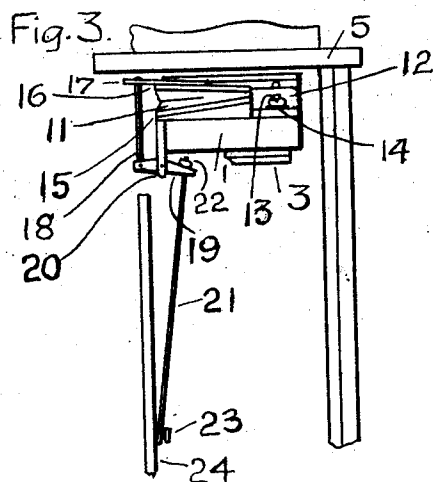
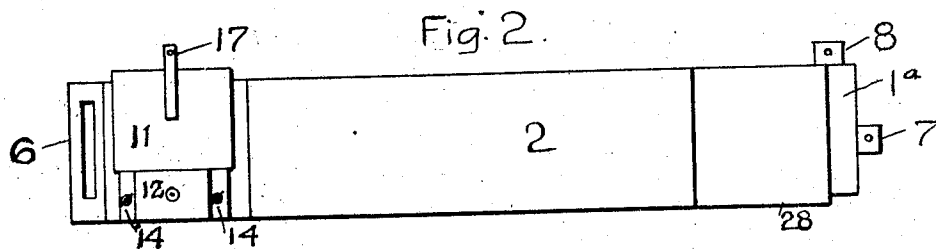
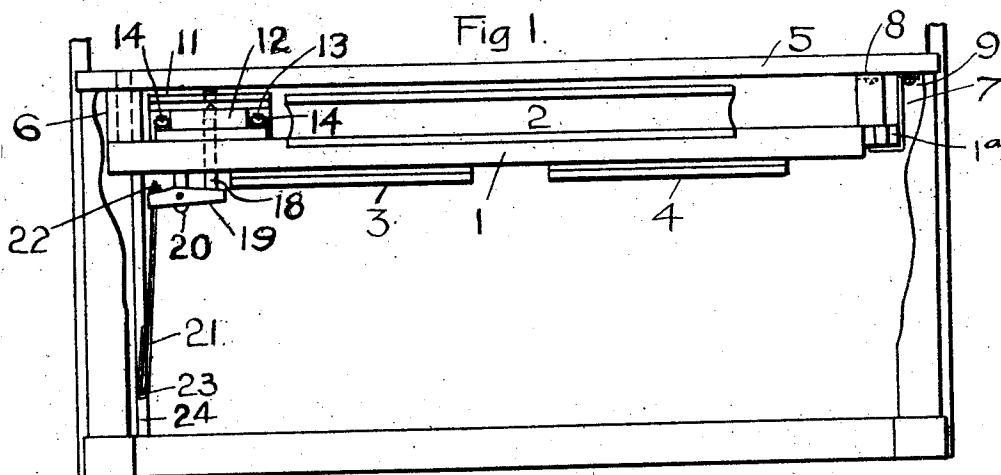


B. A. GALLY.  
PIANO PLAYING EXPRESSION DEVICE.  
APPLICATION FILED JUNE 10, 1912.

1,059,987.

Patented Apr. 29, 1913.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

ROBERT A. GALLY, OF CINCINNATI, OHIO, ASSIGNOR TO THE BALDWIN COMPANY, OF CINCINNATI, OHIO.

## PIANO-PLAYING EXPRESSION DEVICE.

1,059,987.

Specification of Letters Patent.

Patented Apr. 29, 1913.

Application filed June 10, 1912. Serial No. 702,725.

*To all whom it may concern:*

Be it known that I, ROBERT A. GALLY, a citizen of the United States, residing at Cincinnati, in the county of Hamilton, State of Ohio, have invented certain new and useful Improvements in Piano-Playing Expression Devices, of which the following is a specification.

Prior constructions of player-pianos have had the loud pedal pneumatics complicated in connection and attachment and with indirect air connections. The present structure overcomes all these drawbacks.

