

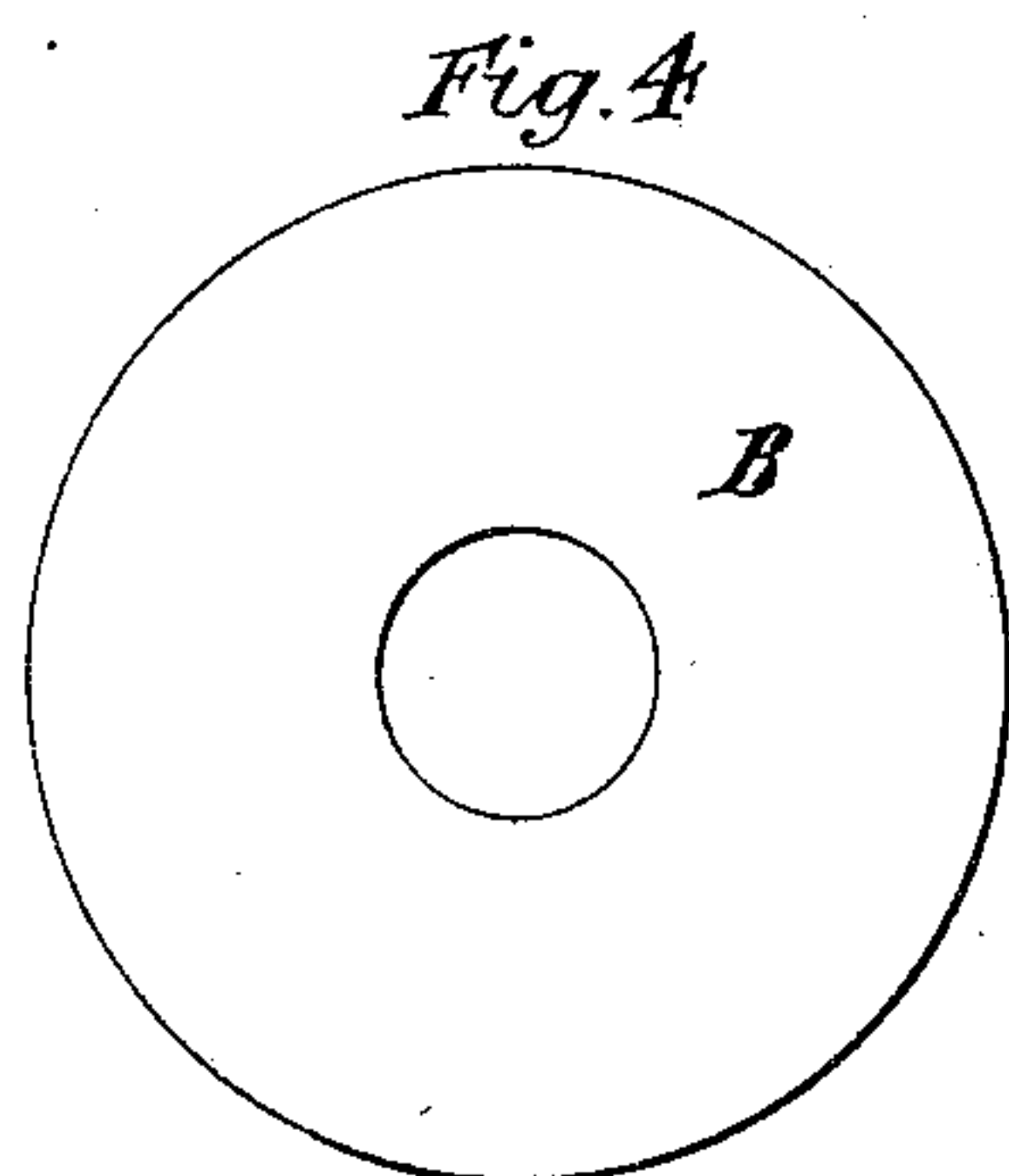
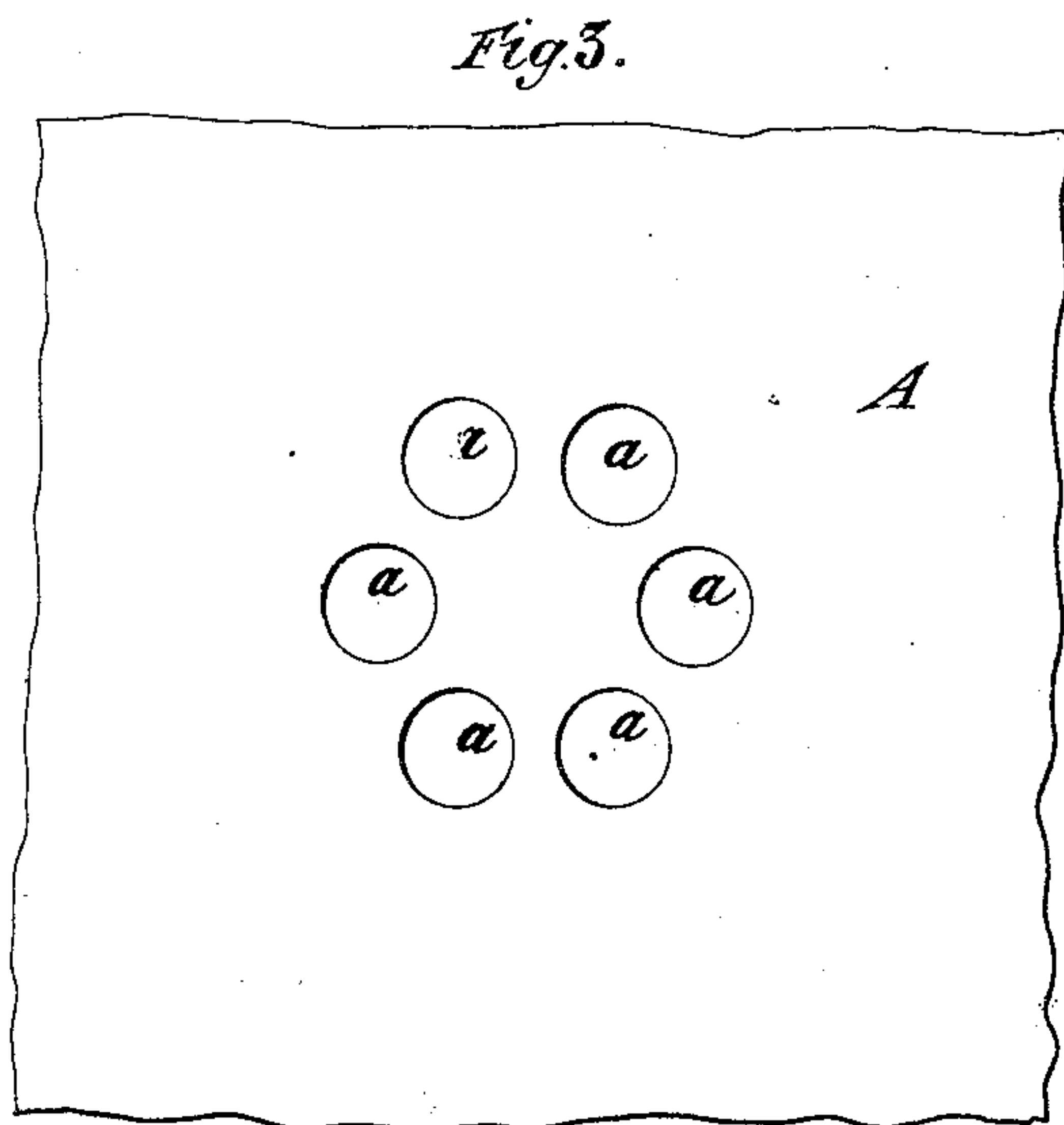
