

Reed Organs.

Patented June 16, 1874.

Fig. 1.

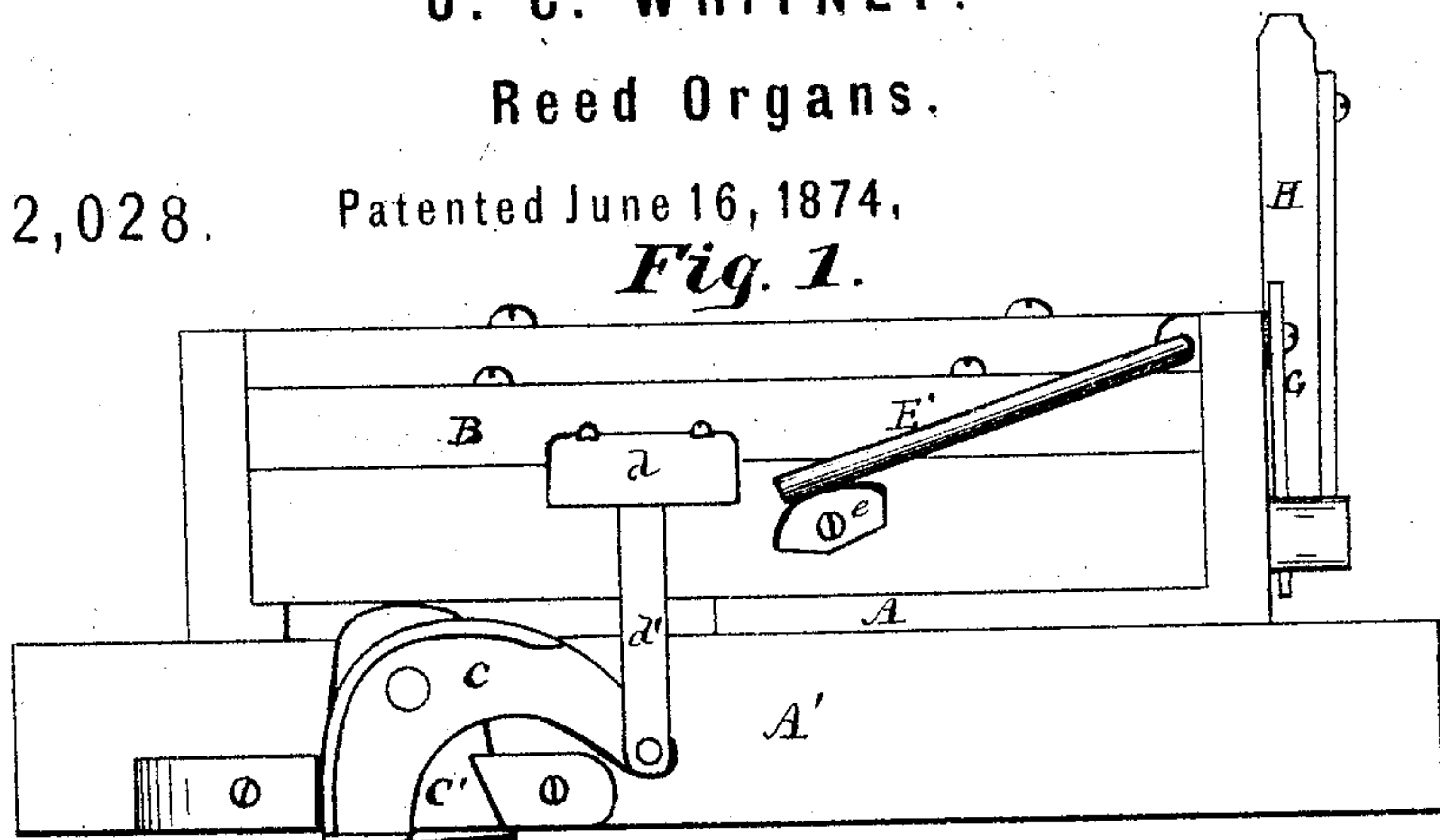


Fig. 3.

