

G. B. KELLY.

REED-ORGAN.

No. 186,845.

Patented Jan. 30, 1877.

FIG. 1.

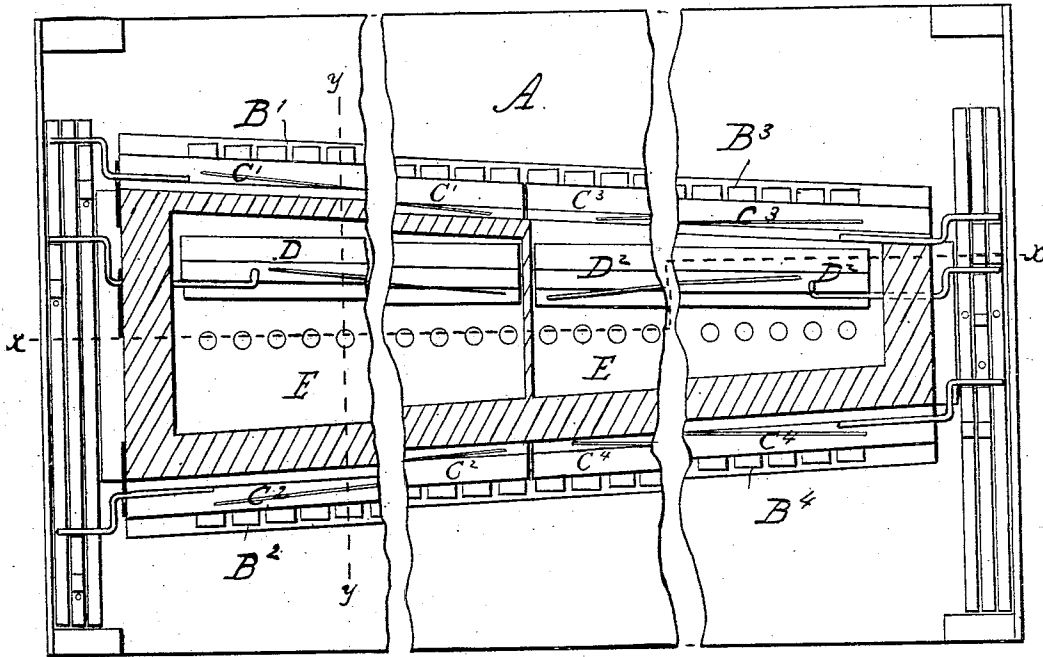


FIG. 2.

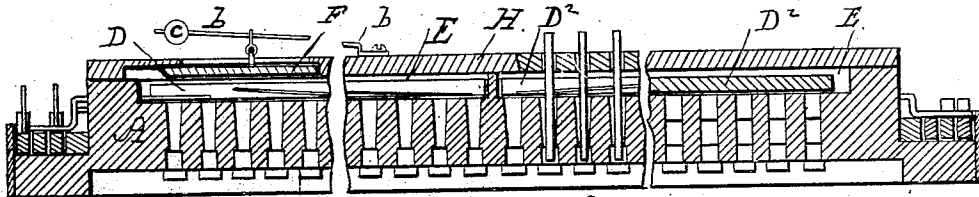


FIG. 3.

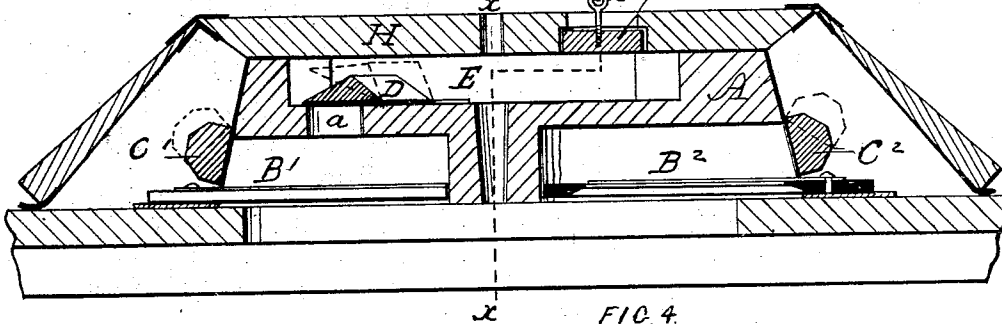
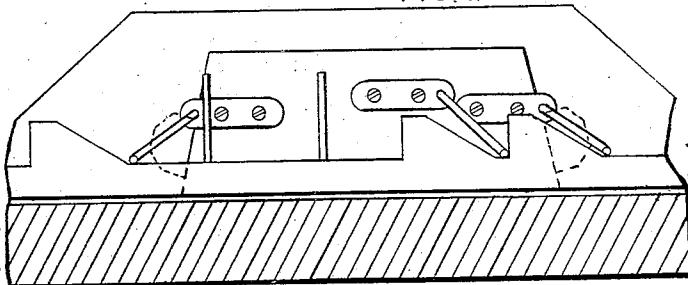


FIG. 4.



