

(No Model.)

L. B. NORTON.

VALVE TREMOLO FOR REED ORGANS.

No. 247,099.

Patented Sept. 13, 1881.

Fig. 1.

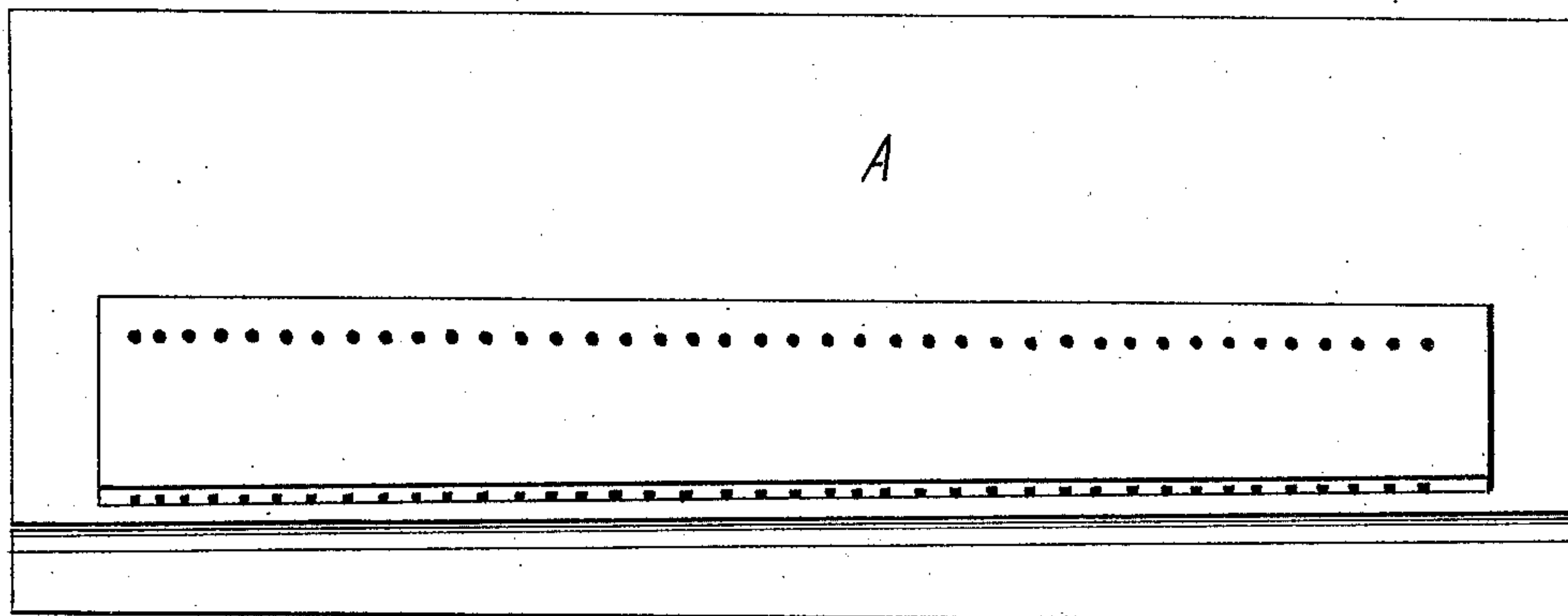


Fig. 2.

