever F' into the position illustrated in full lines in Fig. 7. When the fall-board B is closed, the depending lug or pin e^3 strikes against the upper end of 60 the lever F' and moves the latter toward the name-board, thus moving the lower end of said lever in the opposite direction and closing the stops C through the medium of the link f^2 and the rocking bar F. In this figure 65 I have shown the fall-board B curved and integral with the depending portions or arms b, as this is a common construction. It is quite immaterial at what portion of the fall-board or its frame B' or the arm b the lug e^3 is 70 secured, provided said lug is located thereon in position to engage the actuating pin or lever of the stop C

I do not wish to be limited to the precise mechanism herein shown and described, as 75 many other forms will readily suggest themselves to those skilled in this art whereby the stops C may be closed by the action of the fall-board, and, while I specifically claim but one construction, (herein illustrated,) I re-80 serve the right to make separate applications upon other constructions

upon other constructions.

I claim as my invention—

1. In an organ, the combination, with a frame and a movable lock-board or lid, of a 85 plurality of movable stops provided with pins or projections, and a movable part engaging said pins or projections and so secured to the frame with reference to the lock-

board that the forward or closing movement 90 thereof will actuate said part to close the stops, substantially as described.

2. In an organ, the combination of a movable lid or lock-board with a plurality of stops, each stop having a pin or projection 95 thereon, and a part or bar engaging said pins or projections, said part or bar being movably secured to the name-board and provided with a projecting pin or lug, which latter is so located with reference to the lock-board 100 that the forward movement or closing of the latter will actuate said projecting pin and thus close the stop, substantially as described.

In testimony that I claim the foregoing as my invention I affix my signature in pres- 105

ence of two witnesses.

ROYAL B. STONE.

Witnesses:

TAYLOR E. BROWN, F. W. JENKINS.