

L. K. FULLER.

Improvement in Reed-Organs.

No. 129,810.

Patented July 23, 1872.

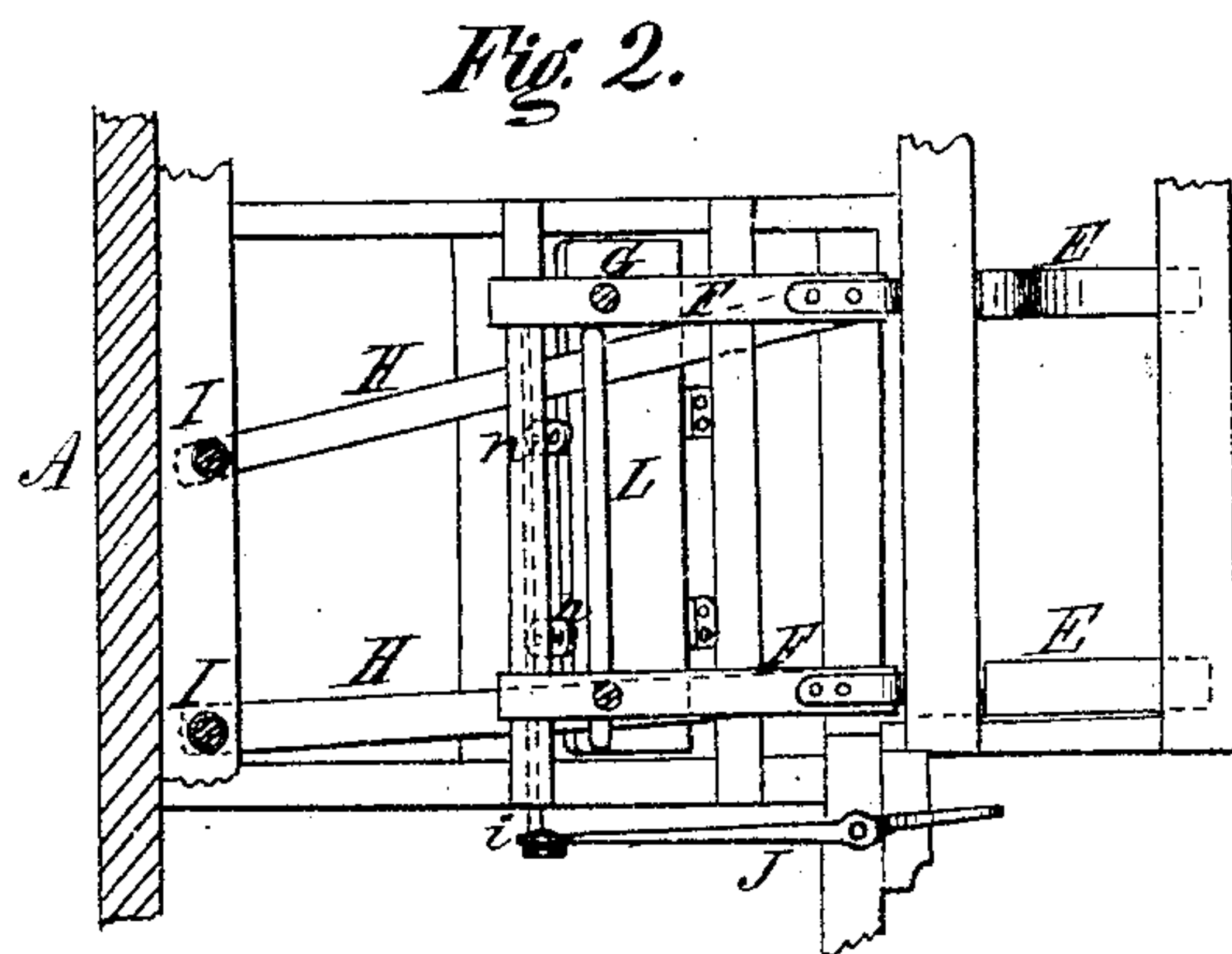
