

(No Model.)

A. S. RAND.  
STOP ACTION FOR ORGANS.

No. 441,328.

Patented Nov. 25, 1890.

*Fig. 1.*

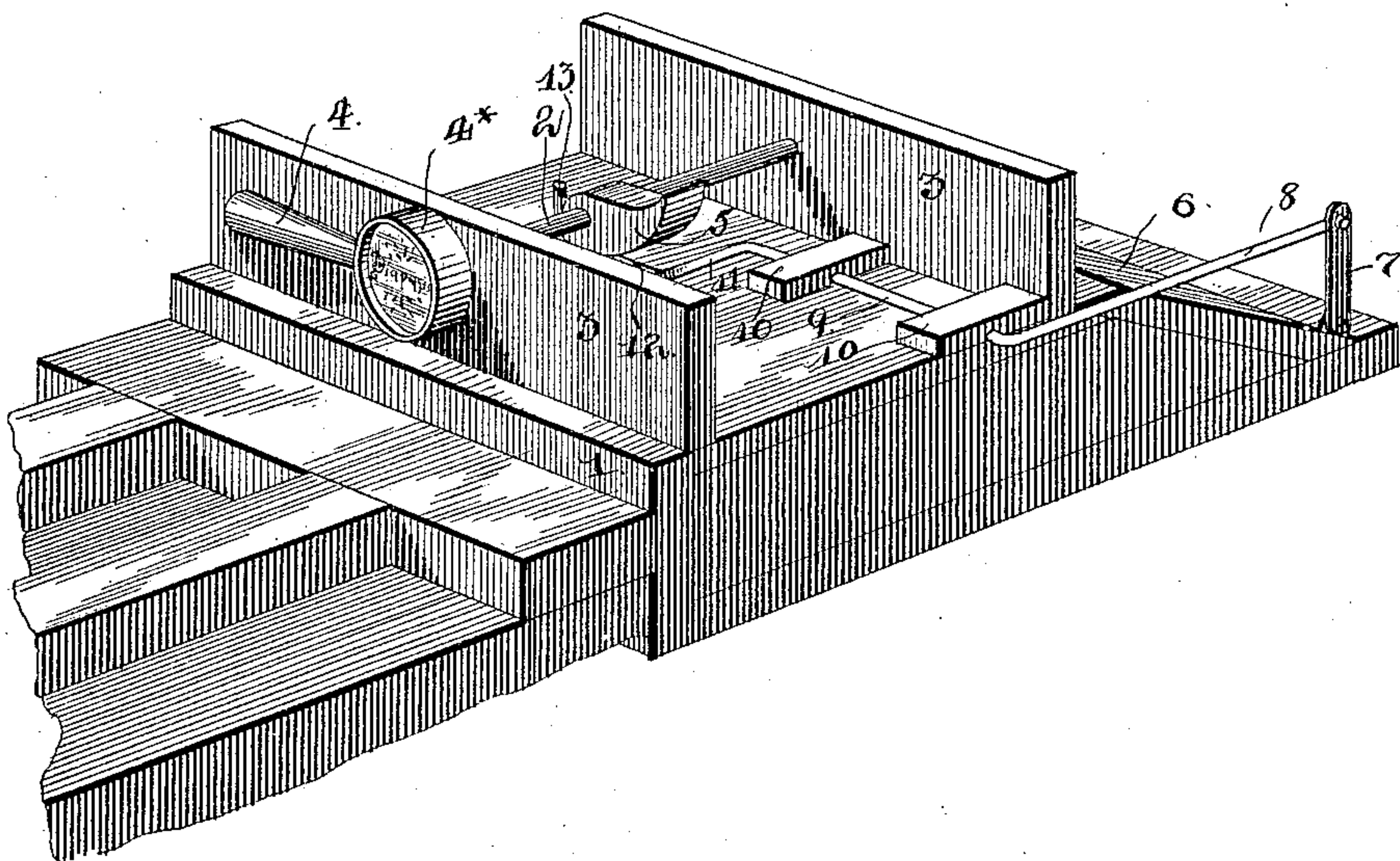
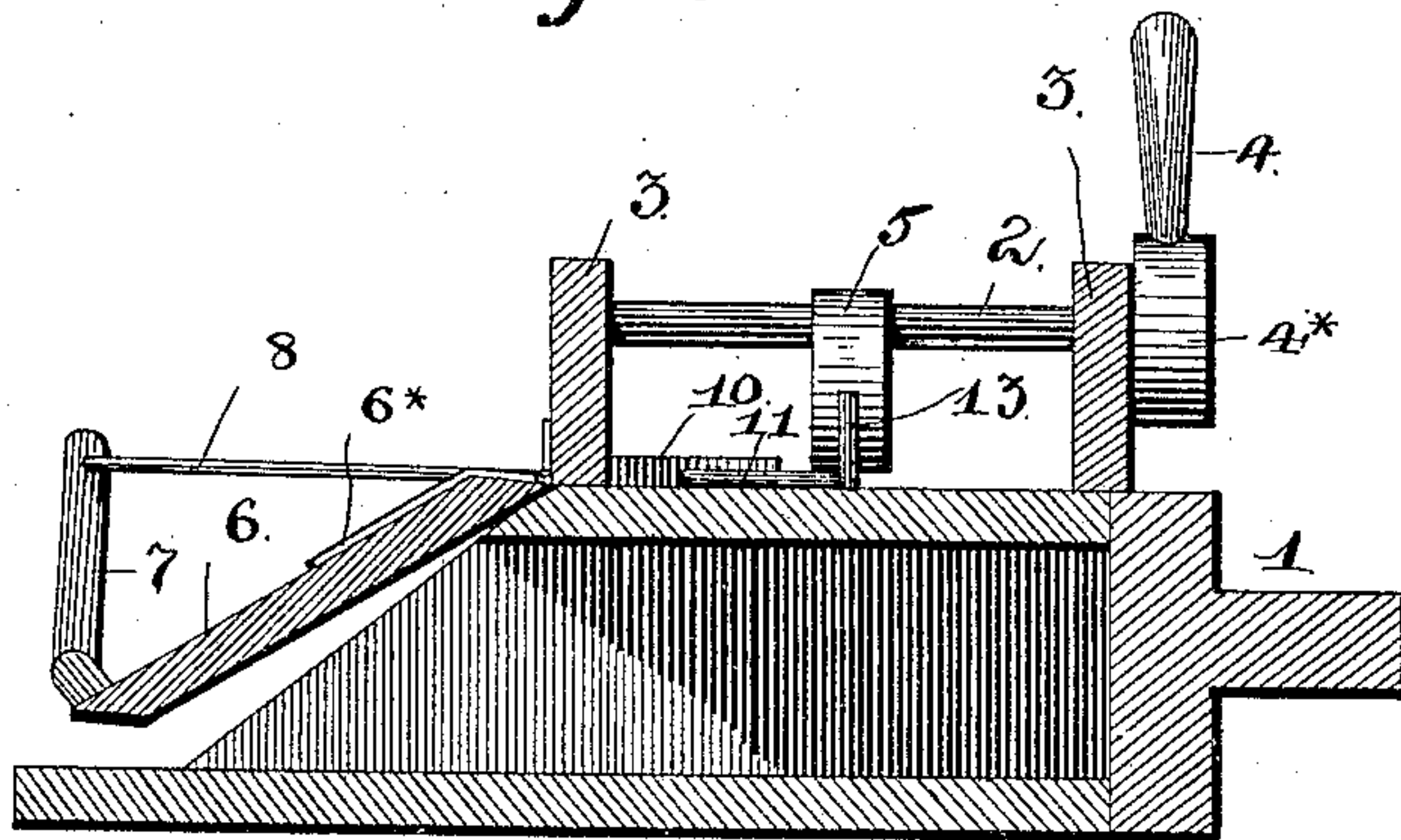


