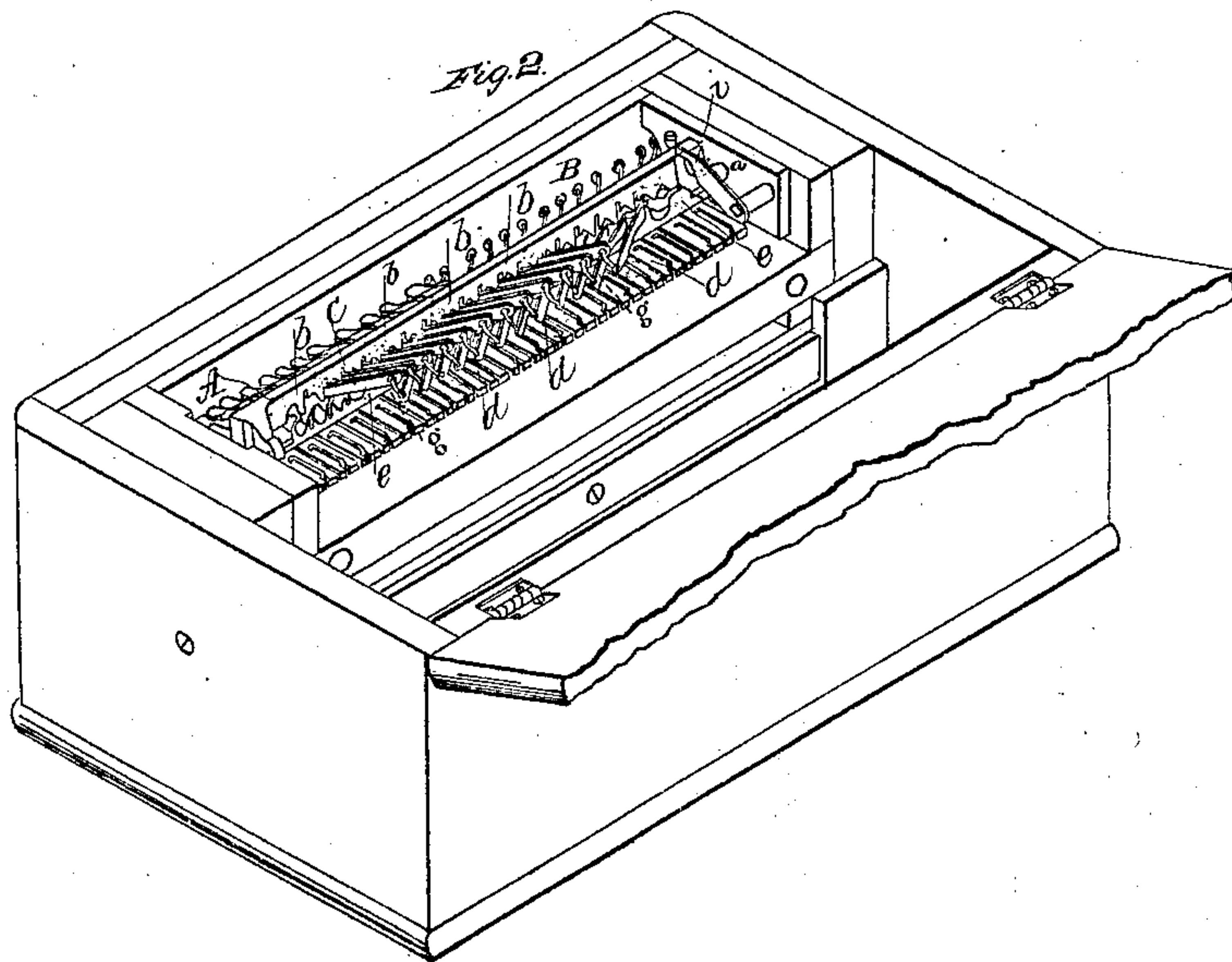
