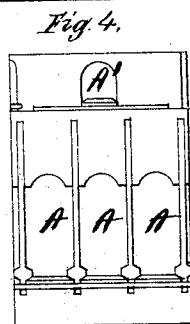
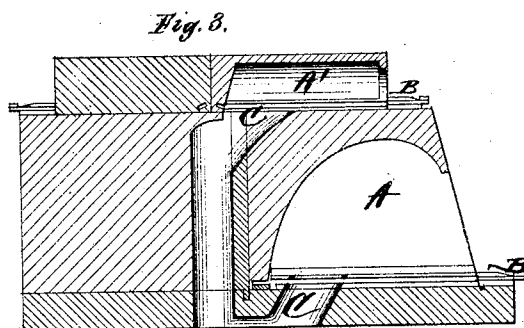
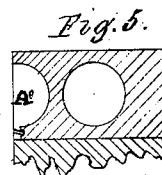
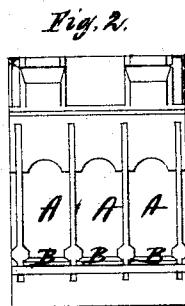
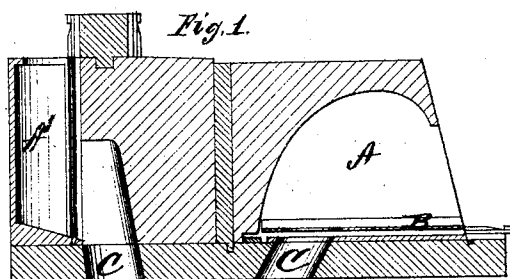


C. W. Small

Reed Organ.

No. 113,940.

Patented Apr. 18, 1871.



Witnesses
John A. Ellis
James V. White

Inventor
Charles W. Small.
Per
J. F. Alexander
Atty.

UNITED STATES PATENT OFFICE.

CHARLES W. SMALL, OF WORCESTER, MASSACHUSETTS.

IMPROVEMENT IN REVERBERATING REED-CELLS FOR ORGANS OR MELODEONS.

Specification forming part of Letters Patent No. **113,940**, dated April 18, 1871.

To all whom it may concern:

Be it known that I, CHARLES W. SMALL, of Worcester, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Reverberating Reed-Cells for Organs or Melodeons; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a longitudinal vertical section. Fig. 3 is a similar view, slightly different in arrangement. Figs. 2 and 4 are end views of Figs. 1 and 3, respectively; and Fig. 5 is a cross-section of Fig. 3.

A represents one of the cells in which the reed B is placed. This cell is extended or enlarged by arching the roof. The cell A' is enlarged by extending the sides, making them concave. By this means the tone is increased and improved, because by avoiding the sharp angles and corners the vibrations are increased

in power by striking and being reflected from the smooth and rounded sides of the cell, producing clear and sonorous sounds.

The mortises C, under the reeds, are made slanting, as shown in Figs. 1 and 3, so that the wind will strike the end of the reed with more force, for the purpose of producing a more instantaneous sound.

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

1. The reed-cell A, in a reed-board for organs or melodeons, having its roof arched above its mouth or entrance.

2. The reed-cell A', in a reed-board for organs or melodeons, having its sides concave, substantially as and for the purpose set forth.

3. In combination with a reed-cell either arched or its sides concave, the inclined passages C C, arranged as and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

CHARLES W. SMALL.

Witnesses:

GEO. M. TAYLOR,
W. A. KNIGHT.