

B. E. RIGGS.

Improvement in Reed-Organs.

No. 133,255.

Patented Nov. 19, 1872.

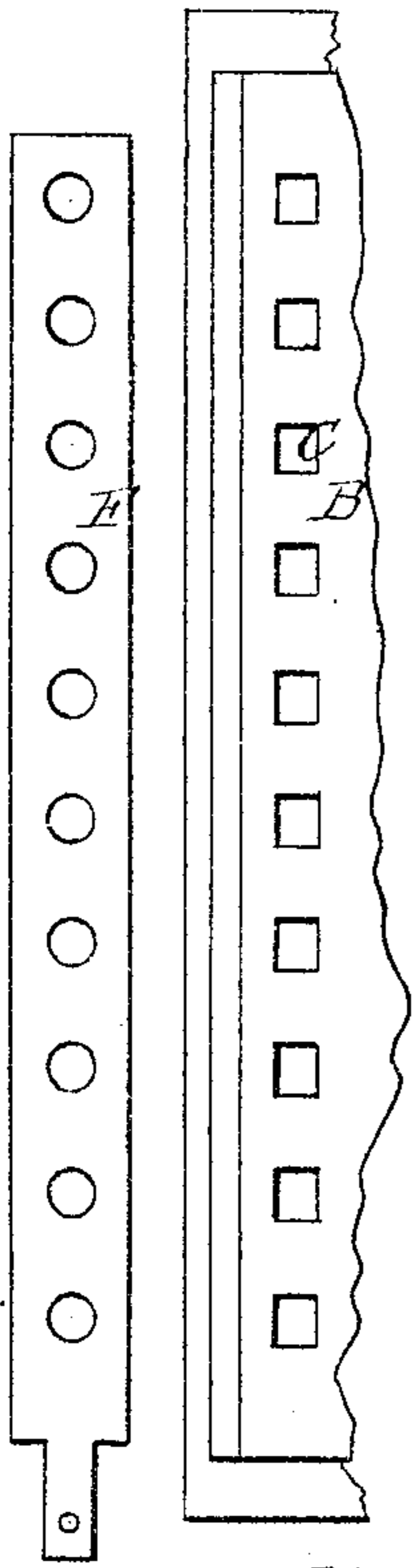


Fig. 3.

Fig. 4.