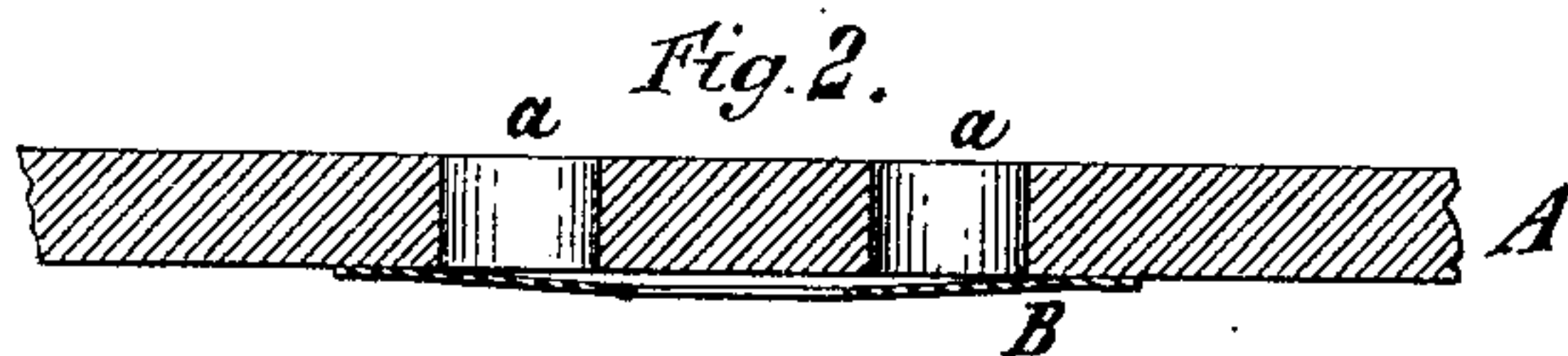
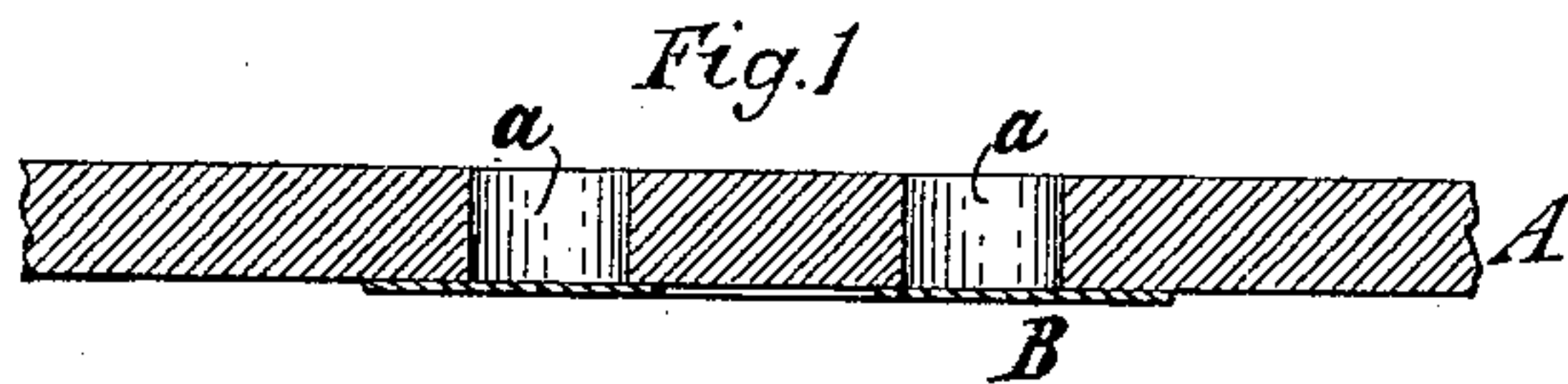
(No Model.)

