

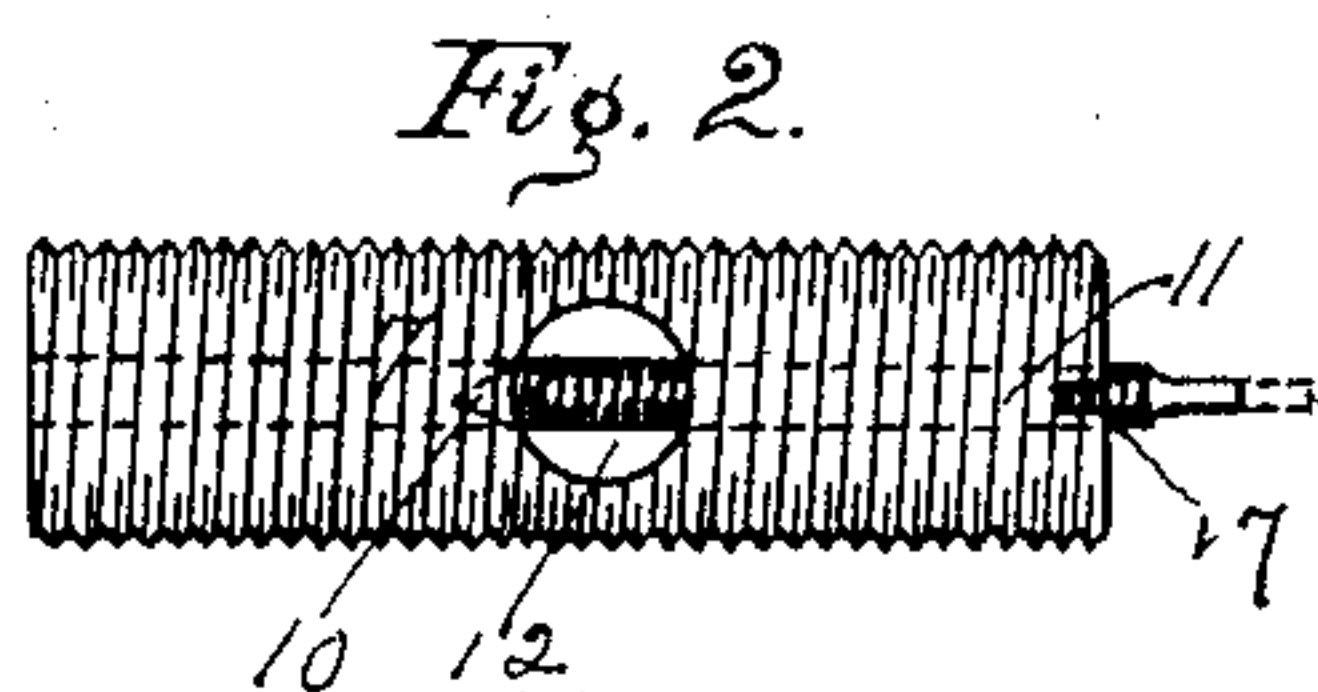
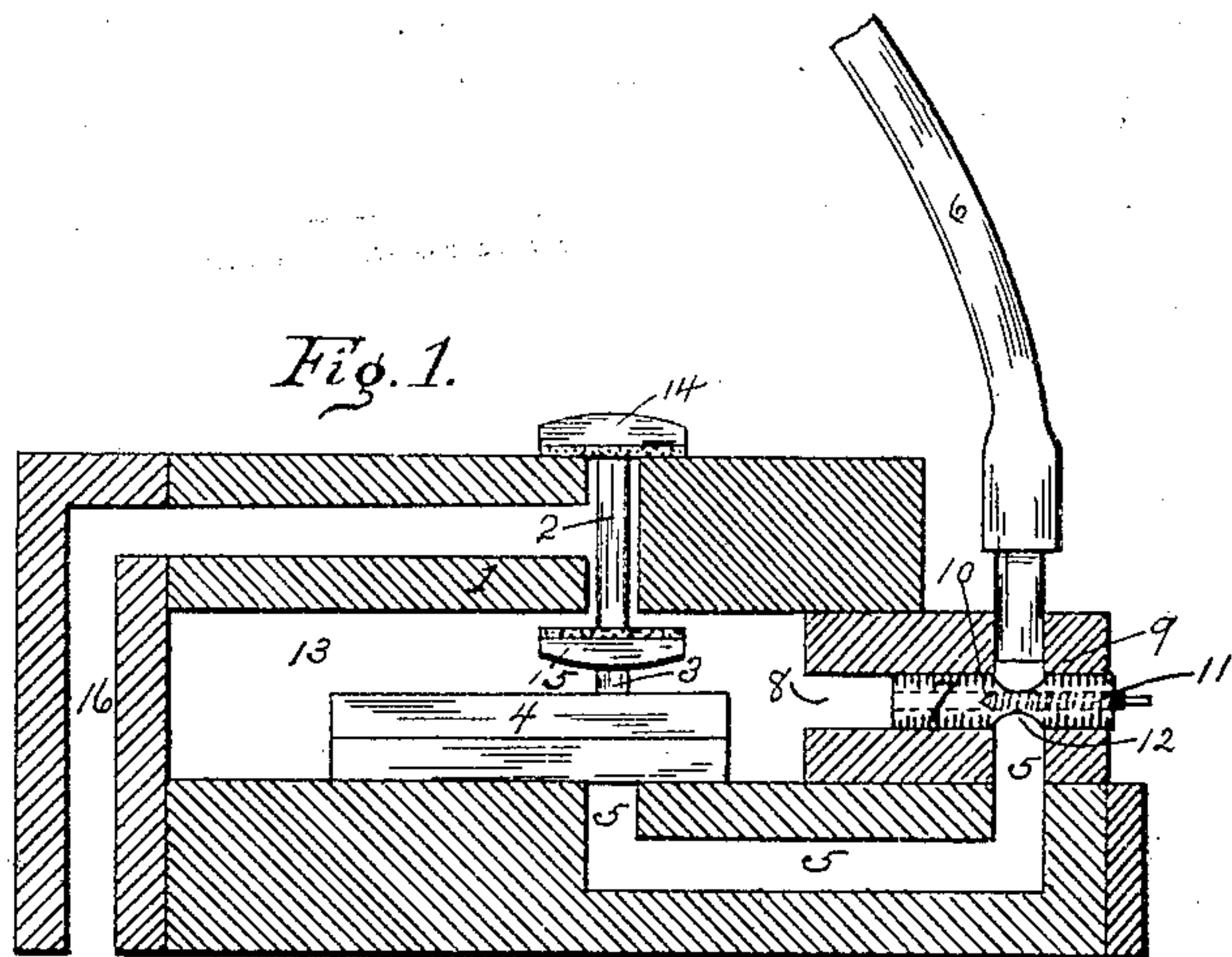
No. 778,365.