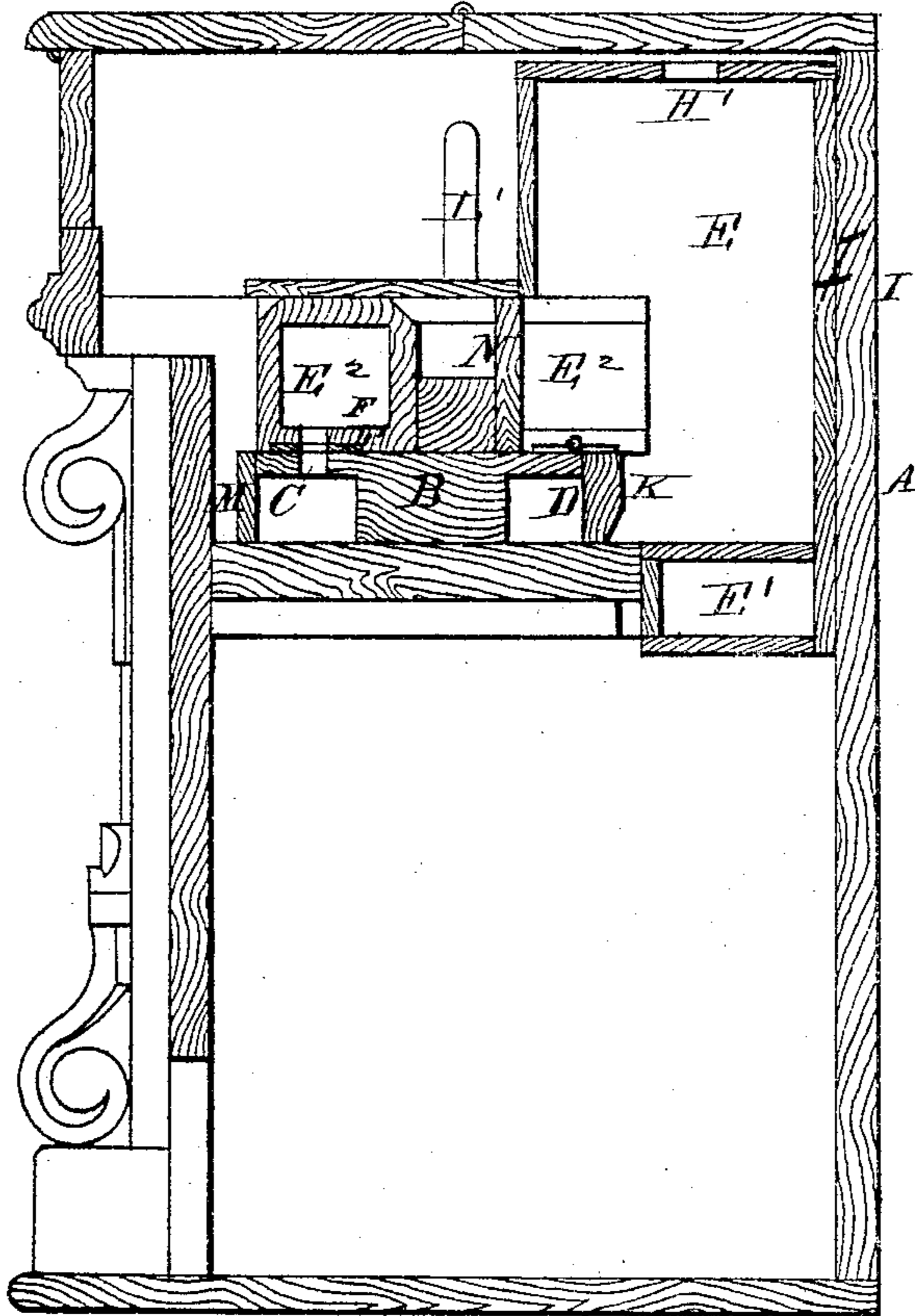


Fig. 1.

