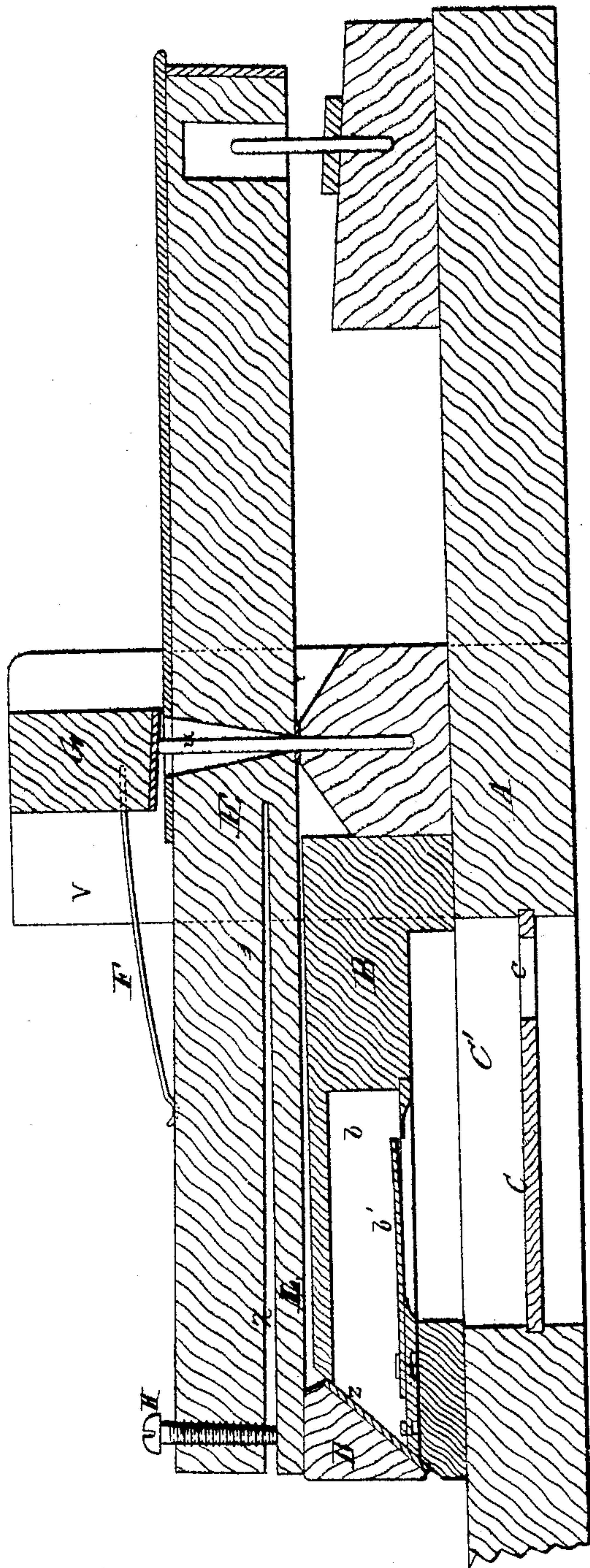


W. N. MANNING.
 Improvement in Organ-Action.
 No. 130,928. Patented Aug. 27, 1872.



WITNESSES.

George C. Upham,
A. D. Kane,

INVENTOR.

W. N. Manning,
Chipman & Co. Agents,
Atty.

UNITED STATES PATENT OFFICE.

WILLIAM N. MANNING, OF ROCKPORT, MASSACHUSETTS.

IMPROVEMENT IN ORGAN ACTION.

Specification forming part of Letters Patent No. 130,928, dated August 27, 1872.

To all whom it may concern:

Be it known that I, WILLIAM N. MANNING, of Rockport, in the county of Essex and State of Massachusetts, have invented a new and valuable Improvement in Organ Action; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

The figure of the drawing is a representation of a sectional view of my invention.

My invention has relation to the action of organs and other reed instruments; and it consists in the construction and novel arrangement of the sounding-board, reed-cells, and valve-keys, all as hereinafter fully described.

Referring to the drawing, A represents the center-board, to which the bellows are attached; B, the reed-board, containing the reed-cells *b* and reeds *b'*, and arranged on top of said center board. C designates the sounding-board, located within the recess C' of the center-board, and between the reeds and the bellows *c* are apertures through the sounding-board for the wind to pass from the reeds. By this arrangement of the sounding-board the volume of tone is increased and its quality improved. The valve-seats *z* for the stops are formed on the outside at the rear ends of the reed-cells, where the reed-board is beveled, in the manner shown in the drawing. D designates the valve, having its under surface inclined or beveled to correspond to the bevel of the reed-board. The valve is secured to the end of the key E, which, on account of the arrangement of the reed-board, may be made of more than the usual length, and, therefore, will be sure to give a good "feeling action." The key is pivoted to the back board of the key-bed, and is acted upon by the spring F, which is attached to the name-board G, and thence extends back, as shown. At its back

part the key has a horizontal slit, *z*, cut in it and running nearly one-half the length of the key. A set-screw, H, connects the ends of the separated parts of the key, and is adjustable from its upper end. By manipulating this screw the "dip" of the key may be regulated and the keys brought to a level. The adjusting of this screw effects the desired purpose by raising or lowering the front end of the key, according to circumstances.

It will be perceived that by the arrangement of the valve the reed is brought under the direct force of the blast; hence, when the valve is raised the reed receives a quick concussion, which makes the tone prompt and of even fullness. The valve being placed on the outside of the reed-cell the action of the wind tends to close it as the air is drawn in.

The name-board fits in grooves at the ends V of the case of the instrument, and may be lifted out when the action needs repairs. When the name-board is removed the keys may all be readily lifted from the pins *u* and taken out.

What I claim as new is—

1. The combination, with a reed-cell, *b*, having a beveled valve-seat, *z*, of a key, *e*, having the angular valve arranged to stop on the outside of the reed-cell D, substantially as specified.

2. The combination, with the key E, of the arm L, stop D, and the adjusting-screw H, substantially as specified.

3. The combination, with the slotted case and sliding name-board G, of the key E and spring F attached to said name-board, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WILLIAM N. MANNING.

Witnesses:

HENRI N. WOODS,
ROBERT TARR.