PATENTED DEC. 27, 1904.

L. U. JOBES.

MECHANICAL MUSICAL INSTRUMENT PLAYER.

APPLICATION FILED FEB. 29, 1904.



WITNESSES:

J. M. Macy.
W. K. Blinn.

INVENTOR.

Lawrence U. Jobes.

UNITED STATES PATENT OFFICE.

LAWRENCE U. JOBES, OF CINCINNATI, OHIO, ASSIGNOR TO THE BALDWIN COMPANY, OF CINCINNATI, OHIO.

MECHANICAL-MUSICAL-INSTRUMENT PLAYER.

SPECIFICATION forming part of Letters Patent No. 778,365, dated December 27, 1904.

Application filed February 29, 1904. Serial No. 195,789.

To all whom it may concern:

Be it known that I, LAWRENCE U. JOBES, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Mechanical-Musical-Instrument Players, of which the following is a clear and full description.

This invention relates to that class of musical-instrument players wherein the action thereof consists of a series of striking pneumatics, a series of primary valves, and a series of puppet-valves, combined with an exhaust-bellows and operated by a perforated music-sheet.

My invention consists of a regulator for the air-vents ordinarily placed in the primary-valve box in the class of musical-instrument players referred to, the object of which is to improve upon the means usually employed of maintaining the vents in working condition and to provide means for their proper regulation, as will be hereinafter fully described.