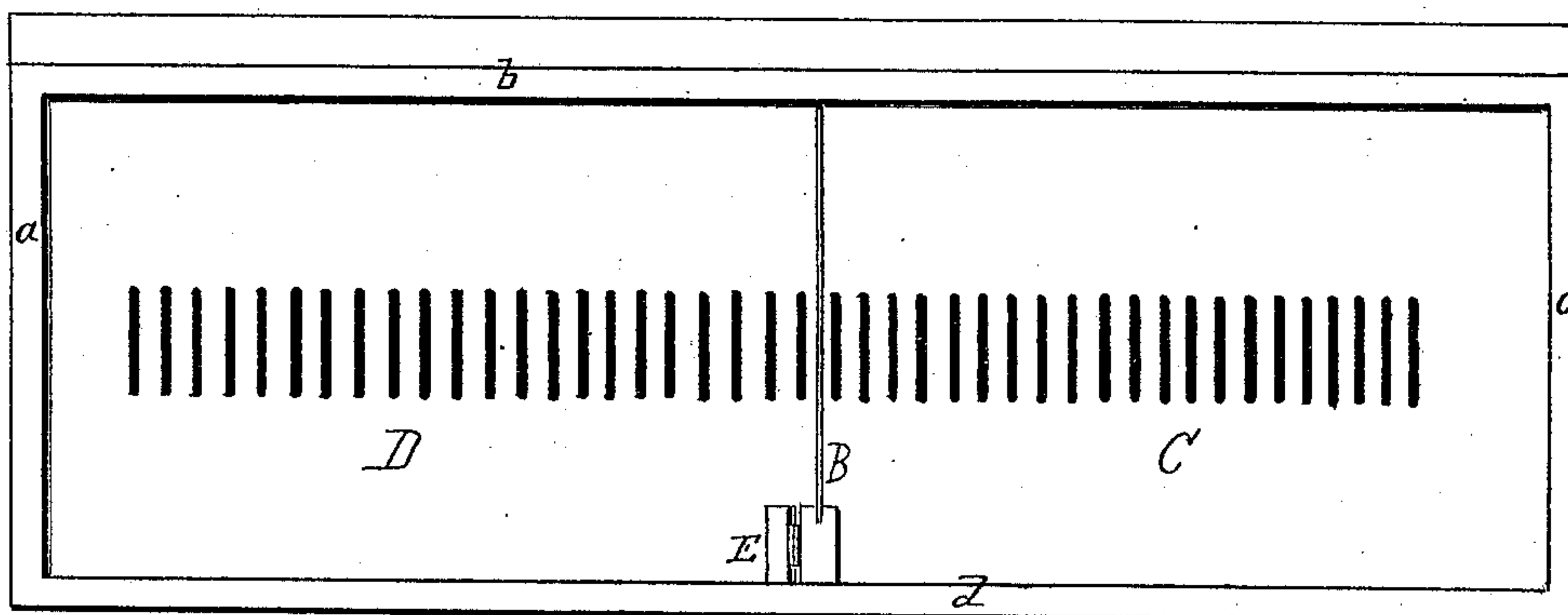


Fig. 3.

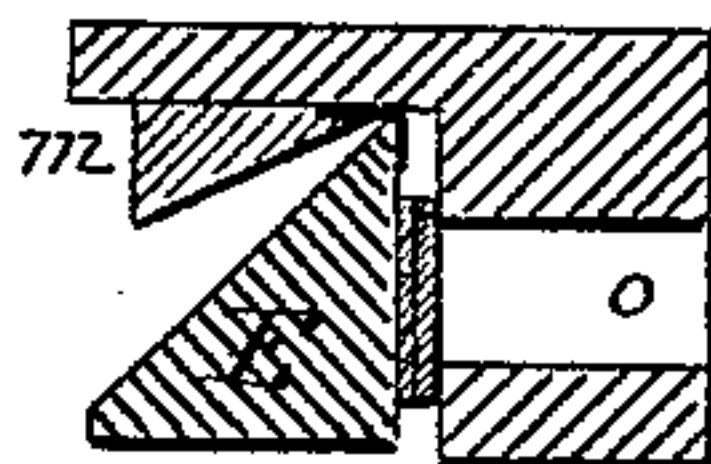
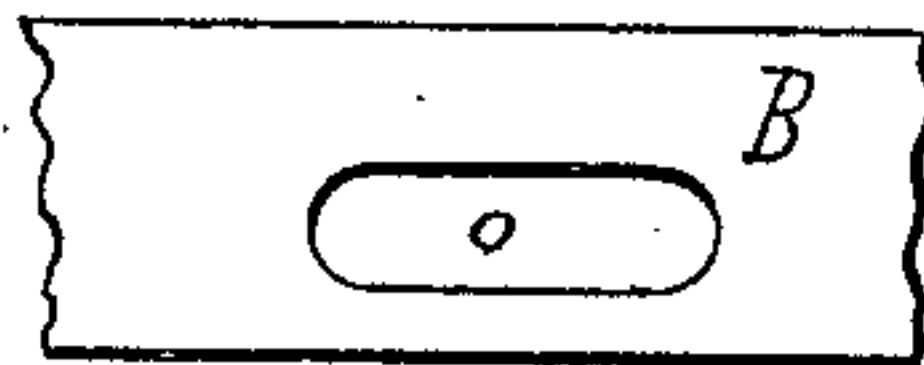


Fig. 4.



