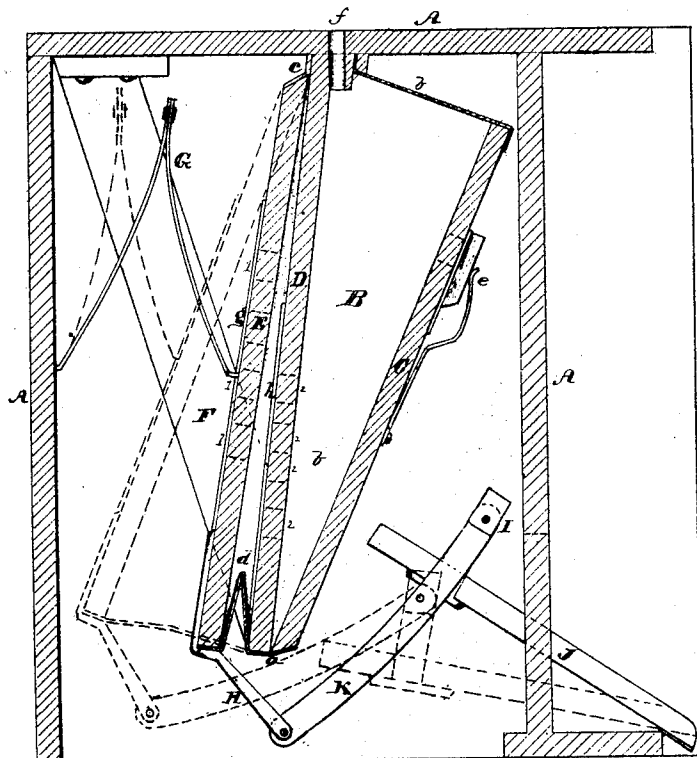


S. Taylor,

Organ Bellows.

No. 107,122.

Patented Sept. 6. 1870.



witnesses
Thos. H. Dodge
A. C. Sirel

Inventor
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United States Patent Office.

SIMEON TAYLOR, OF BRIGHTON, MASSACHUSETTS.

Letters Patent No. 107,122, dated September 6, 1870.

IMPROVEMENT IN REED-ORGAN BELLOWS-ACTION.

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

To all whom it may concern:

Be it known that I, SIMEON TAYLOR, of Brighton, in the county of Middlesex and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Organs; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, which represents a vertical section through the bellows, or so much thereof as is necessary to illustrate my present improvements.

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

The nature of my invention relates to improvements connected with the bellows, whereby the latter can be operated with far more ease and convenience than by the various modes in use prior to the invention of my present improvements.

In the drawing—

The part marked A represents the box or case in which the bellows B is arranged.

The bellows B is inverted and suspended from the top of the box, and is composed, in this instance, of three principal boards, C, D, and E, the center board, D, being rigidly secured to the top of the box A, and supported at its lower end on each side by braces F, which extend down from the top of the box.

The board C is secured at the bottom of the central board D by a flexible covering, *a*, and is connected at its sides and upper end to the sides of the board D, and to the under side of the top of the box A by a flexible leather or cloth covering, *b*.

The exhaust-board E, in this instance, is not as wide as the board B, and is connected at its upper end to the center board D by a leather covering, *c*.

Its sides and lower ends are also connected by a leather folding-piece, *d*, to said center board.

The board C may be forced out, in the position shown in the drawing, by any suitable spring.

It is also provided with a vent-valve, *e*.

The exhaust-board E is held in the position shown in dark lines in the drawing, by the compound or forked spring G, the lower end of one of the legs of which is fastened to the exhaust-board E, while the lower end of the other leg is fastened to the back of the box A.

To the lower end of the exhaust-board E is secured an arm, H, which in turn is connected to the stand I upon the foot-pedal J by the curved, hinged connecting-piece K, whereby the operator, by simply depress-

ing the pedal J, can throw the exhaust part E of the bellows back into the position shown in dotted lines in the drawing, thus drawing the air into the bellows B through the holes *f* in the top of the box A.

It will be understood that the reed part of the keys are to be arranged over the top of the box A in the usual manner.

A series of holes, 1, 2, are made in the boards D E, and covered on their outer ends by flexible leather valves, *g h*.

When the pedal J is depressed, and the exhaust-board E is forced back, as shown in dotted lines, valve *h* opens and valve *g* closes, thus drawing the air through holes *f* into those parts of the bellows between the boards C and D, and D and E, while, when the foot-pedal is allowed to return to the position shown in full lines in the drawing, the valve *g* opens and allows the air to escape through the holes 1 from between the boards D and E.

By the use of the downwardly-projecting arm H, the connection can be formed with the pedal so as to clear the lower end of the bellows.

It will be observed that, by connecting the foot-pedal to the bellows by means of the double-jointed connecting-piece K, as shown and described, less power is required to operate the bellows as the foot-pedal is depressed, since the connections operate somewhat on the principal of the toggle-joint.

By the use of the stand I upon the foot-pedal for supporting the front end of the connecting-piece K, the necessary motion is obtained to the exhaust-board in a more convenient manner than would be the case if the connection was hinged directly to the pedal itself.

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 combination, with the exhaust-board E, of the bellows and the foot-pedal J, of a double-hinged connection-piece, K, arranged substantially as herein shown and described.

2. The combination, with the lower end of the exhaust-board E, of a downwardly-projecting arm, H, and a curved and double-hinged connection-piece, K, substantially as and for the purposes described.

SIMEON TAYLOR.

Witnesses:

THOS. H. DODGE,
A. E. PEIRCE.