

REED-ORGAN.

Patented Feb. 1, 1876.

G *fig. 1.*

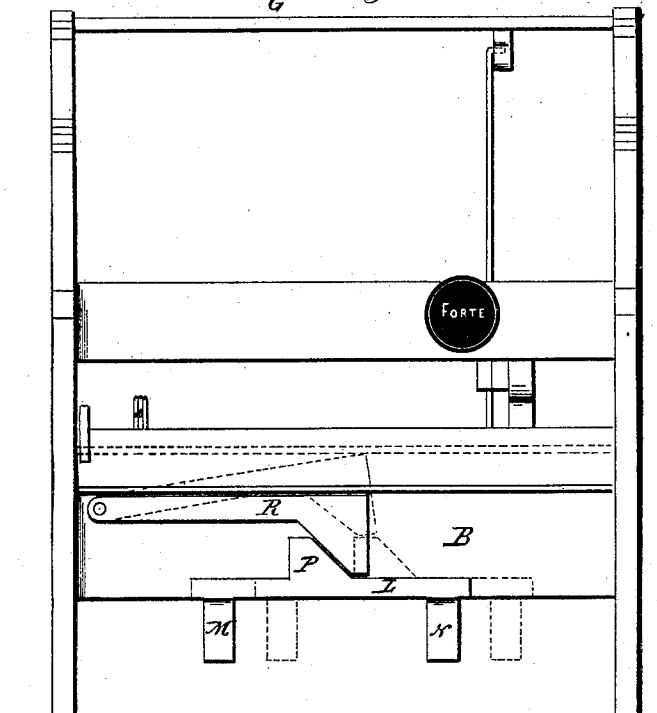
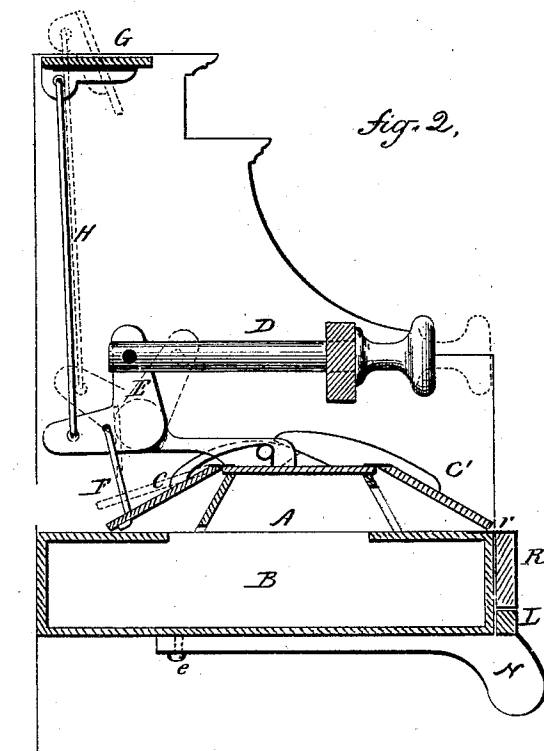


Fig. 2,



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IMPROVEMENT IN REED-ORGANS.

Specification forming part of Letters Patent No. **172,884**, dated February 1, 1876; application filed
November 23, 1875.

To all whom it may concern:

Be it known that I, JOHN R. LOMAS, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Reed-Organs; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent in—

Figure 1, front view; Fig. 2, vertical section of so much of the instrument as will illustrate this invention.

This invention relates to an improvement in what are known as reed-organs, and like instruments.

In the usual construction the full power of the swell is not attained, because the opening to the swell-box is within the case of the instrument.

Again, in the usual construction, the principal swell-stop is moved by the knee or foot into a catch, which will hold it wide open, and from which it must be detached before the swell can be closed.

The object of the first part of this invention is to provide a means for opening some portion of the case at the time the swell is opened; and the object of the second part is to construct the knee-stop so that it may be moved either to the right or left by the knees, and without the necessary catching or latching to hold the swell wide open; and the invention consists, first, in hinging or pivoting a panel or portion of the case, and connecting the same with the swell-stop, so that when the swell-stop is opened the hinged or pivoted portion of the case will be simultaneously opened; and, second, in a horizontal slide in connection with the knee-stop, and constructed with an incline or cam to act upon a lever or projection from the swell-box door, so that when the said slide is moved in one direction, it will open the swell and hold it open, if need be, and moved in the opposite direction will close the box.

A is the reed-board, arranged relatively to the wind-chest B, in the usual manner. C is the hinged door or side of the swell-box, the

opening of which increases the volume of sound in the usual manner. D is the hand-stop for the swell, attached to one arm of a lever, E, the other arm attached to the door C by a rod, F. G is a panel, or portion of the case pivoted or hinged to an adjoining stationary part of the case, and connected by a rod, H, to the lifting-arm of the lever E; hence when the stop D is drawn to open the door C, the part G of the case will be simultaneously turned, as indicated in broken lines, which constitute the first part of the invention.

At the front of the case a slide, L, is arranged on two knee-stops, M N, the two stops hinged at the rear, as at *e*, in the usual manner for knee-stops. The slide or bar L connects the two stops, and so that the pressure against one will move both to the right, and pressure on the other in the opposite direction will move both to the left, the two stops preferably arranged, so that both knees of the player will come between the two.

On the bar L an inclined piece or cam, P, is vertically arranged, and on the swell-box, or at a convenient position, a horizontal lever, R, is hinged, one end of which extends down upon the inclined side of the cam P, as seen in Fig. 1, and from this lever, an extension, *r*, is made to extend beneath the second door C' of the swell-box, and the two doors connected, as indicated, so that the opening of the front C' will open the rear C.

The player, when desiring to open the swell, presses with the right knee against the stop N, forcing the cam P to raise the lever R, and with it the doors of the swell-box, and, if desired to be fully opened, he presses so far to the right that the plane or upper flat surface of the cam will come beneath the end of the lever R, and so that the lever will rest thereon. Then, when desired to close the swell, press with the other knee against the stop M, to draw the cam P from beneath the end of the lever, and the doors automatically close. The movement to open is represented as to the right, and to close to the left; but this may be reversed by reversing the cam. The connection between the door of the swell and the panel or part G may be made direct without the interposition of the lever E, and so

that the knee-stops will turn or open the panel G, instead of through the stop D, the stop D only serving to open one door of the swell, and independent of the second door C', yet the knee-stop arranged to open both.

I claim—

1. The combination, in a reed-organ, of the door of the swell-box, the hand-stop D, lever E, and the hinged or pivoted panel or part of the case G, substantially as and for the purpose described.

2. The combination, in a reed-organ, of the knee-stops M N, cam P connecting said stops with the lever R, and door of the swell-box, substantially as and for the purpose described.

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Witnesses:

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