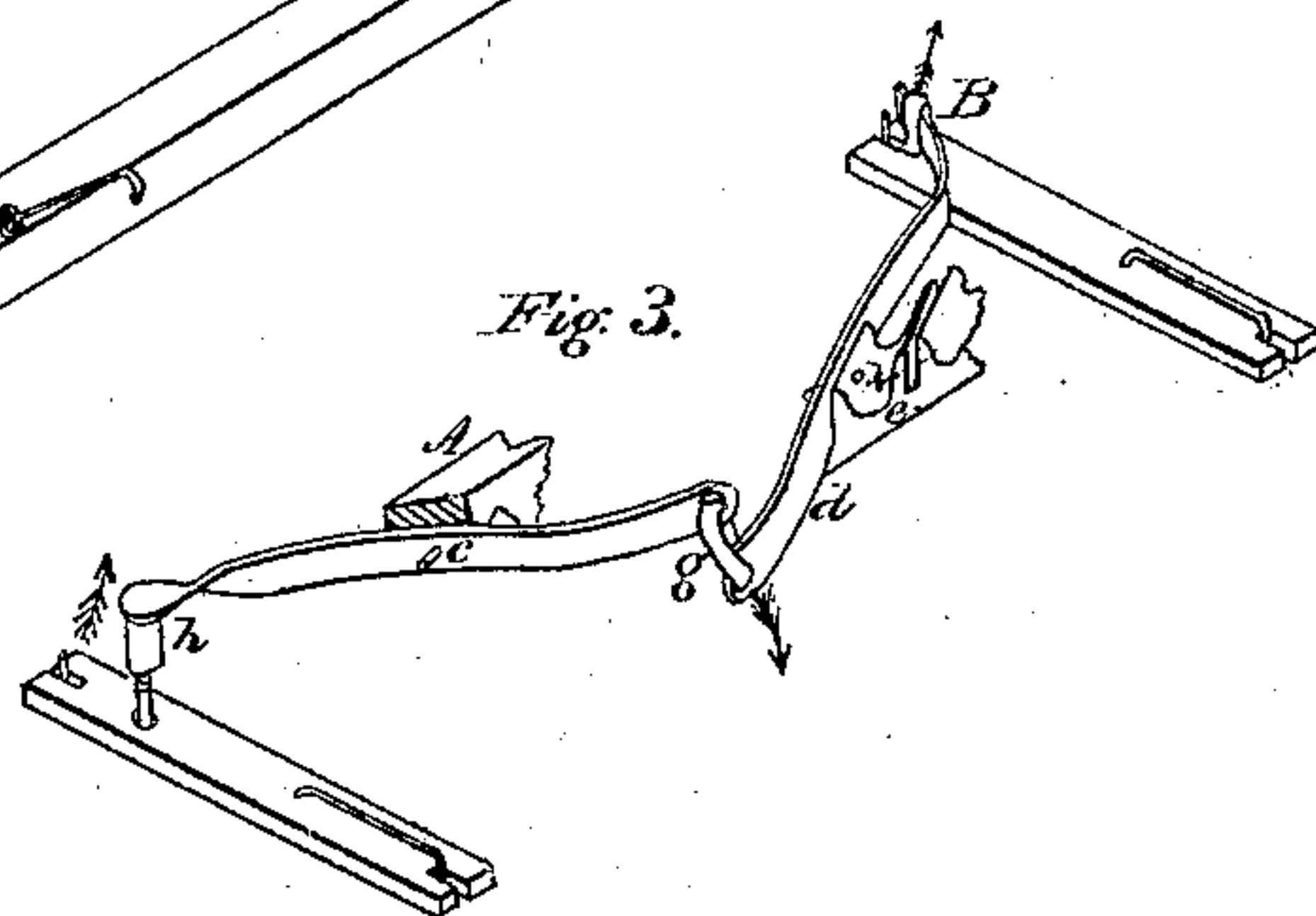