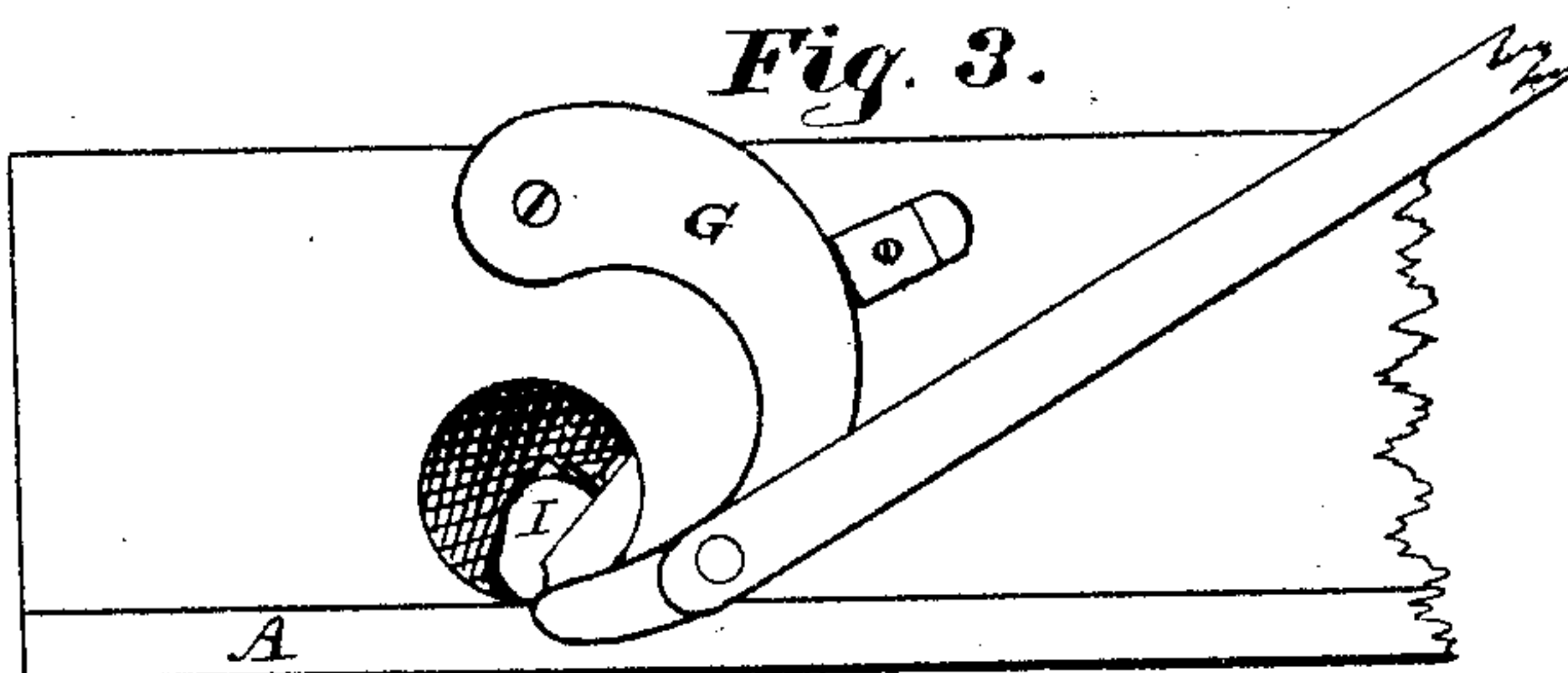
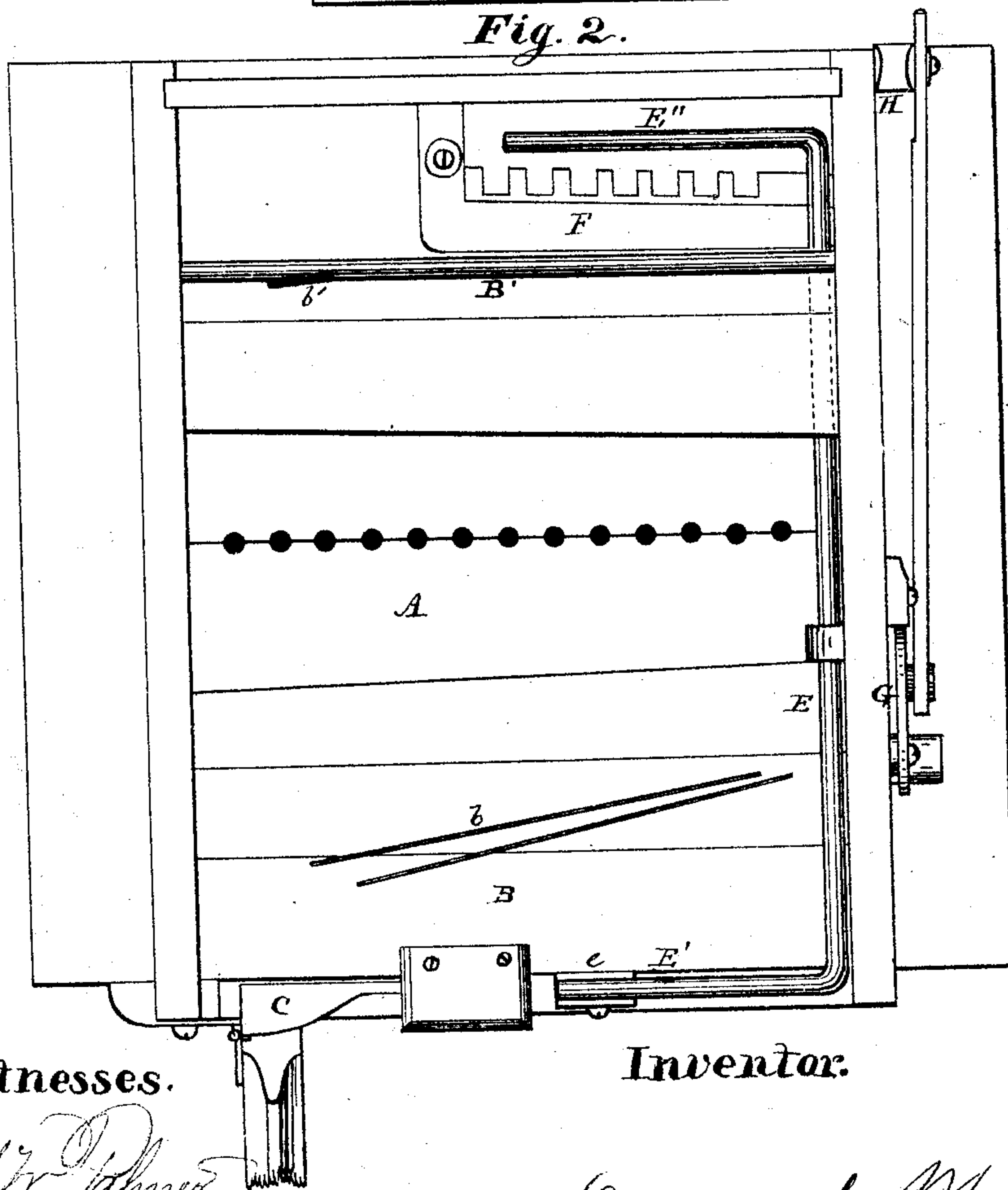