J. H. CHASE.

VALVE FOR MUSICAL INSTRUMENTS.

No. 335,271.

Patented Feb. 2, 1886.



Witnesses
J. J. Keane
James Bowen.

Inventor
J. Herbert Chase,
by his attorneys,
Gifford & Brown

UNITED STATES PATENT OFFICE.

J. HERBERT CHASE, OF BROOKLYN, ASSIGNOR TO THE MECHANICAL
ORGUINETTE COMPANY, OF NEW YORK, N. Y.

VALVE FOR MUSICAL INSTRUMENTS.

SPECIFICATION forming part of Letters Patent No. 335,271, dated February 2, 1886.

Application filed January 13, 1885. Serial No. 152,760. (No model.)

To all whom it may concern:

Be it known that I, J. HERBERT CHASE, of Brooklyn, in the county of Kings and State of New York, have invented a certain new and
5 useful Improvement in Valves for the Wind Mechanism of Musical Instruments, of which the following is a specification.

The object of my improvement is to provide
10 a simple and delicately-operating valve for the bellows and analogous parts of a musical instrument.

The improvement consists in the combination, with a board or like part provided with a series of openings, of a valve made of flexible material, in annular form, of such size
15 that it can cover the series of openings, and secured in place at the outer edge of the board or like part. Such a valve operates so delicately as to respond with alacrity to the slight-
20 est variations of air-pressure. It is, moreover, simple and cheap in construction and little liable to get out of order.

In the accompanying drawings, Figure 1 is a transverse section of a board and valve embodying my improvement. Fig. 2 is a similar
25 view showing the valve in a different position. Fig. 3 is a face view of the board, and Fig. 4 is a face view of the valve detached.

Similar letters of reference designate corresponding parts in all the figures.

A designates a board, which may be the

movable board of an ordinary bellows. It may be of ordinary form. It is provided with a series of holes or openings, *a*, which, as here
shown, are arranged in a circle.

B designates a valve, made, preferably, of
35 india-rubber cloth, but possibly of other flexible material. It has a hole in the middle, and is substantially of annular form. It is of a
size to cover the series of holes or openings *a*.
40 At the outer edge it is secured by mucilage or other means to the board A. When the air-pressure predominates on the side of the valve which is next to the board, the inner edge portion of the valve moves away from the board
45 and permits the air to escape from the holes *a* and pass through the hole in the center. When the air-pressure is reversed, the valve closes the holes *a*.

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

The combination, with a board or like part provided with a series of openings, of a valve made of flexible material, in annular form, of
55 such size that it can cover the series of openings, and secured at the outer edge directly to the board or like part, substantially as specified.

J. HERBERT CHASE.

Witnesses:

T. J. KEANE,
EDWARD T. ROCHE.