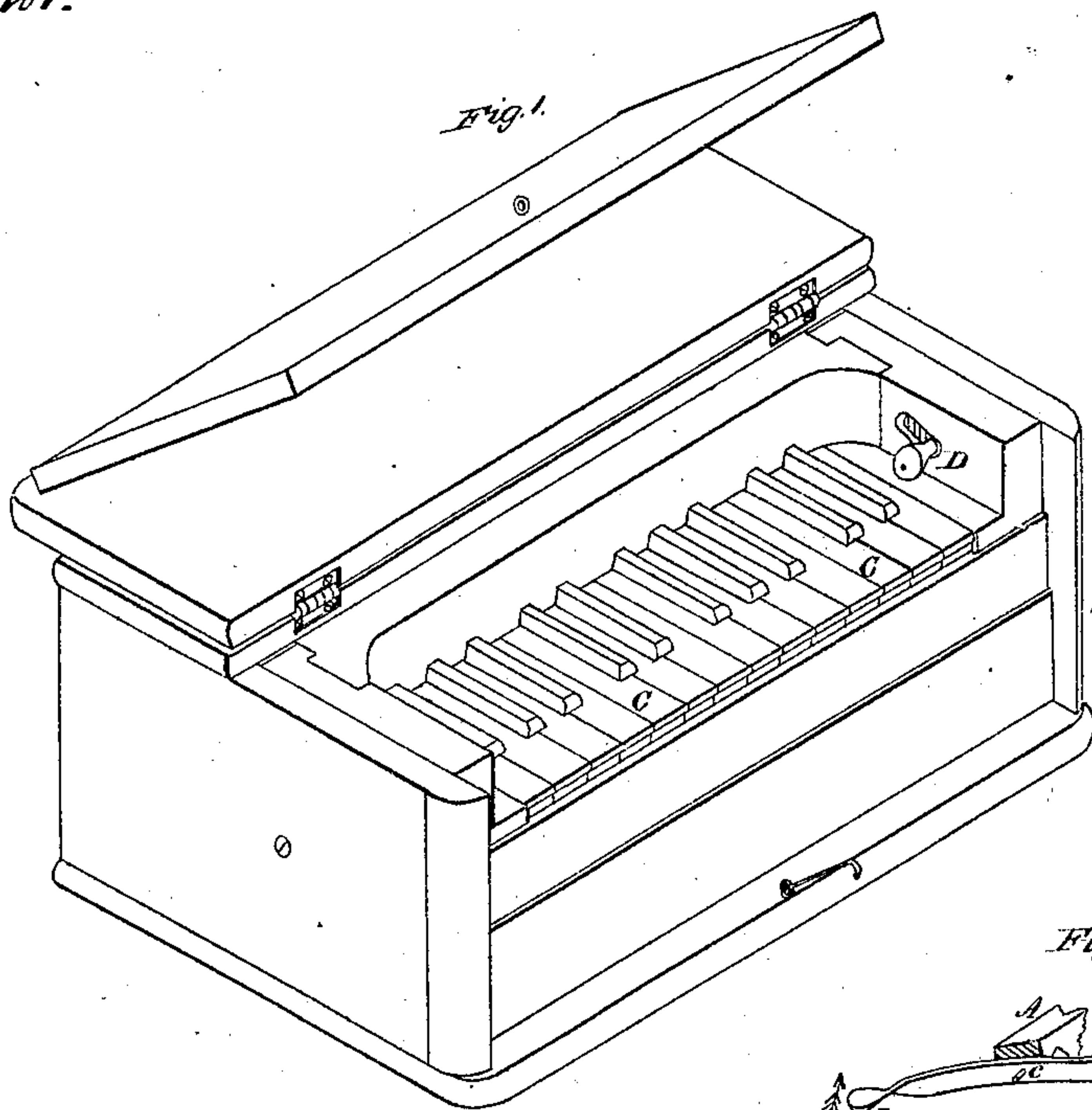


