Clark & Stephenson,

Organ Swell,

No. 46,335. Patented Feb. 14, 1865.

Fig: 2.

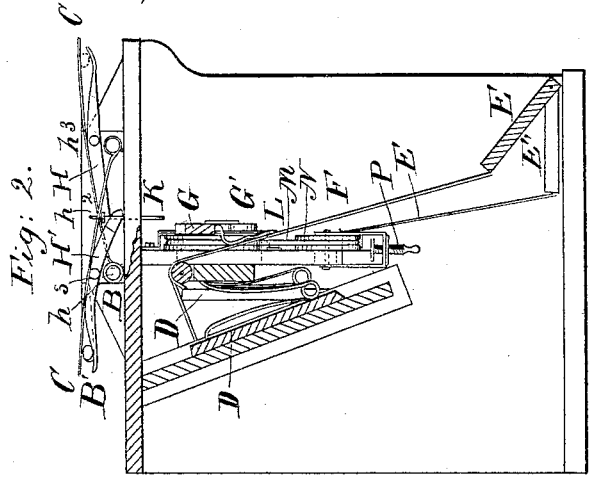


Fig: 1.

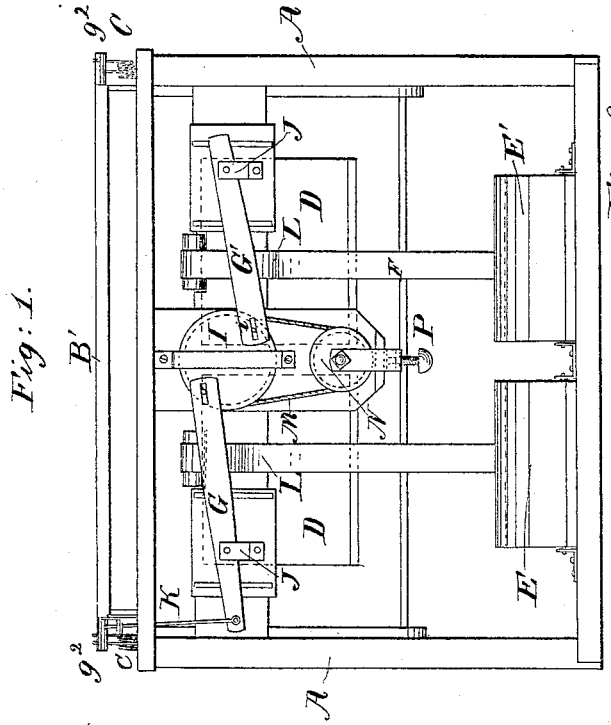
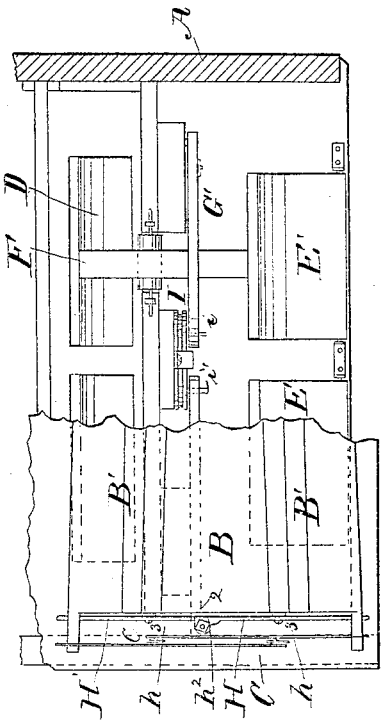


Fig: 3.



Witnesses;
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Geo. Wallace

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UNITED STATES PATENT OFFICE.

DAVID CLARK AND THOMAS STEPHENSON, OF BUFFALO, NEW YORK.

MODE OF OPERATING THE SWELL OF MELODEONS.

Specification forming part of Letters Patent No. **46,335**, dated February 14, 1865.

To all whom it may concern:

Be it known that we, DANIEL CLARK and THOMAS STEPHENSON, of the city of Buffalo, in the county of Erie and State of New York, have invented a new and Improved Method of Operating the Swell of Melodeons and other Similar Musical Instruments; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure I is a longitudinal section representing a melodeon with our improvement therein shown in elevation. Fig. II is a cross-section, partly in elevation. Fig. III is a top-plan partly in section.

Letters of like name and kind refer to like parts in each of the figures.

The nature of this invention relates to operating the swell of melodeons and other similar musical instruments by means of connecting the swell to the bellows-pedals, so that the performer will have entire control over the swell by an extended movement of the pedals, and thereby open and close the swell at pleasure without interfering with the ordinary use of the bellows.

A represents the outside case of a melodeon, organ, or other similar musical instrument having a wind-bellows.

B represents the swell or swell-box, which is of common construction, and is placed on the top of the instrument.

B′ represent the two flaps or valves of the swell, which are of common construction, and have pressure or closing springs thereon, as shown at C.

D represents the bellows, and E and E′ the bellows-pedals.

F represents a strap, which connects each pedal with the bellows in a common manner.

Two levers, G and G′, are placed on each side of and connected to the crank-wheel I by means of a slot in the lever and a crank-pin in the wheel, as shown at *i i*, and have fulcrum-bearings, as shown at J J.

A lifting-rod, K, is connected to the end of the lever G, which rod projects upwardly and connects with two levers, H and H′, placed on the end of the swell-box. These levers have each a fulcrum-bearing on the end of the swell-box, as shown at h^3, and are extended each way, one end passing under the pin g^2 on the end of the swell-valve, and the other end passing under the adjusting screw-nut h^2, so that when the right pedal is pressed downwardly to the extent required the valves of the swell will be opened, and when the left pedal is pressed downwardly to the extent required the valves of the swell will be closed.

A short strap, L, is connected with the bellows and pedal straps F, and also to the levers G and G′, which are for the purpose of forming or completing the connection between the bellows-pedals and the swell. There is sufficient length given to these straps to allow the bellows-pedals to work through sufficient distance for all the ordinary purposes of the bellows, without in the least affecting the swell; but when it is required to open the swell, then the movement of the right pedal is extended a little downwardly by the foot, or sufficiently for the strap L to pull upon the lever G′, and this, through the crank-wheel I, rod K, and levers H H′, before described, will immediately act upon the flaps or valves of the swell to open them, slightly or fully, as may be desired by the operator, and then an extended movement downwardly of the left pedal will, in the same manner, close the swell-valves, the springs C acting upon the valves to assist in closing them, and thus the operator, through the movements of the bellows-pedals, has entire control over the swell.

At M is shown a tension-cord running over the tension-pulley N and crank-wheel I, with a tightening-screw, as shown at P. By this arrangement the tension may be adjusted so that the flaps or valves of the swell will remain in the precise position, either partly or fully open, as the operator desires.

It is evident that other devices for connecting the swell to the bellows-pedals may be used than are here particularly described; and we do not therefore confine ourselves to these particular means, as other equivalent means may be used, the principle and idea of our improvement being to operate the swell by means of connections to the bellows-pedals.

What we claim as our invention, and desire to secure by Letters Patent, is—

Operating the swell of melodeons and other similar musical instruments by means of the bellows-pedals, substantially as described.

DANIEL CLARK.
THOS. STEPHENSON.

Witnesses:
E. B. FORBUSH,
GEO. W. WALLACE.