

(No Model.)

E. BROWN.
ORGAN ACTION.

No. 261,302.

Patented July 18, 1882.

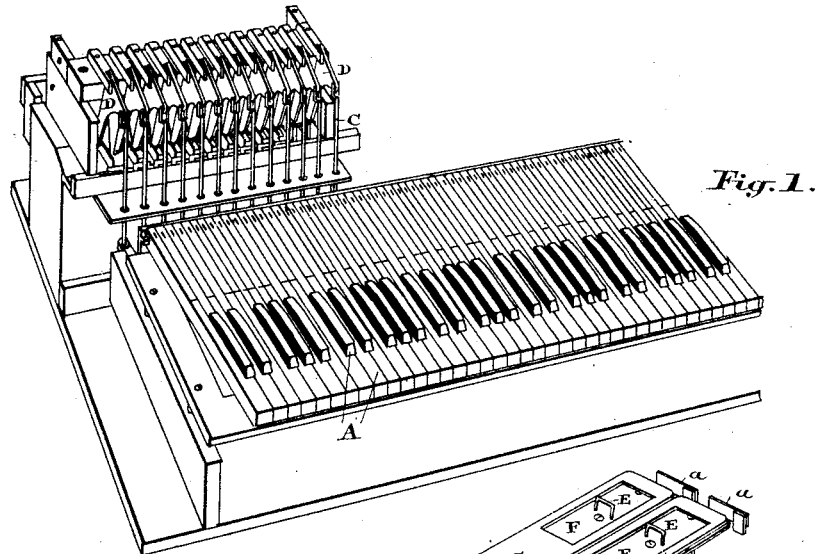


Fig. 1.

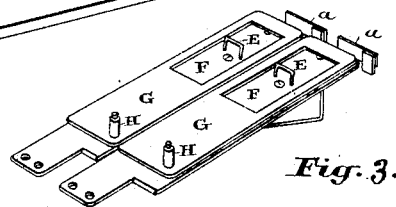


Fig. 3.

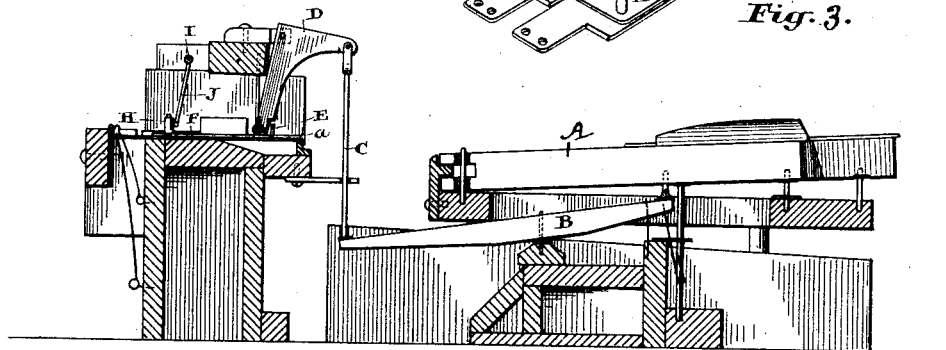


Fig. 2.

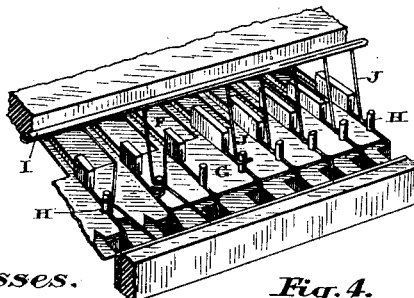


Fig. 4.

Witnesses.

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UNITED STATES PATENT OFFICE.

EDMAN BROWN, OF BOWMANVILLE, ONTARIO, CANADA.

ORGAN-ACTION.

SPECIFICATION forming part of Letters Patent No. 261,302, dated July 18, 1882.

Application filed November 25, 1881. (No model.)

To all whom it may concern:

Be it known that I, EDMAN BROWN, a subject of the Queen of Great Britain, residing at the town of Bowmanville, in the county of Durham, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Organs, of which the following is a specification.

My invention relates to that class of organs in which the notes of the bass, tenor, and treble are all operated from the same key-board; and it consists in the peculiar construction, arrangement, and combination of parts, as more fully hereinafter described and claimed.

In the drawings, Figure 1 is a perspective view, showing a portion of the key-board and the action of the sub-bass. Fig. 2 is a cross-section of the sub-bass. Fig. 3 is an enlarged detail of the main valve, and Fig. 4 is a detail of the cut-off valve.

In the drawings like letters indicate corresponding parts in each figure.

A are the keys of an ordinary key-board.

B are levers connected to the key-board and extending below the lifting-stickers C. The upper ends of the lifting-stickers C are loosely connected to the pivoted squares D. The other ends of these squares rest against a staple, E, fastened to the top of each valve F.

G represents a series of cut-off valves placed on top of the valves F. A rectangular slot is cut out of the top valves, G, so that they may slide freely longitudinally upon the valves F without coming in contact with the staple E.

On the front end of the valves G, I form or attach a stop-plate, *a*, which extends beyond one side of the valve, so as to come in contact with the lower valve, F, next to it on one side and projecting above the valves F, so that the end of the valve G, resting upon the valves F, will come in contact with it. Owing to this connection, when one of the valves F is opened, so as to make the reed or pipe to which it is attached speak, all those above it are stopped by the cut-off valves G, which are thrown forward, each valve, by coming in contact with the stop-plate *a* next to it, moving forward its adjoining valve above. While this arrangement of valves is specially designed to be applied to sub-bass, it will of course be understood that it is equally applicable to the manual of the instrument throughout. It will also be understood that proper springs should be provided

for the purpose of carrying back the valves, and suitable mechanism for assisting in throwing forward the valves should also be arranged.

I is a rocking rod, pivoted to the frame of the action, and provided with downwardly-projecting arms J, arranged to come in contact with the pins H of the cut-off valve. These arms are arranged to act against the front side of the pins for about half-way across the action and against the rear side of the other pins for the rest of the way. The purpose of these arms J and pins H is to make the cut-off valves work uniformly and to keep them from jamming or working hard. This they accomplish by moving the upper or first valve, or that valve nearest to the point where they divide upon opposite sides of the pins, to move as speedily as the lowest valve. If these arms were not used, the lowest valve would move fully two-thirds over its work before the upper or first valve would start.

The arms J are placed on the front of the pins half-way down and on the rear of the pins the rest of the way down, for the reason that after the sixth or seventh cut-off valve is moved the strain begins to be perceptible and increases more on every valve moved, and the action of part of the cut-off valve-springs serves to assist the movement of the rocking rod and arms.

What I claim is—

1. In combination with the main valves F and the cut-off valves G, the squares D, stick-er-bars C, and connections, substantially as described, between the squares and stick-er-bars and valves, as and for the purpose specified.

2. The valve G, having plates *a*, the valve F, having staple E, and operating-connections B C D, so arranged and combined that the action of the valve F will operate all the stop-valves G in the series in one direction, as specified.

3. The combination of the rock-shaft I and arms J, part of which are arranged to bear upon the front and part on the rear side of the pins H, the stop-valve G, valves F, plates *a*, and operating-levers, as and for the purpose specified.

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Witnesses:

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