Fig. 2.



Witnesses

Horace G. Sutz

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By his Attorneys.

Inventor

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# UNITED STATES PATENT OFFICE.

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## STOP-ACTION FOR ORGANS.

SPECIFICATION forming part of Letters Patent No. 441,328, dated November 25, 1890.

Application filed June 13, 1890. Serial No. 355,292. (No model.)

*To all whom it may concern:*

Be it known that I, ALLEN S. RAND, a citizen of the United States, residing at Fort Madison, in the county of Lee and State of Iowa, have invented a new and useful Stop-Action for Organs, of which the following is a specification.

My invention relates to an improvement in stop-actions for organs.

10 The object of the present invention is to provide a simple, inexpensive, and easily-operated stop that performs the full functions of the ordinary sliding stop, but does not take up the room on the face of the organ, and, 15 further, to provide a stop that requires but little exertion on the part of the performer to operate and that will be more rapid in opening and closing the mute than the sliding stops would be; and it consists, in place of 20 the sliding stop, of a rock-shaft operated by a small handle and carrying an eccentric which works the wires connecting with the mute; and it further consists of a novel combination and arrangement of the parts oper- 25 ating the mute, hereinafter more fully described, illustrated in the accompanying drawings, and specifically pointed out in the claims.

In the accompanying drawings, Figure 1 represents a perspective view of an organ 30 stop and mechanism constructed in accordance with my invention. Fig. 2 is a transverse sectional view.

1 represents a portion of the front frame of an ordinary organ, along the face of which 35 the customary stops are placed.

In place of the sliding tube generally used for operating the mutes and in the aperture in which such sliding tubes work I place a shaft 2, journaled in the two upright sections 40 3, which are a portion of the ordinary organ-frame, and which usually are the supports for said tubes. Shaft 2 is operated by a short handle 4, that appears on the outer face of the organ, where the knobs of the ordinary 45 stops are placed, and within the organ and between said sections 3 a cam or eccentric 5 is mounted on said shaft and is operated thereby. Said handle is to be suitably ornamented to make the usual elaborate finish of 50 the organ, and at its connection with said shaft has an enlarged head 4<sup>x</sup>, that is cut out

for the customary insertion of the name of the stop—namely, "Principal," "Diapason," &c.

6 represents the mute of the organ, being situated in the usual place and constructed 55 in the usual manner, and always held securely closed when not opened by mechanism by an ordinary spring-strip 6<sup>x</sup>. To one end or edge of said mute an upright strip or arm 7 is pivoted. Arm 7 is connected by a loose 60 joint to the mute-wire 8, which extends therefrom in a forward direction until it just clears the rear upright 3, when it is then bent at direct right angles and extends, as at 9, parallel to the said uprights 3 and under the 65 lugs 10, which act as bearings for the portion 9 of wire 8 and keep it steady in its movement. The wire again takes a turn at right angles and extends a short distance, as at 11, toward the face of the organ and at an angle 70 to the plane of the whole wire 8, thereby causing it to set up and off from the base on which said wire rests, and it is then bent, as at 12, to pass directly beneath the cam or eccentric 5 on said shaft 2, said eccentric being adapted 75 to work thereon, being regulated in its movement by the stop-pin 13, which is inserted in the base portion aforementioned.

It is thought that the operation of the stop will be apparent from the foregoing descrip- 80 tion. The short handle is turned to the right by the operator, which causes the eccentric mounted on said shaft, regulated in length of movement by said stop-pin, to press down on the portion of the mute-wire which extends 85 beneath the eccentric, and which is, when the mute is closed, set off from the base on which said wire rests, said wire communicating an upward motion to the arm 7, pivoted on the 90 mute, which opens said mute and holds it open until the pressure of the eccentric is relieved from the wire by turning the handle back to its normal position, when the mute 95 flies back and is firmly held in place by the tension of spring 6<sup>x</sup>.

The advantages of the rock-shaft stop over the sliding stops are also thought to be apparent. It can be readily seen that a slight movement of the thumb on one of the handles would suffice to open the mute and would take 100 scarcely a moment of time without the hand having to be hardly raised from the key-

board, whereas in the sliding stops the whole hand has to be raised from the keys and some little exertion required to operate them, thereby causing a loss of time, which is a great factor against smooth and unbroken playing.

Having described my invention and its operation, what I claim, and desire to secure by Letters Patent, is—

1. A stop-action for organs, consisting of a rock-shaft, a crank mounted upon and operating said shaft, and an arm mounted on said shaft and adapted to bear against and operate the mute-opening wires or levers, substantially as described.

2. A stop-action for organs, consisting of a rock-shaft, a crank mounted upon and operating said shaft, an eccentric or cam mounted on said shaft, and a mute-operating wire extending beneath said cam and operated thereby, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

ALLEN S. RAND.

Witnesses:

THEODORE SALMON,  
M. W. MITCHEL.