In the accompanying drawings, Figure 1 is a front view of the lower part of a player-piano containing the bellows; Fig. 2 a plan view of same; Fig. 3 an end view from the bass (left) end of the bellows chest, with the connecting box removed and showing the loud-pedal pneumatic.

A horizontal bellows-chest 1 having a reservoir 2 and pumpers 3 and 4 combined therewith, is suspended underneath and adjacent to the keybed 5 by a connecting box 6 at one end and by hangers 7 and 8 at its other end. The hangers are of flat metal bent at right angles at both ends of each, the upper bend being fastened to the under face of the keybed 5 by suitable screw or bolt 9, and the lower coming under the bellows-chest 1, thus acting as a support of that end while the other end is being fastened, after which screws may be inserted to hold the bellows chest more securely. To give a firmer bearing for the hangers, the end of the bellows chest is finished with a piece of hardwood 1<sup>a</sup>.

The pumpers 3 and 4 are made on the under face of chest 1. The loud pedal pneumatic 11 and valve-box 12 is shown on the left end space on top of said chest 1, but may be placed in other positions on the top of said chest 1 and give the benefit of a compact and direct arrangement. For convenience in removing and regulating the loud-pedal device 12, 13, placed on top of chest 1, screw-rods 13 are used with wing-nuts or the like 14, so that the said devices or boxes may be easily attached. The loud-pedal valve-box 12 is placed on top and at the front of the bellows-chest 1 so that it is visible and accessible from the front when in operation. The rear part of the lower portion of the valve-box 12 is extended to the rear and

slanted downwardly, and on top of this slant is fastened the lower and stationary board 15 of the hinged pneumatic 11.

From the moving-board 16 of loud-pedal pneumatic 11 is extended an arm or finger 17 which acts downwardly on rod 18 which rests on end of a reverse lever 19, this lever 19 being pivoted on hanger-block 20 fastened to the rear of the bellows chest 1. The other end of lever 19 has a pull wire 21 hung through a hole in lever 19, with a regulating-nut 22 on the wire 21 above lever 19 to regulate the adjustment of the wire 21 to the bearing or screw 23 on lifter-rod 24 of the usual loud pedal action of the piano.

This arrangement of loud pedal parts combines compactness, accessibility, ease of regulating, and general effectiveness.

What I claim as my invention, is—

1. In a player-piano: a keybed, a horizontal bellows-chest suspended underneath and adjacent to said keybed, a valve-box on the top face of and adjacent the front of said chest, said box having a rearwardly extending part with its top slanting downwardly to its rear and toward the rear of said bellows-chest, and a hinged pneumatic positioned on the top of said slanting part of said box and with its hinge toward the front and its open part at the rear edge of said bellows-chest; said valve-box having a valve controlling said pneumatic.

2. In a player-piano: a keybed, a horizontal bellows-chest suspended from underneath and adjacent to said keybed, a hinged pneumatic mounted on said bellows-chest with its open part at the rear edge of said bellows-chest with its moving-board uppermost, a vertical rod from said moving-board downwardly at the rear of said chest, a horizontal lever at bottom of said rod and connected to one end thereof, a center bearing intermediate the length of said lever, a pull wire extending down from the other end of said lever, a vertical lifting-rod of the piano devices, and a bearing on said lifter-rod, the lower end of said wire having engagement with said bearing.

3. In a player-piano: a keybed, a horizontal bellows-chest suspended from underneath and adjacent to said keybed, a hinged pneumatic mounted on said bellows-chest with its open part at the rear edge of said bellows-chest with its moving-board uppermost; a

vertical rod from said moving-board down-  
wardly at the rear of said chest, a horizontal  
lever at bottom of said rod and connected  
to one end thereof, a center bearing inter-  
mediate the length of said lever, a vertical  
5 lifting-rod of the piano device, a bearing  
on said lifting-rod, the lower end of said

wire having engagement with said bearing,  
and a vertically acting adjusting-means on  
said wire.

ROBT. A. GALLY.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,  
Washington, D. C."