

H. K. WHITE.
 REED-ORGAN VALVES.

No. 175,542.

Patented March 28, 1876.

Fig. 1.

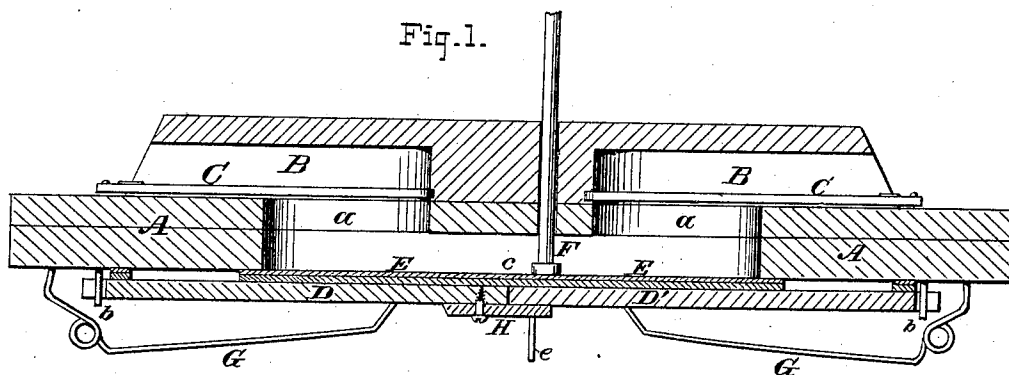


Fig. 2.

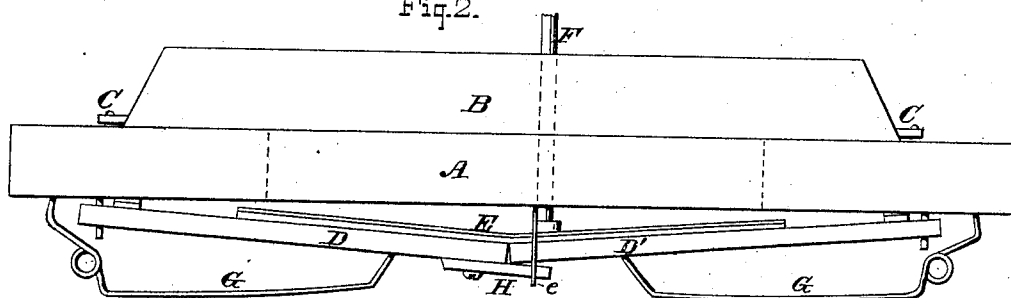


Fig. 3.

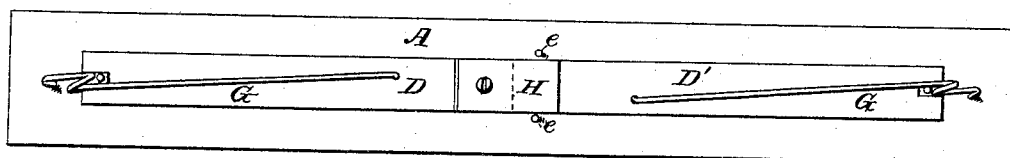
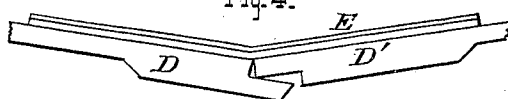


Fig. 4.



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HENRY K. WHITE, OF BRATTLEBOROUGH, VERMONT, ASSIGNOR TO J.
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IMPROVEMENT IN REED-ORGAN VALVES.

Specification forming part of Letters Patent No. **175,542**, dated March 28, 1876; application filed
February 23, 1876.

To all whom it may concern:

Be it known that I, HENRY K. WHITE, of Brattleborough, in the county of Windham and State of Vermont, have invented certain Improvements in Valves for Reed-Organs, of which the following is a specification:

My invention relates solely to the valves of reed-organs; and it consists, essentially, in making the valve of pieces or sections, and providing it with a continuous strip of packing to form flexible joints between the adjoining sections of the valve, as and for the purposes hereinafter specified.

It also consists in providing one section of the valve with a lap to project over the contiguous section, for the purpose hereinafter specified.

In the drawings, Figure 1 is a longitudinal vertical section through the reed cells and valve of a reed-organ, with the valve closed, illustrating my invention. Fig. 2 is a side elevation of the same, showing the valve open. Fig. 3 is a plan view of the valve. Fig. 4 shows a modification, which will be referred to more particularly in the description.

Let A represent the foundation-board, B the reed-cells, C the reeds, and *a a* the valve-openings, which may be arranged in the usual manner, and which form no part of my present invention. D D' are parts or sections that form the valve, pivoted at the outer ends on pins *b b*, and flexibly hinged together at the point *c* by extending the packing E in one piece, continuously over the joint, as shown, and affixing it to the valve in the usual manner. F is a tracker-pin, arranged to impinge against the section D' of the valve, as shown. Ordinary pressure on the tracker-pin opens the valve, as shown in Fig. 2. G G are springs arranged in the usual manner to effect the closing of the valve.

The advantage of this construction is that the foundation-board A is liable to become warped and prevent the valve, as ordinarily constructed, from seating properly, whereas in my improved valve formed of pieces flexibly hinged together by a continuous packing-strip, the valve will the more readily and surely accommodate itself to the warped surface of the valve-seat, and prevent leakage of air through the reeds.

The sections D D' being provided with separate springs, and the tracker-pin acting upon but one, it is obvious that if they were connected only by the flexible packing the constant pressure or strain upon the packing at the joint would tend to strip it from the valve, and thus, in a short time, put the valve out of order.

To obviate this I provide the section D with a plate, H, secured rigidly thereto, so as to overlap the adjoining extremity of the section D'. Thus the latter, when raised from its seat by the tracker-pin, as in Fig. 2, acts against this plate to raise the contiguous section, and entirely relieve the packing from strain.

It will be understood that I do not confine myself to the precise construction of the valve and plate herein shown for effecting the above result, as the section D might be prolonged and a shoulder cut on it to engage a corresponding lip on the other section, as in Fig. 4, without materially affecting the result.

Guide-pins *e e*, or some equivalent device, may be arranged and applied so as to prevent lateral movement of the valve.

By continuous, as referring to the packing E, is meant extending over the adjacent ends of the valve-sections to form a hinge.

I claim—

1. A reed-organ valve constructed of sections, pivoted at the outer ends, abutting together, and provided with a continuous strip of packing to form a flexible joint, substantially as and for the purposes set forth.

2. A reed-organ valve constructed of sections D D', continuous flexible packing E, and plate H, or its substantial equivalent, constructed and arranged to operate in the manner substantially as set forth.

3. The combination of the sections D D', flexible packing E, plate H, springs G G, and suitable guides *e e*, to prevent lateral movement, when arranged to form a valve for reed-organs, as set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

HENRY K. WHITE.

Witnesses:

W. H. CHILDS,
J. E. HALL.