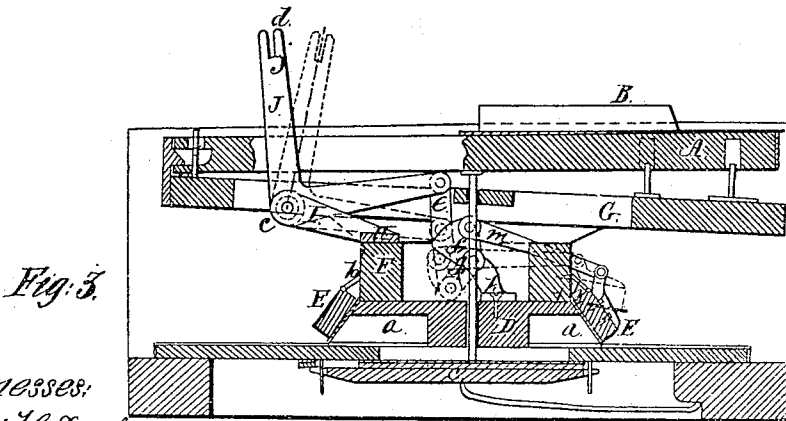
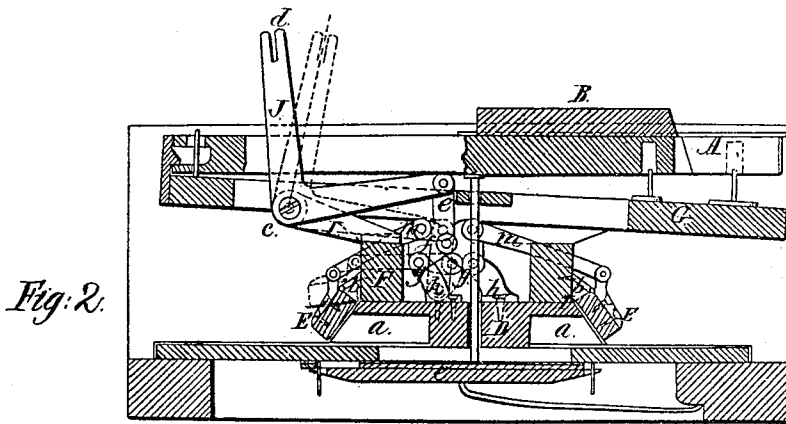
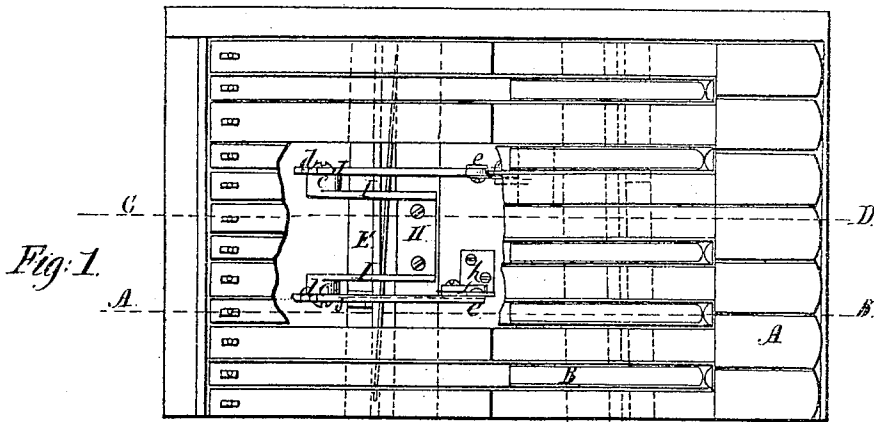


S. Taylor,
Organ.

Organ.

No. 9,686.

Patented June 22, 1869.



Witnesses:
Thos. H. Dodge
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Inventor:
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United States Patent Office.

SIMEON TAYLOR, OF WORCESTER, MASSACHUSETTS.

Letters Patent No. 91,686, dated June 22, 1869.

IMPROVEMENT IN ORGANS AND MELODEONS.

The Schedule referred to in these Letters Patent and making part of the same.

Know all men by these presents:

That I, SIMEON TAYLOR, of the city and county of Worcester, and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Organs and Melodeons, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a plan view of so much of an organ or melodeon as is necessary to illustrate my present improvements.