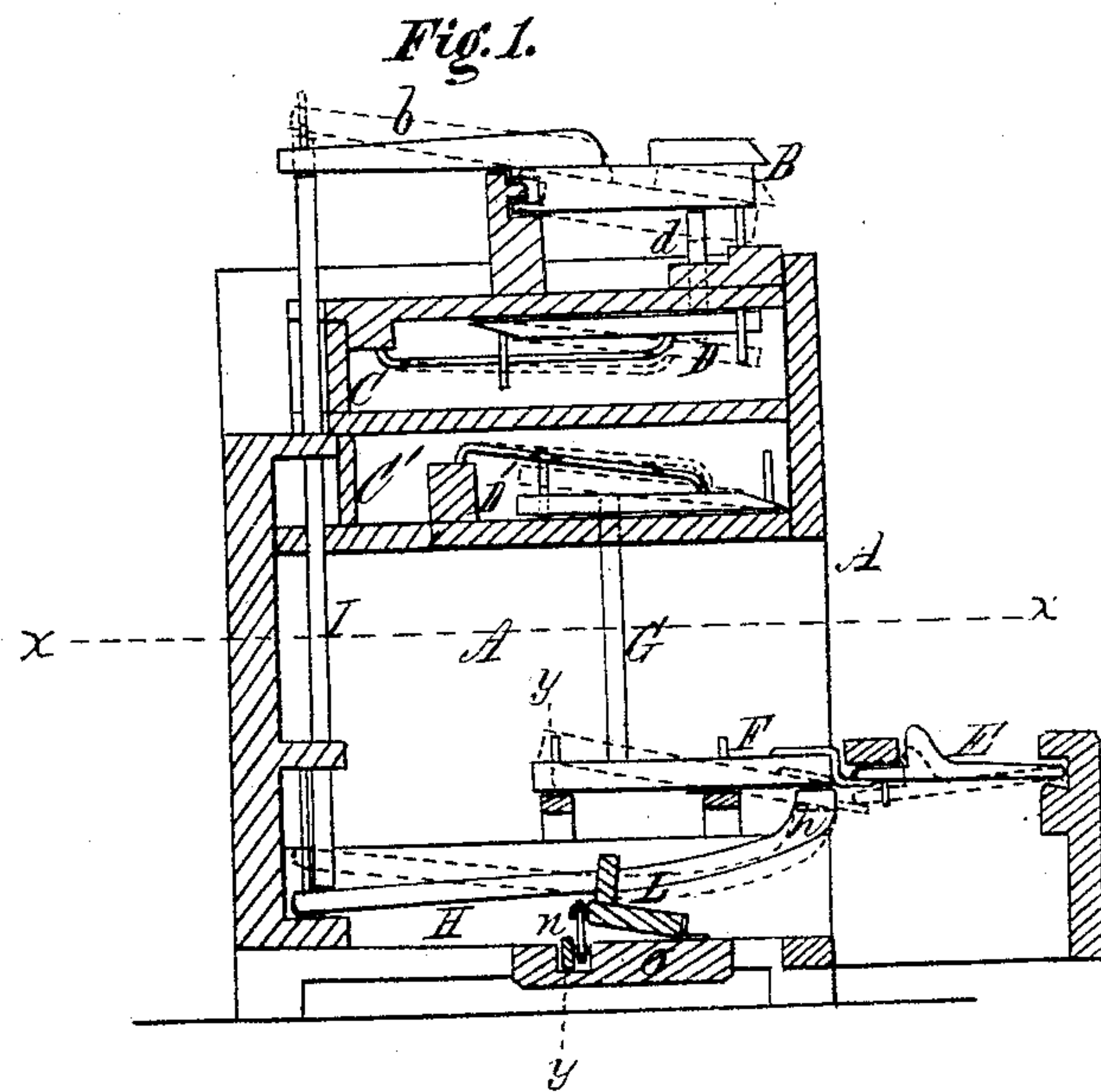
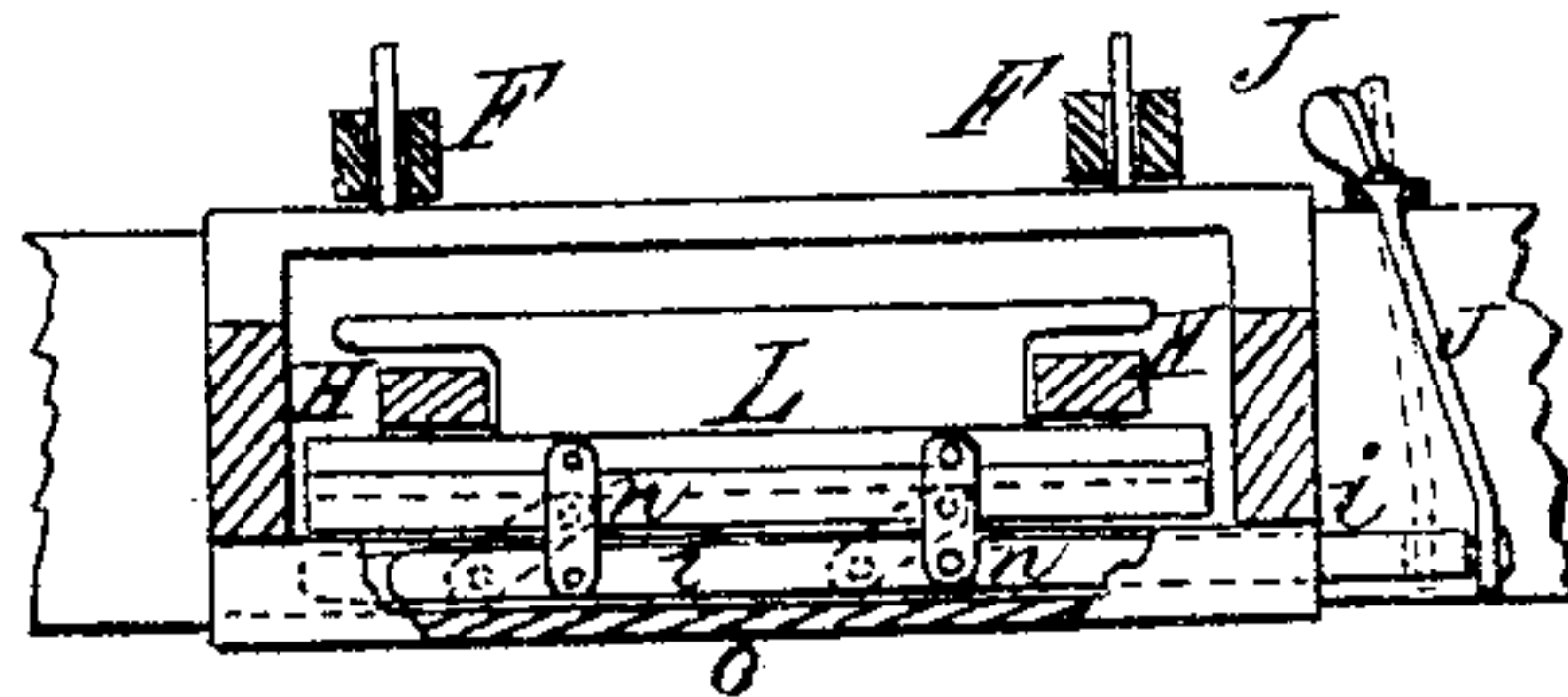


