(No Model.)

E. L. MUNDY.

REED ORGAN.

No. 304,544. Patented Sept. 2, 1884.

Fig. 1.

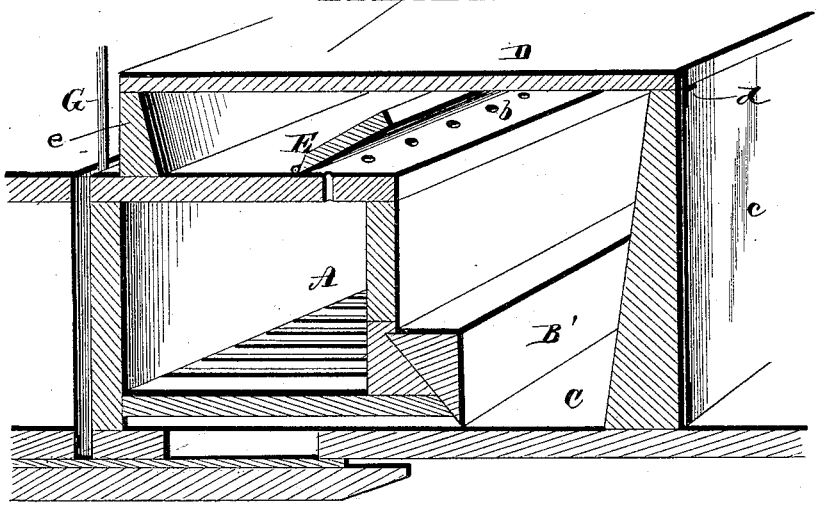


Fig. 2.

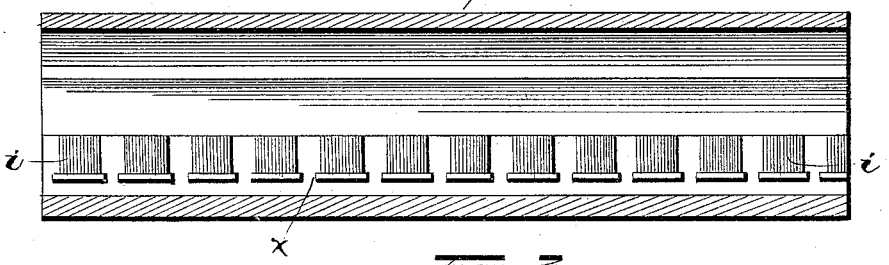
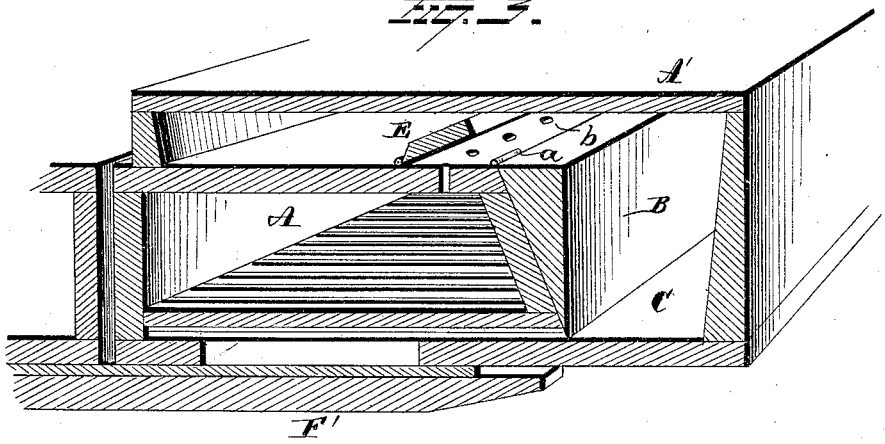


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

ELLIS L. MUNDY, OF NORWALK, OHIO.

REED-ORGAN.

SPECIFICATION forming part of Letters Patent No. 304,544, dated September 2, 1884.

Application filed June 24, 1882. (No model.)

To all whom it may concern:

Be it known that I, ELLIS L. MUNDY, of Norwalk, in the county of Huron and State of Ohio, have invented certain new and useful Improvements in Reed-Organs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

My invention relates to reed-organs, and more particularly to the construction of chambers in a reed-organ to improve the tone proceeding from the reeds of the instrument.

In the drawings, Figure 1 is a section, shown in isometric view, of the resonant-chamber and the common air-chamber. Fig. 2 represents a longitudinal vertical section through the swell-chamber, showing the mute partially raised and the reeds placed in grooves of the openings. Fig. 3 represents in section an isometric view of the chambers with the mute reaching to the top of the common air-chamber.

A common mute or stop-valve, B, is secured to the top of the chamber A by means of hinges *a*, or in any other suitable manner, and is adapted to close the openings *i*, leading into the chamber A. If desirable, a smaller mute, B′, as shown in Fig. 1, may be secured in a similar manner. When the mute B is opened, the sound-waves from the reeds enter the swell-chamber C, which is open at both its ends, and, if desirable, to give the sound-waves a freer passage and produce a more sonorous sound, the swell-valve D is opened, which may be hinged at either edge, but is preferably hinged at *d*. To produce a mild and soft tone, small apertures or holes, *b*, are cut through the casing of the chamber A. They are preferably formed in the top near the edge of the casing, although as respects their locality I do not limit my invention. A stop-valve, E, that extends the full length of the casing, is hinged so as to operate to open or close the apertures *b*. To inclose the sound-waves proceeding from the apertures *b*, the side board, *c*, of the swell-chamber C is to extend up high enough to allow the mute E to be opened. The front end of the swell-valve D rests upon a rail or projection *e*, (shown in Fig. 1,) that is secured on the top and rear end of the chamber A. The arrangement of these different chambers admits of various sound-waves being produced. When the valve F is opened by the tracker-pin G, which is actuated through the agency of any suitable connecting mechanism with an ordinary key-board, the air passes through the reeds, vibrating the same, and when the mute B is closed and the stop-valve E is open, the sound-waves pass through the apertures *b* and produce a soft and distant effect. This may be changed by opening the mute B and allowing the sound-waves to pass into the chamber C, which will give a more resonant and sonorous tone to the reeds, and to give it full vent the swell-valve D is opened, each change in the opening of the valves acting to produce a different sound. Thus it will be seen that many harmonious tone effects may be produced.

I am aware that it is not broadly new to employ a swell-chest in combination with a reed-board; also, that it is not new to provide the swell-chest with a movable lid, and hence I make no broad claim thereto; but

What I claim is—

1. In a reed-organ, a reed-chamber and a swell-chamber, the reed-chamber being provided with two sources of acoustic communication with the swell-chamber, in combination with two mutes covering the communications between the reed-chamber and swell-chamber, substantially as and for the purpose set forth.

2. In a reed-organ, a reed-chamber provided with two sources of acoustic communication with the swell-chamber, one of which communications consists of a series of apertures, in combination with two mutes covering, respectively, said sources of sound communication, substantially as and for the purposes specified.

3. The reed-chamber A, provided with the apertures *b*, and the lower aperture communicating with the swell-chamber, in combination with the swell-chamber C, provided with the valve D, and the mutes B and E, for closing the communications between the reed and swell chambers, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ELLIS L. MUNDY.

Witnesses:

JNO. CROWELL, Jr.,

EMMA WRIGHT.