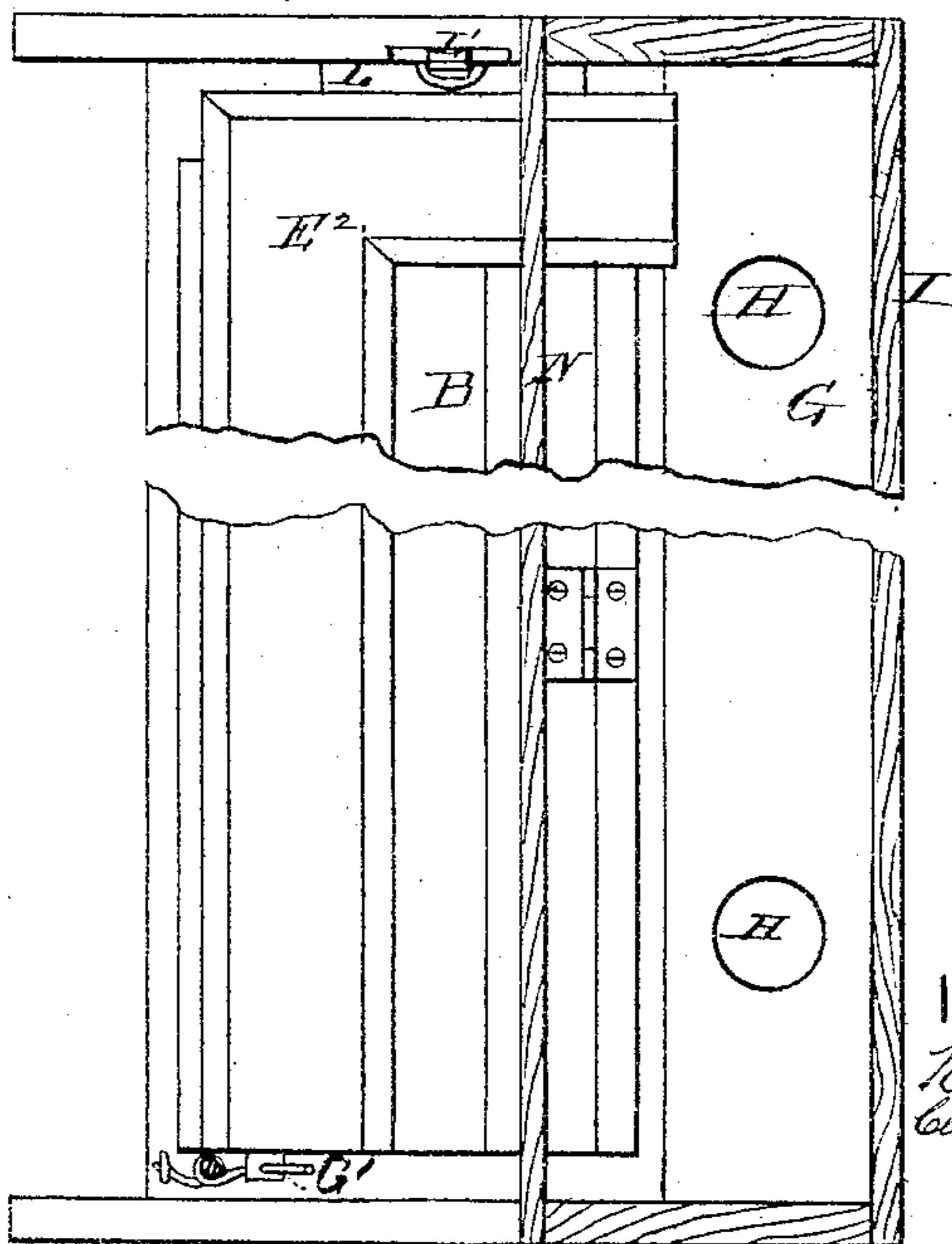


Fig. 2.

WITNESSES.

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UNITED STATES PATENT OFFICE.

BENJAMIN E. RIGGS, OF HOMER, MICHIGAN.

IMPROVEMENT IN REED-ORGANS.

Specification forming part of Letters Patent No. 133,255, dated November 19, 1872.

To all whom it may concern:

Be it known that I, BENJAMIN EUGENE RIGGS, of Homer, in the county of Calhoun and State of Michigan, have invented a new and valuable Improvement in Reed-Organs; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a vertical section of my invention. Fig. 2 is a horizontal section of my invention. Figs. 3 and 4 are detail views of my invention.

My invention has relation to reed-organs; and it consists in the construction and novel arrangement of certain vibratory sound-chambers, of a pipe to conduct the sound thereto from the reeds, and of stops to regulate the passage of said sound to the vibratory sound-chambers, all as hereinafter more fully described.

Referring to the drawing, A represents the organ-case, and B the reed-board, with separate sets of reeds located respectively at the front and back part, as designated by the letters C D. E E¹ represent two vibratory sound-chambers or boxes, made of thin wood or other material, calculated to vibrate properly under the influence of sound. These chambers are, as shown, located at the back part of the organ, and respectively above and below the reed-board. The sounds from the front set of reeds are conducted to the upper chamber E by means of an L-shaped pipe, E², the long arm of which lies upon the reed-board above the reeds, and has perforations corresponding to them. A perforated slide-stop, F, lies between said perforated arm and the reeds, and is operated in shutting off or allowing the escape of sounds by a lever, G'. The sounds from the reeds D descend to the chamber E¹, which has a thin sounding-board top, G, of a similar nature to the top of a guitar, and constructed with openings H. The back board I unites the two vibratory chambers.

Any sound entering one chamber is affected by the other also. The back set of reeds vibrate above the deck or top of the lower chamber E¹. The object of these chambers is to produce mellowness and depth of tone resembling that of the pipe-organ. The lower chamber is designed to be made of or covered with very thin wood or other material, so that the vibration will give sounds similar to those produced by stringed instruments. The sounds from both chambers ascend and pass through an opening, H', at the top of the chamber E. This chamber is intended to rise above the top of the organ-case, to be cylindrical, and made in imitation of pipes. K denotes a hinged stop to the back set of reeds. L designates a slide, and L' a lever for controlling said stop. M indicates a hinged stop for the front set of reeds. When the slide-stop is shut and the stop M opened the sounds from the front reeds pass out, but are not conducted to the vibratory chambers. When the stop M is opened the front set of reeds may be removed. N represents a partition closing the space at the front of the upper chamber E.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination and arrangement of the chambers E E¹, reeds C D, perforated pipe E², and slide-stop F, substantially as specified.

2. In an organ, the sounding-chambers E E¹, arranged one above the other, in combination with the perforated pipe E² and perforated slide-stop F, substantially as specified.

3. The sounding-chamber E¹, located behind and below the back set of reeds D, and provided with openings H, in combination with the upper sounding-chamber E, all arranged substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

BENJAMIN EUGENE RIGGS.

Witnesses:

DAVID N. GREEN,
AMBERS BUTTS.