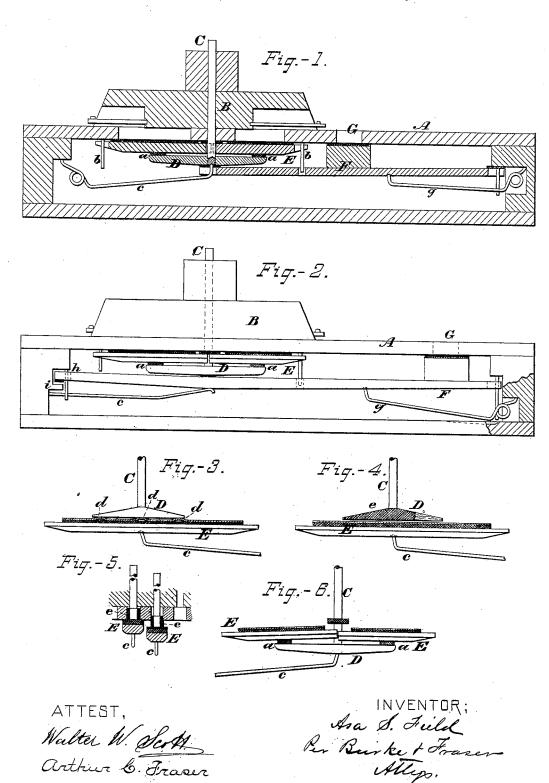
A. S. FIELD. Valve for Reed-Organ.

No. 205,624.

Patented July 2, 1878.



## UNITED STATES PATENT OFFICE.

ASA S. FIELD, OF BRATTLEBOROUGH, VERMONT, ASSIGNOR TO J. ESTEY & CO., OF SAME PLACE.

## IMPROVEMENT IN VALVES FOR REED-ORGANS.

Specification forming part of Letters Patent No. 205,624, dated July 2, 1878; application filed April 30, 1878.

To all whom it may concern:

Be it known that I, Asa S. Field, of the town 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:

This invention relates to valves for organs to be manipulated through tracker-pins, and so constructed that the said tracker-pins act to lift them bodily from their seats; and it consists partly in the construction of the valves, and partly in the construction and arrangement of the tracker-pins in connection with the valves, all as will be hereinafter more fully set forth.

In the drawings, Figure 1 is a vertical section through a valve constructed according to my invention. Fig. 2 is a side elevation, showing a modification of the same arrangement. Figs. 3, 4, and 5 are views showing modifications of the valve and tracker-pin. Fig. 6 is a detached view of the valve.

A is the reed-board, and B the reed-cells, mounted thereon in the usual manner.

In the precise construction shown in Figs. 1, 2 and 6, C is a tracker-pin, fixed rigidly to a **T**-head or cross-piece, D. E is the valve, bored at the center to admit the tracker-pin, and secured to the piece D by interposed pieces a a of felt, leather, or other suitable material. The valve may be cut at the center, and thus form, in point of fact, two valves, adapted to different sets of reeds; or it might be cut into several parts, and each part be separately attached to the cross-piece D.

The valve or valves operated by one trackerpin are provided with guide-pins b b and a spring, c, which properly bears upon the valve or cross-piece directly opposite the end of the tracker-pin, and in line with its axis. When the tracker-pin is pressed upon in playing the valve or valves are lifted bodily, as if the pin was attached rigidly to the valve, all parts of the valve being simultaneously lifted to the same heightabovethevalve-seat. The valves, however, being attached, if at all, flexibly to the tracker-pins, are permitted to readily adjust themselves to their seats.

In lieu of the construction just described the rigidly-attached cross-piece D may rest directly upon the soft leather or other packing of the valve-face, and be attached to same at one or more points, as shown at dd in Fig. 3; or the piece D need not be attached to the valve in any manner; but in such a case the flanks of the cross-piece should be covered with felt e, or its equivalent, as indicated in Figs. 4 and 5. The object is, mainly, to combine the advantages of a valve rigidly secured to the tracker-pin, so as to be lifted bodily thereby, with those of a valve of the ordinary kind, which will readily and properly adjust itself to its seat.

F represents a valve adapted to a reed and reed-cell, to be located at G. This valve is held up to its seat by a spring, g, the prolonged end resting on the cross-piece D or the valve E, as the case may be, the pin C operating both valves simultaneously.

When the extra or additional set of reeds G is near the margin of the reed-board, as in Fig. 2, it is best to carry the prolongations to the opposite side and let the ends h rest in the grooves i. This transfers the fulcrumpoint to h, and gives the valve ample lift.

Having thus described my invention, I

1. In a reed-organ, a tracker-pin with a Thead or cross-piece rigidly affixed to its lower end, said cross-piece being arranged in such a manner as to act upon and lift the valve

bodily from its seat, substantially as set forth.

2. In a reed-organ, a tracker-pin provided with a rigidly-attached cross-piece, and said cross-piece attached to the valve or valves by means of flexible connecting-pieces, either on the face or back of the valve, substantially as set forth.

3. In a reed-organ, two or more valves arranged on opposite sides of a tracker-pin and attached to a cross-piece rigidly affixed to the pin by means of flexible connections *a a*, substantially as set forth.

4. In a reed-organ, the combination of the tracker-pin C, provided with a rigidly-attached cross-piece, D, with the valve E cut in parts,

and each part attached separately and flexibly to the cross-piece, substantially as shown and specified.

5. In a reed organ, the combination of a tracker-pin, C, with a rigidly-attached cross-piece on its lower end, with the valve E and the spring c arranged to press upon the valve or cross-piece in the prolongation of the axis of the tracker-pin, substantially as set forth.

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

ASA S. FIELD

Witnesses:

WALTER H. CHILDS,

J. E. HALL.