P. J. O'NEILL.

Reed-Organ Action.

No. 161,894. Patented April 13, 1875.

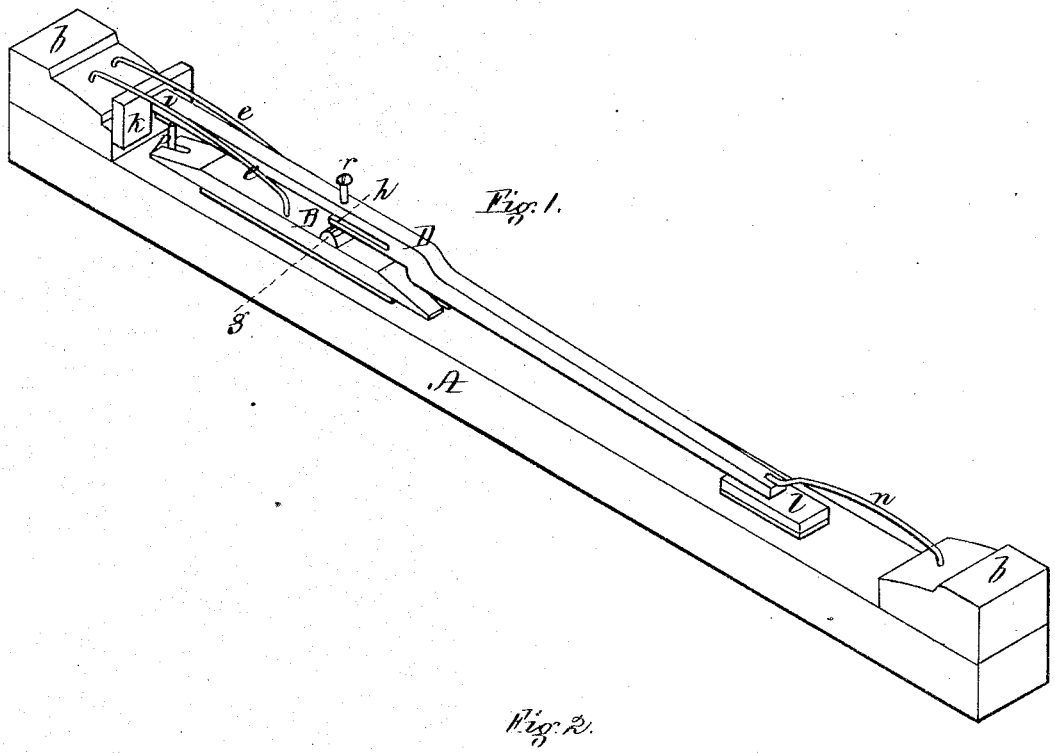
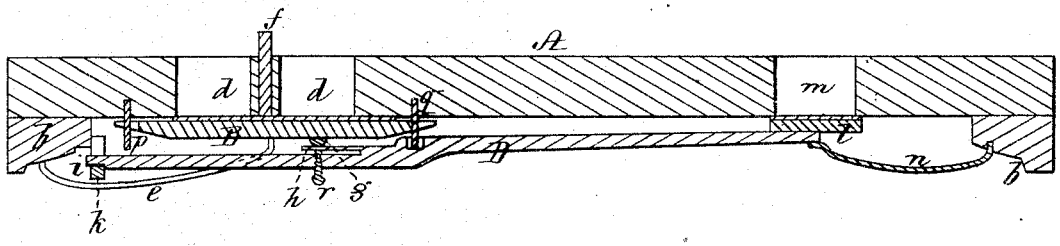


Fig. 1.

Fig. 2.



Witnesses,
W. J. Cambridge
A. F. Haynes.

Inventor,
Peter J. O'Neill,
Per Terschemacher & Stearns,
Attorneys.

UNITED STATES PATENT OFFICE.

PETER J. O'NEILL, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN REED-ORGAN ACTIONS.

Specification forming part of Letters Patent No. **161,894**, dated April 13, 1875; application filed February 10, 1875.

To all whom it may concern:

Be it known that I, PETER J. O'NEILL, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improved Reed-Organ Action, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings making part of this specification, in which—

Figure 1 is a perspective view of my improved organ-action, (inverted.) Fig. 2 is a longitudinal vertical section through the same.

This invention relates to that class of reed-organs having an extra or third set of reeds, known as a "Kalophon" attachment. In these organs the motion of each of the main pallets (which is effected by the depression of its key) is transmitted to the corresponding kalophon-pallet by means of two levers, which arrangement is complicated and expensive. To simplify the construction and reduce the number of parts is the object of my invention, which consists in a long kalophon-lever, having its fulcrum near the front of the reed-board; this lever being operated directly by the main pallet, instead of by an additional or intermediate lever, as heretofore.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawings, A represents the reed-board, which rests on two parallel strips, *b*, placed between it and the wind-chest. (Not shown.) B is the main pallet, which is situated near the front of the reed-board, and controls the passage *d*, through which the air is admitted to the reed-chamber above, this pallet being depressed against the resistance of springs *e* by a pin, *f*, which is operated by the key-lever. (Not shown.) The under side of the pallet B is provided with a rounded projection, *g*, against which bears the tongue *h* of the kalophon-lever D, which extends under the entire length of the pallet B, and has its fulcrum at *i*, in a bridge-piece, *k*, secured to the front strip *b*. The inner end of the lever D carries the small pallet *l*, which controls the passage *m*, through which the air is admitted to the kalophon-reed, a spring, *n*, being employed to keep the pallet in place against the under side of the reed-board. When the pallet B is depressed by its key-lever, its motion is communicated directly to the kalophon-lever D and pallet *l*, the two air-passages *d m* being thus opened simultaneously, as desired. The pallet B is prevented from moving laterally out of place by two guide-pins, *p q*, the latter extending into an opening in the upper side of the lever D, by which it is guided and prevented from being moved out of its proper position. *r* is a regulating-screw, by which the tongue-piece *h* is kept in contact with the projection *g*, whereby the rattling of the parts is avoided.

The above-described action is exceedingly simple and effective, and enables me to dispense with the intermediate lever and its fulcrum heretofore used, thus materially reducing the number of parts and the consequent cost of construction.

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

The lever D, having its fulcrum at one end, near the front of the reed-board, and having attached to its opposite end the pallet *l*, in combination with the pallet B, by which it is operated, substantially in the manner and for the purpose set forth.

Witness my hand this 4th day of February, A. D. 1875.

PETER J. O'NEILL.

In presence of—

N. W. STEARNS,

P. E. TESCHEMACHER.