

R. E. LETTON.
Reed-Organs.

No. 141,510.

Patented August 5, 1873.

Fig 1.

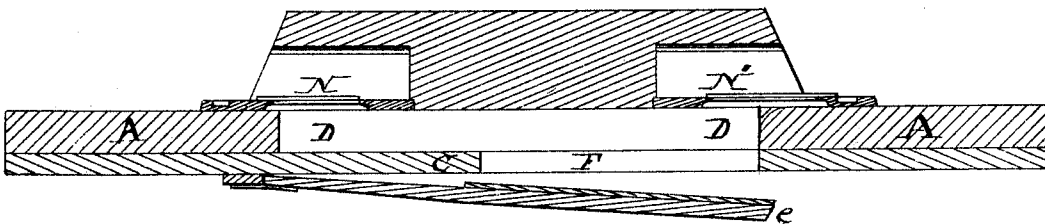
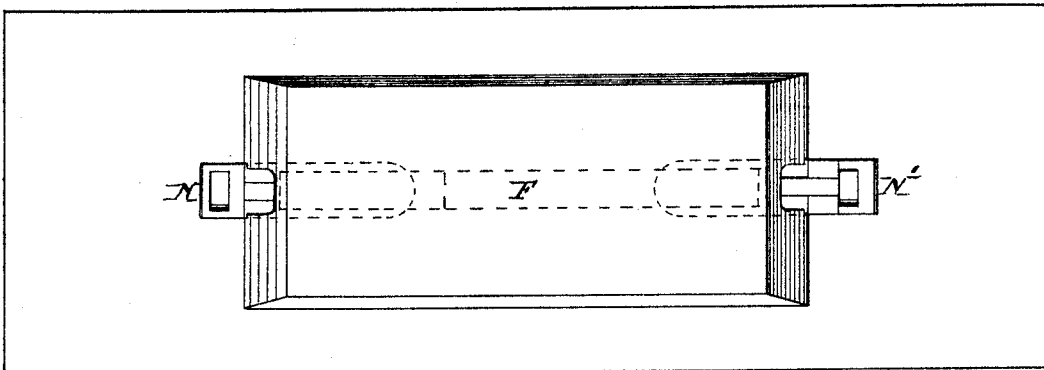


Fig 2.



Witnesses:

Chas C Wilson
W Harkness,

Inventor:

Raphael E. Letton
by his attys.
Cox and Cox

UNITED STATES PATENT OFFICE.

RAPHAEL E. LETTON, OF QUINCY, ILLINOIS.

IMPROVEMENT IN REED-ORGANS.

Specification forming part of Letters Patent No. **141,510**, dated August 5, 1873; application filed May 8, 1873.

To all whom it may concern:

Be it known that I, RAPHAEL E. LETTON, of Quincy, Adams county, Illinois, have invented certain new and useful Improvements in Reed Instruments, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to reed-organs and other analogous musical instruments operated by the action of exhaust-bellows; and consists in arranging the valve-slots through which the air passes into the exhaust-chamber, in combination with apertures and boards beneath the reeds, in such manner that the speaking-space may be enlarged or diminished, and the line of sound directed at the pleasure of the manufacturer; the object being to provide a simple and effective means of controlling the tone, quantity, and quality of the sound of the reeds.

Figure 1 is a sectional side view of a device embodying my invention. Fig. 2 is a plan view of the same.

A in the accompanying drawings is the base-board, of usual form, and provided with a proper exhaust-orifice. C is the sounding-board, which is also of any usual construction. N N' are the reeds, placed on either side of and above the slot D in the base-board A, its length depending upon the character of sound to be produced. The valve *e* is attached to the under side of the board C for opening or closing the slot F.

When a loud tone is desired the slots D and F are constructed in such manner as to sub-

ject the reed to the direct action of the current of air, as shown in the reed N'. By this arrangement an unobstructed exit for the air is afforded, the line of the sound being nearly straight, and, there being ample speaking-space, a loud and penetrating tone results.

When a subdued tone is desired the slot D is extended under the reed, while the board C projects beyond and below the point thereof; thus the passage of the current of air is obstructed, as shown in the reed N'. By this arrangement the air is drawn through the pipe-like cavity formed by the portion of the slot D below the reed N, and a subdued and mellow tone results. Thus the invention is capable of producing notes of different character.

The above effects may be produced by dispensing with the board C and constructing the board A with an aperture corresponding to that formed by the united slots D and F.

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

The reed-board A C provided with the slots D and F, the valve *e*, and reeds N and N', when said parts are constructed, combined, and arranged substantially as and for the purpose described.

In testimony that I claim the foregoing improvement in reed instruments as above described I have hereunto set my hand and seal.

RAPHAEL E. LETTON. [L. s.]

Witnesses:

CHAS. N. LETTON,
H. HEAD.