

(No Model.)

H. NELSON.
ORGAN.

No. 502,050.

Patented July 25, 1893.

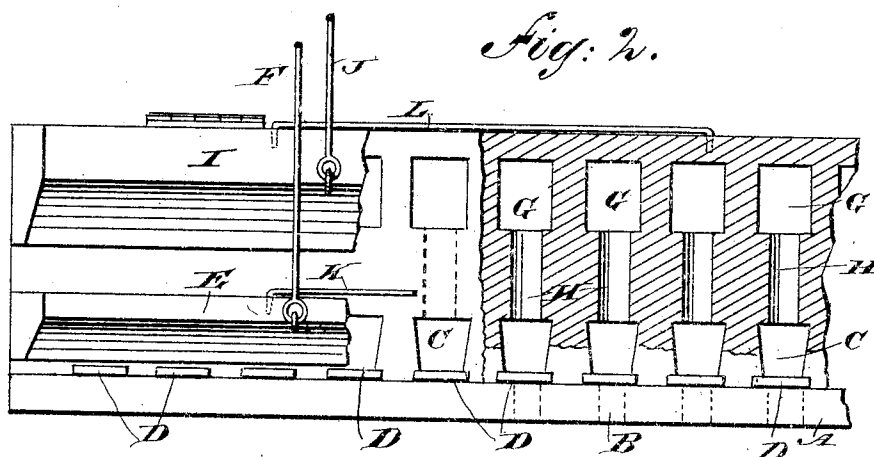
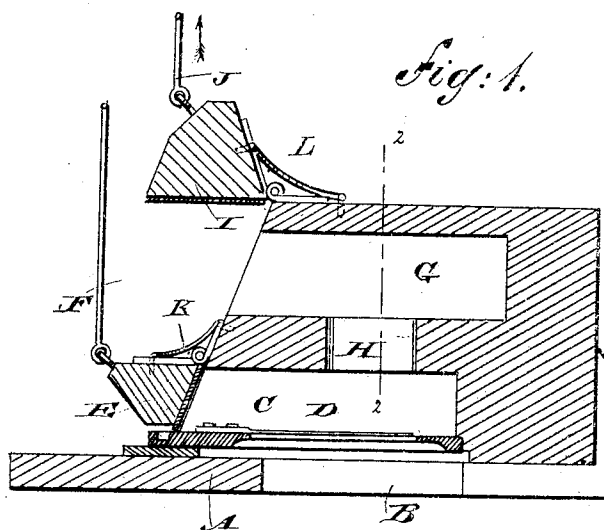
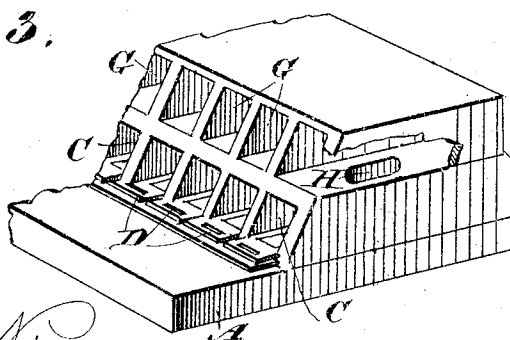


Fig: 3.



WITNESSES:

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HENRY NELSON, OF FORT WAYNE, INDIANA.

ORGAN.

SPECIFICATION forming part of Letters Patent No. 502,050, dated July 25, 1893.

Application filed April 12, 1892. Serial No. 428,820. (No model.)

To all whom it may concern:

Be it known that I, HENRY NELSON, of Fort Wayne, in the county of Allen and State of Indiana, have invented a new and useful Improvement in Organs, of which the following is a full, clear, and exact description.

The invention relates to reed organs, and its object is to provide certain new and useful improvements in organs whereby the tone of each reed can be readily changed, at the will of the operator, from a soft, fine violetta tone to a clear pipe tone, or to a full, strong, reed organ tone.

The invention consists of certain parts and details and combinations, of the same, as will be hereinafter described and then pointed out in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a transverse section of the improvement. Fig. 2 is a front view of the same with parts in section on the line 2—2 of Fig. 1; and Fig. 3 is a perspective view of the improvement with the valves removed.

The organ is provided with the usual sound-board A, provided with an opening B, connected in the usual manner with the suction bellows. Above the aperture B on the sound-board A is arranged the reed cell C, containing the reed D, so that the air passing through the cell C and through the reed D into the opening B produces a tone. The front end of the cell C is ordinarily closed by a valve or stop E, connected by a rod F, with the usual organ mechanism under the control of the operator, so as to open or close the front end of the cell C. As illustrated in Fig. 2, a series of such cells C is arranged one alongside the other and all are controlled by the same valve or stop E.

Above each cell C is arranged a second cell G in communication with the lower cell C by an aperture H, formed in the top of the cell C, which top at the same time forms the bottom of the upper cell G. The front end of the cell G is adapted to be opened and closed by a valve I, similar to the valve E and connected by a rod J, with the organ mechanism under the control of the operator, so that the valve I can be opened or closed independently of the

valve E. As shown in Fig. 2, the valve I controls a series of upper cells G similarly to the valve E controlling the like number of lower cells C. A spring L, is connected with the valve I to hold the same normally in a closed position and a similar spring K, is connected with the valve E to close and hold the same closed, when not opened by the rod F at the will of the operator. Thus, ordinarily, both valves E and I are closed. Now, when the upper valve I is opened by the operator, then the air passes through the front end of the cell G into the latter and through the aperture H into the lower cell C through the reed D into the opening B, by the suction of the bellows, whereby a clear pure pipe tone is produced. When the upper valve I is closed, and the lower valve E is opened by the operator, then the air passes into the cell C through the reed D into the opening B whereby a soft pipe tone is produced. When both valves E and I are simultaneously opened, then the air passes into both cells G and C, and the air in the cell G passes through the opening H into the cell C to reinforce the air entering the latter, the total amount of air passing through the reed D into the opening B, by the suction of the bellows, whereby a pure, clear, strong, common reed organ tone is produced. Thus, the operator can at will, produce any desired tone according to the piece of music to be executed. As will be readily understood, the operator can at will change the tone as above described by opening either one of the valves E or I or both simultaneously, for the purpose set forth.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. An organ provided with two connected cells, an independent valve for each of the cells and adapted to open each cell at its front end to the outer air, and a reed held in one of the said cells in such a manner as to be sounded on opening either or both of the valves, substantially as shown and described.

2. An organ provided with two cells open at the front and located one above the other and in communication one with the other, the lower cell containing a reed and each cell containing, at its front end, an independent valve, substantially as shown and described.

3. An organ provided with two cells open

at the front located one above the other and in communication one with the other, a reed arranged in the bottom of the lower cell over the opening in the sounding board, and a
5 spring pressed valve for the front open end of each cell and under the control of the operator, substantially as shown and described.

4. In an organ, the combination with a sounding board having a series of reed apertures, of a series of cells arranged on the said
10 sounding board and each containing a reed over the corresponding reed aperture in the sounding board, a valve for opening and clos-

ing the front openings of the cells in the said series, a second series of cells each in commu- 15
nication with the corresponding cell of the series below, and a second valve for opening and closing the front ends of the cells in the second series independent of the valves for the first-named series of cells, substantially 20
as shown and described.

HENRY NELSON.

Witnesses:

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