W. G. DAY.

TRANSPOSING MECHANISM FOR ORGANS.

No. 107,342. Patented Sept. 13, 1870.

Fig. 1.

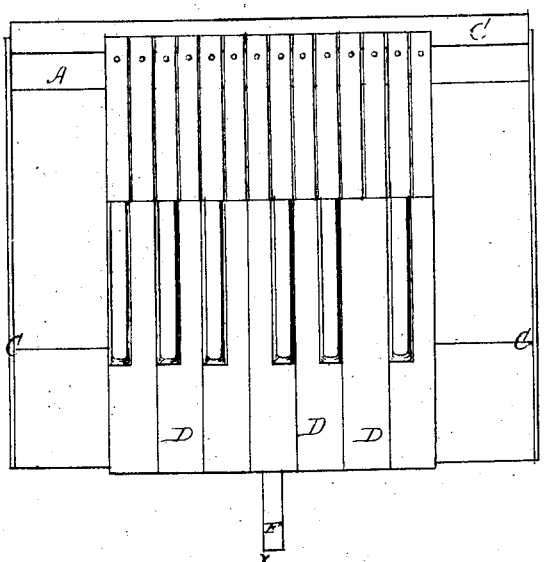


Fig. 2.

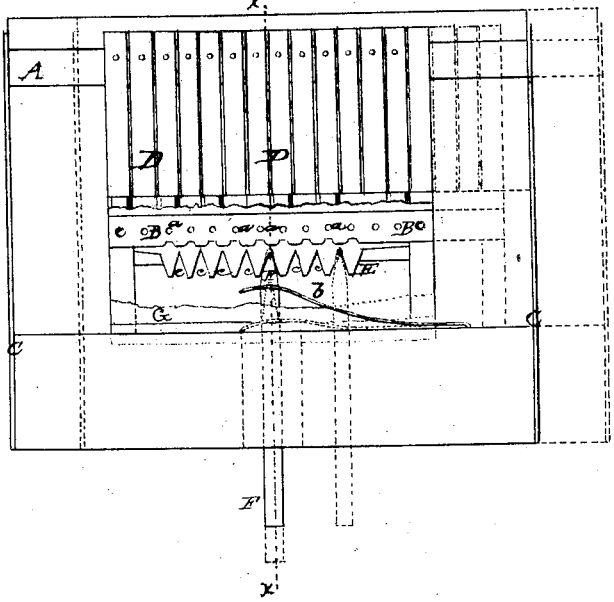
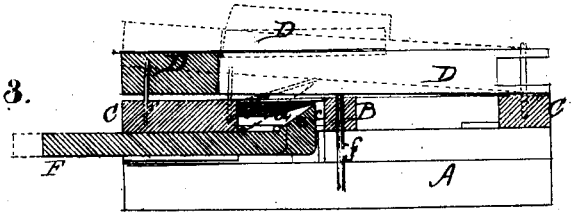


Fig. 3.



Witnesses.

Phil. T. Dodge

R. E. Brewster

Inventor:

W. G. Day

by Dodge & Munn

Attys

United States Patent Office.

WILLARD G. DAY, OF BALTIMORE, MARYLAND.

Letters Patent No. 107,342, *dated September* 13, 1870.

IMPROVEMENT IN TRANSPOSING MECHANISM FOR ORGANS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, WILLARD G. DAY, of Baltimore, in the county of Baltimore and State of Maryland, have invented certain Improvements in Organs, Melodeons, and similar instruments, of which the following is a specification, reference being had to the accompanying drawing.

My invention consists in constructing and arranging the key-board of an organ, or other similar instrument, by means of certain mechanical contrivances, so that a player may transpose any piece of music without altering the fingering or the reading of the music, as hereinafter explained.

In the drawing—

Figure 1 is a top plan view of a portion of the key-board and its connections.

Figure 2 is a similar view, with portions broken away to show the interior arrangement, and

Figure 3 is a vertical cross-section of the line *x x*.

A is the top of the wind-chest of the instrument, and

B the center-board, perforated with holes, *a*, for the admission of loose wooden pins, *f*, which lead from the under side of the keys to the valves in the wind-chest.

Upon the top of the wind-chest, and over the center-board B, is placed a key-board frame, C, made rectangular, and so arranged in its bearings as to allow of its being moved or slid laterally. It is, also, made long enough to always have some of its keys over the pins *f*, when thus moved.

In this frame are mounted keys, D, arranged so as to bear upon the valve-pins *f*, as shown in fig. 3. The rear end of these keys is pivoted to the rear sides of the frame, while their front ends move vertically on guide-pins, *g*, attached to the frame, as shown in the same figure.

To the front side of the central-board B is attached a plate, E, having its front side provided with notches, *c*, similar to those between saw-teeth, and as shown in fig. 2, and under the frame C, immediately in front of these notches, is arranged a sliding catch, F, having its end opposite the notches *c*, wedge-shaped, so as readily to engage with them.

This sliding catch moves longitudinally in the frame C, but laterally it moves with the frame, so that, as the frame is moved laterally, its end or head comes opposite a different notch with which to engage.

To the inner edge of the front part of the frame C, is hinged a plate, G, so as to be between the frame and the front edge of the central-board B, and under the keys D, as shown in fig. 3.

This board or plate G has attached to its under side an inclined block, *d*, so located as to be immediately over the inner end of the sliding catch F, which also has an incline, *e*, on its upper side, so that, as the catch is drawn out, these inclines will, in moving on each other, cause the free end of the plate G to turn up, and raise with it the free ends of the keys D, as shown in dotted lines in fig. 3.

The catch F is held forward, with its head in one of the notches *c*, by means of a spring, *b*, attached to the inner side of the frame C, at one end, and with its free end bearing on the catch, as shown.

It will thus be seen that, by constructing and arranging a key-board upon the wind-chest of an organ, as above described, the player may transpose any piece of music without altering the fingering or the reading of the music, by simply pulling out the sliding catch, and disengaging it from the board E, and then moving the key-board frame laterally, in either direction, any desired distance, and, when thus moved, allow the catch to be engaged again as before. If the notches are just far enough apart to allow each key to be transferred to the next valve-pin, either above or below it, the effect of the movement of the board is obvious.

The advantages of these improvements will be readily understood. A player may play a piece of music in any key in which it may be written, or in any other key which he may prefer, whether higher or lower, by simply moving his key-board, and, in this way, he may accommodate any piece of music to any desired pitch of voice without the trouble of rewriting the notes, or of transposing while he plays, or of publishing different editions of the same song, arranged in different keys to suit different ranges of voice, for tenor, bass, alto, or soprano.

Having thus described my invention,

What I claim is—

1. The combination of the key-board C and catch F with the center-board B and notched plate E, when constructed and arranged substantially as and for the purpose set forth.

2. The combination of the catch F and spring *b* with the notched plate E, when constructed and arranged substantially as and for the purpose set forth.

3. The combination of the catch F and hinged-board G, when constructed and arranged substantially as described, for raising the keys D, as set forth.

WILLARD G. DAY.

Witnesses:

H. B. MUNN,

PHIL. T. DODGE.