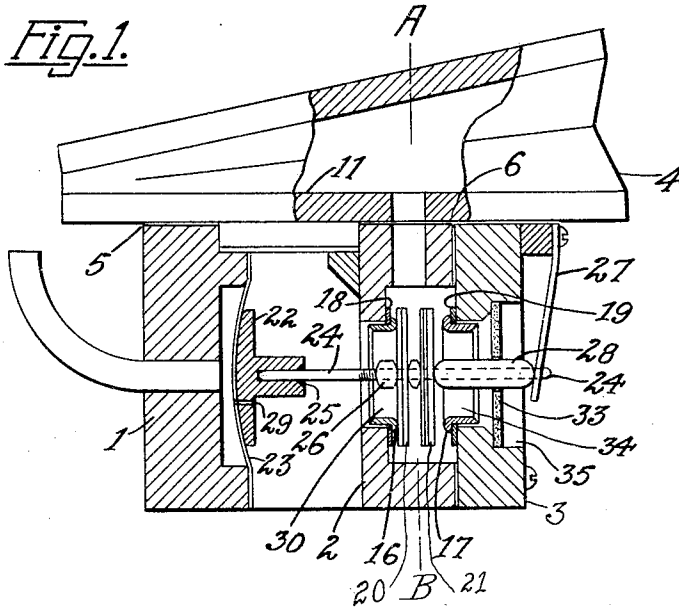


R. A. GALLY.  
MUSIC PLAYER VALVE.  
APPLICATION FILED FEB. 21, 1913.

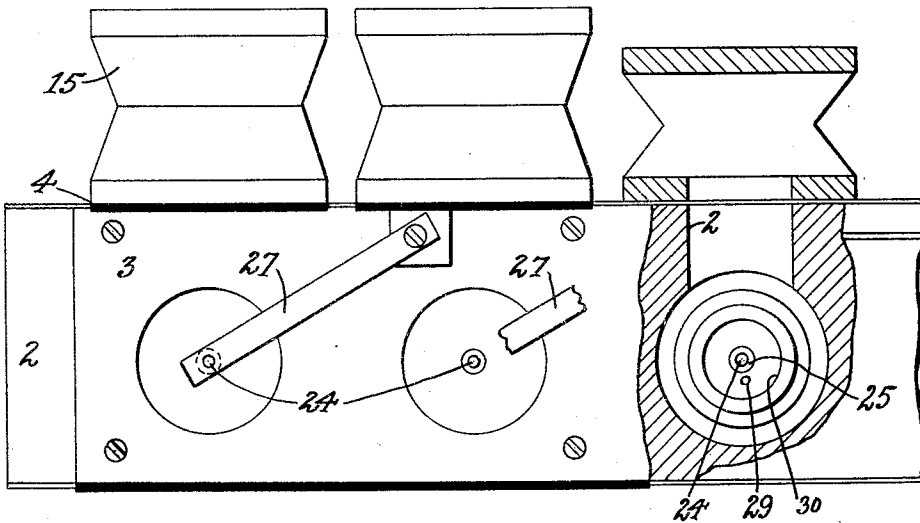
1,105,071.

Patented July 28, 1914.

*Fig. 1.*



*Fig. 2.*



*Witnesses:*  
*Jacob A. Hollander*  
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*Inventor:*  
*Robt. A. Gally.*

# UNITED STATES PATENT OFFICE.

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

## MUSIC-PLAYER VALVE.

1,105,071.

Specification of Letters Patent.

Patented July 28, 1914.

Original application filed November 11, 1912, Serial No. 730,635. Divided and this application filed February 21, 1913. Serial No. 749,812.

*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 Music-Player Valves, of which the following is a specification.

The object of my invention is to obviate various noises common to previous devices of this nature and make easy the regulation of the valves to the pneumatics that actuate said valves, and to prevent disturbance or injury to the valves or the striker pneumatics by accidental collapse of said strikers from an outside blow of a workman's hand.

In the drawings Figure 1 is an end view of a valve chest in section with a striker pneumatic attached, and Fig. 2 a front view of said chest with parts in section taken at A and B of Fig. 1.

The valve action now shown comprises a pouch rail 1, valve rail 2 and valve-cap 3, a striker pneumatic 4 being attached to said rails 1 and 2, preferably by leather or similar split joints 5 and 6 glued to both striker and rails, to allow removal of striker for repairs by the pulling apart of the leather without damage to the wood of either board 11 of striker 4, or of rails 1 and 2.

The valve seats 16, 17, usually of eyelet form, may be of any suitable material, a non-corrosive substance preferable, as hard rubber or the like, and of a nature that will not warp from a true face. To avoid danger of such seats loosening from their valve boards as 2 and 3, and consequent leakage, and as safeguard against the shrinkage of the wood of said boards cracking a hard rubber or compo seat, or the splitting of the board from its shrinkage strain on the seats or eyelets, the hole in the valve board is made loose to the valve seat, a gasket 18, 19, of yielding material, as leather, is made with a central hole to fit snugly over the stem or hub of the seat or eyelet, with the outer part of said gasket extending outward and sealed to the valve board. Such a joint is absolutely safe against leakage or other trouble.