WITNESSES.

Daniel S. Glenney Jr.

Hobart B. Dyer

INVENTOR.

Lorenzo B. Norton
by George Perry, atty.

UNITED STATES PATENT OFFICE.

LORENZO B. NORTON, OF NEW HAVEN, CONNECTICUT.

VALVE-TREMOLO FOR REED-ORGANS.

SPECIFICATION forming part of Letters Patent No. 247,099, dated September 13, 1881.

Application filed January 11, 1881. (No model.)

To all whom it may concern:

Be it known that I, LORENZO B. NORTON, of New Haven, in the county of New Haven and State of Connecticut, have invented a new, useful, and Improved Valve-Tremolo for Reed-Organs, of which the following is a description.

Heretofore valve-tremolos for organs have commonly been constructed on the upper side of the sounding-board, and the air-current from one division of the wind-chest passed up through an aperture in the sounding-board, through the tremolo, and down through another aperture in the sounding-board to the other division. Valves have also been arranged on the bellows-board to act as tremolos.

My invention consists in making an aperture in the partition which divides the wind-chest, and in the novel construction and arrangement of a valve to operate in connection with the aperture, as hereinafter set forth. By these means the air-current passes direct from one division of the wind-chest to the other, and a better-acting tremolo is the result.

In the accompanying drawings, Figure 1 is a view of the top or upper side of the sounding-board. Fig. 2 is a view of the under side, showing the partition which divides the wind-chest and the valve arranged to operate in connection with the aperture in the partition. Fig. 3 is a cross-section of the partition and valve; and Fig. 4 is a side view of a part of the partition, showing the aperture.

To enable others to make my improved valve-tremolo so that it will operate in the manner contemplated, I will describe it in detail.

A, Fig. 1, is the upper side of the sounding-board in a reed-organ, and, so far as the present invention is concerned, needs no further description.

Fig. 2 shows the under side of the sounding-board, on which the pieces *a b c d* are fastened to form the wind-chest. These pieces rest on the upper side of the bellows-board, to which the sounding-board is secured. The wind-

chest thus formed is divided by the partition B into two divisions, C and D. The wide part of the partition is made of wood and the narrow part is sheet metal. Through the wide part the oblong aperture *o* (shown in Fig. 4 and in section in Fig. 3) is made, and the side of the wide part of the partition next the valve is the valve-seat. In Fig. 2 the openings or slots in the sounding-board are shown, over which the reeds are placed.

The valve E is a piece of wood three inches long, or of other convenient length, the cross-section of which is represented in Fig. 3. It is hinged to the under side of the sounding-board by a strip of cambric in a manner to be self-closing, and its side next the partition has an elastic covering suitable to close the aperture. The valve and the triangular-shaped piece *m*, Fig. 2, are first glued to the cambric, and the piece *m* is then glued to the under side of the sounding-board, the cambric being interposed. In Fig. 2 the sounding-board is represented as turned over, and the valve is shown open and resting on the piece *m*.

The valve being constructed and arranged in connection with the aperture in the partition, as above described, on closing the opening in the bellows-board in division C, the air-current passes directly through the aperture to division D, vibrating the valve.

Having described my improved valve-tremolo and the manner of its operation, what I claim as new, and desire to secure by Letters Patent, is—

A valve-tremolo for reed-organs, consisting of the valve E, hinged to the under side of the sounding-board, and arranged to operate as described, to close by its own weight over the aperture *o* in the vertical partition of the wind-chest, so as to be vibrated by an air-current passing through said aperture, substantially as set forth.

LORENZO B. NORTON.

Witnesses:

GEORGE TERRY,
EARL BROWN.