*Whipple & Bowe*  
*Counter for Melodeon.*

*N<sup>o</sup> 13021.*

*Patented June 5, 1855.*





# UNITED STATES PATENT OFFICE.

WM. C. WHIPPLE AND WM. C. BOWE, OF WESTVILLE, CONNECTICUT.

## MELODEON.

Specification of Letters Patent No. 13,021, dated June 5, 1855.

*To all whom it may concern:*

Be it known that we, WILLIAM C. WHIPPLE and WILLIAM C. BOWE, both of Westville, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Melodeons; and we do hereby declare that the following is a full, clear, and exact description of the construction, character, and operation of the same, reference being had to the accompanying drawings, which make a part of this specification, in which—

Figure 1, is a perspective view of the melodeon. Fig. 2, is a perspective view of the same, inverted, showing the positions of the two sets of levers for playing the additional octave. Fig. 3, is a perspective view of one pair of the levers, showing the manner of connecting them.

Our improvement consists in so connecting two sets of levers, (in the wind chest,) with the keys that the octave above will be sounded at the same time, (if desired,) or, by reversing the arrangement of the levers, the octave below may be sounded.

We make the melodeon in the usual way, and, in the wind chest, under the reeds, we fit two sets of levers, as represented in Fig. 2, (one pair of which is represented in Fig. 3, on an enlarged scale, showing their connection, and support.) We attach one set of these levers to a swinging bar, A, Fig. 2, (which swings on fulcra, or joint pins,  $a$  and  $a$ ,) by cutting diagonal slots in the side of the bar, and letting in the central parts of the levers as seen at  $b$ ,  $b$ , &c., Fig. 2, and secure them with fulcra, or joint pins, as shown at  $c$ , Fig. 3, in such a manner that they may work perfectly free. We attach the other set of the levers  $d$ ,  $d$ , &c., to a permanent bar  $e$ ,  $e$ , in similar diagonal slots, but cut oblique in the opposite direction from those in the bar, A (so that the extreme ends of each pair of levers will reach to the extent of an octave,) and we secure these levers, also, by fulcrum pins, as seen at Fig. 3. We connect the contiguous ends of the two sets of levers, (that is each pair,) by a free, but inflex, loop, as shown at  $g$ , Figs. 2 and 3, so that the motion of the lever,  $e$ , will be communicated to the lever,  $d$ , causing their extreme ends to move at all times, in the same direction, to open or close the valves. The extreme end of each of the levers,  $e$ , (when the arrangement is used,) rests on

a pitman which passes through the valve, as shown at  $h$ , Fig. 3, (which pitman,  $h$ , is connected with, and is worked by, the ordinary pitman on which the key presses,) and this pitman,  $h$ , is adjusted by a screw, as seen at  $h$ , Fig. 3, to the exact length required. And we connect the extreme end of each of the levers,  $d$ , with loops attached to the ends of the valves, as shown at B, Figs. 2 and 3.

Having thus constructed all the parts, and arranged them in the manner shown in Fig. 2, the instrument will be ready for use, when by pressing down any one of the keys, as, C, Fig. 1, the pitman,  $h$ , Fig. 3, will force down the extreme end of the lever,  $e$ , (in the direction indicated by the dart,) raise the contiguous ends of  $e$ , and  $d$ , at  $g$ , and thus open the valve at B, which is under the key C', Fig. 1, so as to sound the reed which is an octave above the one under the key C, which is depressed; so that the depression of any one of the keys will produce its proper tone and also its octave; thereby giving the instrument the same power as if made with two sets of reeds. And by reversing the arrangement of the levers the octave below may be played in the same manner. And, if thought best in any case, the octave below may be played with the lower half of the key board, and the octave above, with the upper half, by varying the arrangement of the levers, as above described. And the swinging bar, A, may be cut in two in the middle, and each part supported there by a puppet head, so that one part of the keyboard may be played with the octave while the other is played without it.

When it is not desired to play the octave, the knob D, Fig. 1, may be brought forward to the position shown in Fig. 1, which, by the action of an ordinary lever to change stops, the bar, or hand,  $i$ , will be moved back from the bar A, when by its own weight, (or by a spring,) it will fall back and remove the extreme end of the lever,  $e$ , from the pitman,  $h$ , so that the operation of the keys will not affect the levers,  $e$ , and  $d$ , when the operation will be the same as a common melodeon. But any other form may be used for moving the swinging bar, A, as by a pedal, or otherwise. And if the swinging bar, A, be made in two parts, to accommodate each part of the key board,

there must be a knob, ordinary lever, and hand, *i*, at each end of the case, or two pedals, ordinary levers, and hands *i*.

Instead of having the pitman, *h*, pass  
5 through the valve as shown in Fig. 3, a knob may be attached to the extreme end of the lever, *c*, as at *h*, fitted with an adjustable screw, so as to rest against the valve, which will produce the same effect as the  
10 before described arrangements.

What we claim as our invention, and desire to secure by Letters Patent, is—

The use of two sets of levers, located in the wind chest, under the valves, and so connected as to enable us to play any desired 15 note and its octave, when the whole is constructed, arranged, and made to operate, substantially, as herein described.

WM. C. WHIPPLE.

WM. C. BOWE.

Witnesses:

S. THOMPSON,

R. FITZGERALD.