Figure 2 represents a section on line A B, fig. 1, and

Figure 3 represents a section on line C D, fig. 1.

To enable those skilled in the art to which my invention belongs to make and use the same, I will describe it more in detail.

The nature of my invention consists—

First, in the combination and arrangement of the mechanism by which the volume of tone of the instrument is regulated, in such a manner that the stops, by which such mechanism is operated, can be placed directly in front of the player, instead of at the sides of the instrument, as has heretofore been practised.

Second, in the combination with the valves which regulate the volume of the tone of the instrument, of certain peculiar mechanism for operating the same, as hereafter explained.

In the drawings—

A B represent keys attached to valves C, in the ordinary manner.

D is the reed-frame, provided, in this instance, with two long valves E E, one on each side, which cover the openings *a a*.

These valves are held down by springs *b b*, arranged in the usual manner.

Upon one of the cross-pieces F (which supports the guide-frame G) is secured a stand, H, having two arms I I.

To each of these arms a right-angle lever, J, is pivoted or hinged at *c*.

The upright arms of said levers have slots *d*, by means of which the horizontal stop-handles are to be attached, and which project forward through the casing, so that they can be operated by the performer while sitting in front of the instrument.

The horizontal arm of lever J, fig. 3, projects forward, and is connected by a link, *e*, to the rear part of a triangular piece, *f*, which, in turn, is hinged at *g* to a stand, *h*, secured to the top of the reed-frame.

To the upper front corner of the piece *f* is hinged the rear end of the connection *m*, the front end of which is hinged to a projection on the valve E, which

in turn is hinged to the reed-frame, at 1, as fully indicated in fig. 3.

The operation is as follows:

When arm J is drawn forward by means of the stop-handle, piece *f* is depressed, thereby drawing connection *m* back, and raising the valve E, the position of the parts when the valve is opened being shown by red lines, fig. 3.

It will be seen, by reference to fig. 3, that the rear joint of the connection *m* is drawn back and down into the same, or nearly the same horizontal plane with joint *g* of the piece *f*, so that the power of spring *b* draws the connection *m* on a line with joint *g*, whereby the valve is held open, or in a locked position, until it is closed by the operator moving the upright arm of lever J back sufficiently to raise piece *f*, until the rear joint of connection *m* rises above the dead-point, or centre *g*, when the power of the spring *b* instantly closes valve E.

I have now described the mode of applying the device to operate the front valve E.

In fig. 2 the device is shown, applied to open both the front and rear valves by forward movements of the upper arms of the levers J, the motions of pieces *f* and connections *m*, in one case, being in an opposite direction from what they are in the other.

In fig. 1, the rear parts of the keys are represented broken away, to show the position and relative arrangement of the stop or valve-operating mechanism.

The upper ends of the arms J project up between the keys A B, the sides of the keys being cut away slightly, to admit of a free movement of the levers and keys, without rubbing or chafing.

It will be understood, that instead of one valve, E, running the whole width of the keys, two or more may be substituted, each valve being provided with a separate operating-mechanism.

My invention has been practically tested, and meets with much favor.

The arrangement of the mechanism for opening and closing the valves or stops, to regulate the volume and power of the sounds below the keys and above the reed-frame, is very important, since it obviates the necessity of complicated lever-arrangements.

Having described my improvements in organs and melodeons,

What I claim therein as new and of my invention, and desire to secure by Letters Patent, is—

1. The arrangement of the arms, by which the volume of tone-regulating mechanism is operated, between the rear parts of the keys, substantially as and for the purposes set forth.

2. The combination, with one or more valves E,

of a bell-crank lever, *J*, stands *h*, and connections *f*, *m*, and *e*, substantially as and for the purposes set forth.

3. The combination and relative arrangement, with the valves *E E*, bell-cranks *J J*, stands *H h*, and arms *I*, of the pieces *f f*, and connections *m m* and *e e*, substantially as and for the purposes set forth.

4. The arrangement of the mechanism for opening

and closing the valves or stops, by which the volume and power of the organ or melodeon is regulated, under the keys and above the reed-frame, substantially as shown and described.

SIMEON TAYLOR.

Witnesses:

THOS. H. DODGE,
D. L. MILLER.