Referring to the drawings, Figure 1 shows my improved vent-regulator in position in the primary-valve box. Fig. 2 is an enlarged view of my vent-regulator.

In the description and drawings corresponding numerals of reference indicate corresponding parts.

1 is the primary-valve box; 2, the primary valve, the stem 3 of which rests on the primary pneumatic 4. The passage 5 leads from the pneumatic 4 to the pipe 6. In the front wall 9 of the box 1 I place my vent-regulator 7, which rests in the opening 8 directly in the path of the passage 5. One end of the regulator is placed flush with the outer surface of the wall 9.

My vent-regulator 7 consists of a tube having a screw-thread running the entire length of its outer surface, with a slot 17 at one end, by means of which it is run into the opening 8 to its proper position. The opening through the tube is threaded from the front end to the point 10, about half the length of the same. In the threaded end of the tube is fitted the regulating-screw 11, one end of which is cone-shaped and the opposite end flattened

to receive a regulating-tool. At a point where the threaded inner portion of the tube ends a transverse opening 12 passes through the same, said opening being somewhat larger than the diameter of the regulating-screw. This allows an air-space around the screw at this point. Instead of the hole 12 a slot cut in the side of the tube at the same point will answer the purpose equally well for the passage of air. I prefer, however, the use of the hole, as described.

It will be seen that when the regulating-screw is run in to its limit the tube will be closed to the passage of the air and that by reversing the motion of the screw an air-passage is maintained through the unobstructed portion of the tube and the opening 12, passing through the same, and by varying the position of the screw the amount of air passing through the tube can be perfectly controlled. This makes it possible to regulate the vents in the primary box from the outside by having the regulating-screws in an accessible position.

The ordinary manner of providing vents for instruments of this class is to glue a paper punching over the end of the opening 8, in the center of which is a small hole made with a needle. The holes are often stopped by the accumulation of dust, and in order to clear them or enlarge them it becomes necessary to open up the primary box in order to gain access to them.

The operation of my improved vent-regulator is as follows: The valve-chamber 13 is under suction, which creates a partial vacuum, and the valve-disk 14 on top of the valve-box is closed. When air is allowed to enter the pipe 6, it passes through the regulator 7, the passage 5, and raises the pneumatic 4, which closes the lower valve-disk 15 and opens the upper valve-disk 14 and allows the air to enter the passage 16. When the air is closed off from the pipe 6, the parts return to their former normal position, and in order that the pneumatic 4 may act quickly a vent is provided through my improved vent-regulator for the escape of the air into the chamber 13.

My improved vent-regulator possesses the

advantages of always being accessible for regulating. The amount of air passing through the same can be increased or decreased at will, while it is only necessary to run in the regulating-screw until it stops and reverse to the proper point for cleaning the vent of any dust that may accumulate, and thus impair its action.

Having described my invention, what I desire to secure by Letters Patent is—

1. In a mechanical - musical - instrument player, a vent-regulator consisting of a tube having a transverse opening for the passage of air through the same and through the tube at the rear of said opening; the front end of said tube being provided with a regulating-screw, the inner end of which is cone-shaped and adapted to open or close the tube at the rear of said transverse opening, the exterior of said vent-regulator being provided with a screw-thread its entire length and a slot at one end by means of which the same is placed and held in position, substantially as described.

2. In a mechanical - musical - instrument player the combination of the primary-valve box, the primary-valve pneumatic, the pipe connected with the passage leading to the primary pneumatic and a vent-regulator, consisting of a tube having a transverse opening for the passage of air through same, and through the tube at the rear of said opening, the front end of said tube being provided with a regulating-screw, the inner end of which is cone-shaped, and adapted to open and close the tube at the rear of said transverse opening; the exterior of said vent-regulator being provided with a screw-thread its entire length, and a slot at one end by means of which the same is placed and held in position; said vent-regulator being interposed in the passage leading from the pipe to the primary pneumatic, substantially as described and set forth.

LAWRENCE U. JOBES.

Witnesses:

J. W. MACY,
H. K. BLIM.