Fig. 2.



Witnesses.

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IMPROVEMENT IN REED-ORGANS.

Specification forming part of Letters Patent No. **152,028**, dated June 16, 1874; application filed April 20, 1874.

To all whom it may concern:

Be it known that I, ORISON C. WHITNEY, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain Improvements in Reed-Organs, of which the following is a specification:

This invention relates to certain improvements in reed-organs; and consists, first, in the peculiar combination and arrangement of the knee-swell; second, in the combination and arrangement of the celeste accompaniment with the valve-action; and, third, in the peculiar construction of an eccentric lever in combination with the stop-lever for operating the mute-valve, as hereinafter described and claimed.

To enable others to fully understand my invention, I will proceed to describe the same in detail by the aid of the accompanying drawing, in which—

Figure 1 is a front elevation of a portion of a reed-organ having my improved knee-swell attached. Fig. 2 is a top or plan view of the same, also showing the celeste attachment. Fig. 3 is a view of a part of the end of the instrument, showing the eccentric lever above mentioned.

A in the several figures is the sounding-board, on which the reed tube-boards are placed, and beneath which the valve-action is placed. Over each of the tube-boards is made a box, having hinged lids B B', held down by springs b b'. To the front of the frame A' is attached the aforesaid knee-swell movement, consisting of a curved lever, C, pivoted to a plate, C', said plate being fastened on by screws, so, if desired, it can be taken off for repairs or adjustment, the said lever C being my hinged knee-lever for organ-swells, patented July 12, 1870. Instead of having the curved end of said lever C bear against and push the block d on the lid B of the tube-board I attach, by a joint, a connecting-rod, d', the upper end of which rests in a cavity in the under side of said block d. By thus constructing the lever a direct motion is given to the lid B without friction. E is a rock-

shaft, placed at one end of the frame-work, having arms E' E'', the end of the arm E' resting on a block, e, on the front edge of the lid B, the other, E'', lying under the lid B', the purpose of which is the simultaneous lifting of both lids B B' by the action of the knee-lever C. In the box under the lid B' is placed a celeste accompaniment, F, to the main tube-board. It is made detachable for the purpose of removing it when necessary to withdraw the reeds in the main tube-board for tuning or repairs.

The object of placing the celeste accompaniment thus in juxtaposition to the main tube-board is to avoid the necessity of making a separate valve-action for the use of said accompaniment, and enabling it to be operated by the usual valve-action, by simply lengthening the valves sufficiently to cover other openings in the board. By this method great economy is gained, and an equally perfect accompaniment is obtained.

G is a metal eccentric lever, operated by the stop-lever H for operating the mute-valve I. It is made in the form shown, and of metal, for the purpose of securing a uniform device, not subject to atmospheric influences, which cause expansion or contraction, thereby deranging its perfect working; and it also obviates the liability of the parts making a squeaking sound when rubbing together, as when wooden levers are used.

Having described my invention, I claim—

1. The curved lever C, plate C', connecting-rod d', block d, block e, rock-shaft E, and lids B B', all combined and arranged to operate as and for the purpose set forth.

2. In combination with the subject-matter of the above claim, the celeste set of reeds F, substantially as described and shown.

3. The curved metal eccentric lever G, in combination with the mute-valve I, as and for the purpose set forth.

ORISON C. WHITNEY.

Witnesses:

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GEO. W. TIBBITTS.