WITNESSES

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IMPROVEMENT IN REED-ORGANS.

Specification forming part of Letters Patent No. **186,845**, dated January 30, 1877; application filed June 16, 1876.

To all whom it may concern:

Be it known that I, GEORGE B. KELLY, of Boston, county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Reed-Organs, of which the following is a specification:

This invention relates to that class of reed-organs in which an additional register is employed, in combination with an ordinary register, for the set of reeds; and it consists, first, in the combination, with the ordinary stop of a set of reeds, of an additional stop, located within a chamber on the board in which the reeds are located, and through which work the stems for opening the valves to each reed, by means of which less air can be made to pass to the reeds, when desired; second, in a valve arranged to open inwardly to the said chamber in which the additional register is located, in combination with the ordinary reed register or stop, as more fully hereinafter set forth.

In the accompanying plate of drawings, Figure 1 is a plan view of my improved combination of registers; Fig. 2, a section along line *x x*, Figs. 1 and 3; Fig. 3, a cross-section on line *y y*, Fig. 2; and Fig. 4, a view of one end.

In the drawings, A represents a board, in which are arranged four sets of reeds, B¹ B² B³ B⁴, each set having a register, C¹ C² C³ C⁴, all of which are adapted to be opened and closed, and the whole being constructed and arranged as ordinarily in reed-organs, therefore needs no more particular description herein. D D², two registers, one to the set of reeds B¹ and the other to the set of reeds B³, both of which registers are in addition to the usual registers C¹ and C³ for each of said sets of reeds. These additional registers D D² are arranged to open and close air passages or cells *a* to the reeds of the sets of reeds to which they are adapted, and they are also arranged to be operated, as is common for all registers in reed-organs.

In the use of my combination of two registers for a set of reeds upon the reeds of the organ from which the bass-notes are produced I arrange the said extra register, so that the air which can pass to the reeds when it is opened will be less in quantity

than that which passes when the ordinary and common register for such reeds is opened, and thus softer base-tones will be produced; and, again, if the two registers be opened at one and the same time, stronger and rounder bass-tones will be obtained.

The arrangement of the extra register to the bass-reeds for the purpose above stated is within the chamber E of the board in which the reeds are located, and through which work the stems for opening the valves to each reed when the keys are played upon, and under such an arrangement less air can pass to the reeds when that register is opened than when the ordinary register is opened.

F, a valve opening inwardly to the chamber E, in which the additional register D is arranged, as above described. This valve opens against a weighted spring-lever, *b*, which is hung to it and fastened to the outside of the cap-board H. Should the supply of air when the register D is opened be too weak, this valve opens, letting in an additional quantity, and, obviously, by having the weight *c* adjustable on the spring-lever *b*, the opening of the valve can be regulated as desired.

In combining the two registers with the reeds used for a celeste-stop, it is arranged and applied to only one of the two sets, and when so applied it gives an extra supply of air to such reeds, if it be opened at the same time as the ordinary register thereof, whereby the celeste tones are produced with the two sets of reeds tuned in unison, whereas, heretofore it was usual to tune them out of unison.

Again, with the additional register for one set of these reeds closed and the two registers for the two sets opened, as the two sets are tuned in unison, an increased volume of tone can be obtained.

The chamber or space E above the reed-cells, into which the reed-cells open when the extra register there located is opened, as described, gives a resonancy to and qualifies the tones produced from the reeds.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination, with the ordinary stop of a set of reeds, of an additional stop, D, located within the chamber E, substantially as described.

2. The valve F, arranged to open inwardly to the chamber E, in which is a register, D, of a set of reeds, in combination with the or-

dinary reed register or stop, all arranged to operate substantially as herein shown and described.

GEO. B. KELLY.

Witnesses:

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