Fig. 3.

Witnesses:

L. N. Jones.
Wm. F. McNamee



Inventor:

Levi K. Fuller.

Per Burke & Frases attys

UNITED STATES PATENT OFFICE.

LEVI K. FULLER, OF BRATTLEBOROUGH, VERMONT.

IMPROVEMENT IN REED-ORGANS.

Specification forming part of Letters Patent No. 129,810, dated July 23, 1872.

SPECIFICATION.

To all whom it may concern:

Be it known that I, LEVI K. FULLER, of Brattleborough, in the county of Windham and State of Vermont, have invented certain new and useful Improvements in Reed-Organs and other Wind Musical Instruments, of which the following is a description:

My invention relates to mechanism employed to operate the upper and lower valves and sound the reeds or pipes of an organ simultaneously when desired; and it consists of a hinged coupling device, so arranged as to constitute, when required, a fulcrum-support for an auxiliary lever in such a manner that when the coupler is raised by means of a suitable lever-and-toggle arrangement, as hereinafter described, one end of said auxiliary lever is depressed by the descent of the foot-pedal, and imparts, through a vertical rod resting on its opposite end, a corresponding movement to the upper key, operating the valve of the manual note simultaneously with that of the pedal bass note; also, in the arrangement and combination therewith of parts operating and controlling the action of the valves, as hereinafter described.

In the drawing, Figure 1 is a vertical section of a portion of an organ or wind musical instrument provided with my improvement, showing the wind-chests C C', provided with the ordinary valves D D' for the reeds or pipes, and the mechanism by which they are operated; Fig. 2, a plan of line *x x*, Fig. 1; Fig. 3, a detached view, showing the device for actuating the coupler L, as seen in rear elevation on the line *y y* of Fig. 1.

The operating parts are mounted in a frame-work, A, of ordinary construction employed in organs of this class. In using the instrument it is sometimes desirable to sound the corresponding note of the upper bank simultaneously with that of the bass or pedal note. The bass note is sounded by the depression of the pedal E by the foot, which imparts a similar movement to one end of the intermediate lever F, raising the opposite end and the tracker-pin G resting thereon, and thereby opening the valve D' and admitting air to the reed. The upper note, when sounded alone, is opened by the depression of the key B, tracker-pin *d*, and valve D. When it is desired to sound the two notes si-

multaneously, as before stated, the coupling device L, which consists of a hinged vertically-vibrating platform, is elevated by drawing the bearing-rod *i* outward on its fixed bearing *o* by means of the foot-lever J, as shown in Fig. 3, by which movement the toggles *n n*, pivoted at one end to the rod *i* and at the other to the hinged platform L, are brought into a perpendicular position, or nearly so, raising the platform L and causing it to elevate and support the auxiliary lever H, for which it forms a fulcrum. The end *h* of this lever is situated immediately under the pedal E, or, with the same effect, under the lever F, which is depressed by this pedal. When the coupling-platform L is in this position the depression of the pedal acts directly through the lever F and rod G to open the lower bass-note valve D', while at the same time the end *h* of the lever H is depressed by the action of the pedal and the opposite end elevated, (the hinged platform L being its fulcrum,) which raises the connecting-rod I and arm *b* of the key B in a corresponding degree, thereby depressing the valve D of the upper bank simultaneously with that of the lower or pedal bass. Reversing the position of the foot-lever J slides the bearing-rod *i* back, throwing the toggles *n n* into an inclined position, lowering the platform L, and allowing the auxiliary levers H to fall away from the pedal and lever F, and be no longer subject to their action, and thus leaving the pedal bass and manual notes disconnected.

The operation of this coupling device is certain and reliable, and easily controlled by the performer.

What I claim as my invention is—

1. The hinged platform L, in combination with the bass-pedal E, lever F, and auxiliary lever H, operating substantially as and for the purpose described.

2. In combination with the hinged platform L, I claim the toggles *n n*, rod *i*, lever H, pedal E, connecting-rod I, bearing *o*, and foot-lever J, operating substantially as set forth.

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

LEVI K. FULLER.

Witnesses:

W. H. CHILDS,
C. H. SMITH.