Regulating of valves 20 and 21 with respect to each other and to the follower 22 attached to pouch 23, is made easy by having

the valve rod 24 placed loosely in a hole 25 of follower 22, so that rod 24 may be withdrawn from hole 25 and together with its assembled valves on it, be removed from the valve action for regulating or cleaning. A regulating button 26 just to the rear of valve 20 is movable lengthwise of valve rod 24 on a threaded portion of the rod, and adjusts follower 22 and pouch 23 to valve 20 when latter is seated, and is easily adjusted when rod 24 and its valves are removed without the risk of loosening the follower from the pouch as when turning a valve rod that is screwed into its follower. To use a spring as 27 to aid the return of valves 20 and 21 and rod 24, and tight seating of valve 20, and yet avoid a shoulder on rod 24 that would interfere with the removal of the valves from the rod, a removable sleeve 28 is slid freely on to rod 24, with the rear end of the sleeve against the valve parts, and its forward end against the guide spring 27 which presses back the sleeve against the valve parts.

The return vent 29 is placed in the follower button 22 which is attached to pouch 23, this vent 29 being opposite to the valve port or hole 30, so that the vent may be examined, regulated or cleaned through said valve hole 30 when the valve is removed.

The prevention of over-quick inward flow of outside air to a pneumatic 4 is obtained by a felt 33 or similar porous material placed across the outer port 34, most conveniently and neatly in a counterbored hole or recess in face of valve cap 3, the hole 35 being preferably larger than port 34, to allow use of porous or air retarding material of ordinary thickness instead of an extremely thin material required for the smaller hole 34.

The air flow retarding of the outer port not only quiets the air rush noise through outer port 34, but prevents racing and consequent pounding or snapping noises of striker pneumatic 4 on quickly repeating operation, and reduces the tendency of valve 20 to make a pounding noise at finish of its return action.

Many of the parts shown herein are for illustration only, such parts being also shown, and many of them claimed, in my

original application #730,635, filed November 11th, 1912, from which this application is a division.

What I claim as my invention, is:—

1. A music player valve action having a valve board, a valve seat having a main part and a flanged head, and a gasket of yielding material having a part thereof snugly surrounding the main part of said valve seat and between its said head and board, the face of the gasket being attached to said valve board.

2. A music player valve action having a valve board, a valve seat having a main part and a flanged head, and a gasket of yielding material with a hole therein snugly surrounding the main part of said valve seat, the face of the gasket being attached to said valve board, and that part of the gasket adjacent its hole lying between the under part of said flange and the part of the board immediately under said flange.

3. A music player valve action having a valve board with a hole, a valve seat having a main part and a flanged head, with the main part loosely within said hole, and its flanged head extended over said board around said hole, and a gasket of yielding material snugly surrounding the main part of said valve seat between the under part of the flange head and the board, the gasket being attached to said valve board outside of said hole.

4. A music player valve action having a reciprocating motion valve and a pneumatic to actuate same, a hole in a solid part of said pneumatic and opposite to said valve, and in axial alinement with said reciprocating motion and of greater length in that direction than said motion, a valve rod having its inner end resting loosely in said hole and having the valve mounted on said rod, said rod extended through said valve and being freely removable from said hole and the action together with said valve.

5. A music player valve action having a reciprocating motion valve and a pneumatic to actuate same, a hole in a solid part of said pneumatic and opposite to said valve, and in axial alinement with said reciprocating motion and of greater length in that direction than said motion, a valve rod having its inner end resting loosely in said hole and having the valve mounted on said rod, and said rod extended through said valve, said rod extended into said hole a distance greater than said reciprocating motion.

6. A music player valve action having a reciprocating motion valve and a pneumatic to actuate same, a straight hole in a solid part of said pneumatic and opposite to said

valve, and a valve rod having its inner end resting loosely in said hole and having the valve mounted on said rod and said rod extended through said valve.

7. In a music player valve action having a valve cap, a valve rod passing through said cap, and a valve on said rod rearward of said cap, a sleeve freely mounted on said rod with its inner end against said valve and its outer end forward of said cap, and a spring forward of said cap and against the outer end of said sleeve.

8. In a music player valve action having a valve cap, a valve rod passing through said cap, and a valve on said rod rearward of said cap, a sleeve freely mounted on said rod with its inner end against said valve, and its outer end forward of said cap, and a spring forward of said cap and against the outer end of said sleeve, said rod extending forward of said sleeve, and said spring engaged with said rod.

9. A music player valve action having a valve hole and valves therefor adapted to be removed therefrom, a pneumatic inside the action and directly opposite said valve hole, and a vent or bleed in said pneumatic opposite to and accessible through said valve hole.

10. A music player valve action having a valve hole and valves therefor adapted to be removed therefrom, a pneumatic inside said action, and a vent or bleed hole connected to said pneumatic and inside said action in a position opposite to and accessible through said valve hole.

11. A music player valve action having a valve hole and valves therefor adapted to be removed therefrom, a pneumatic inside said action, and a vent or bleed hole connected to said pneumatic and inside said action in a position accessible through said valve hole.

12. A music player valve action having a valve and port, a counterbore larger than said port and away from said valve, and a porous material disk inset in said counterbore and across said port.

13. A music player valve action having a valve hole and valves thereto adapted to be removed therefrom, a pneumatic inside said action, and a vent or bleed hole connected to said pneumatic and inside said action in a position opposite to the said valve hole and accessible through said valve hole.

ROBT. A. GALLY.

Witnesses:

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