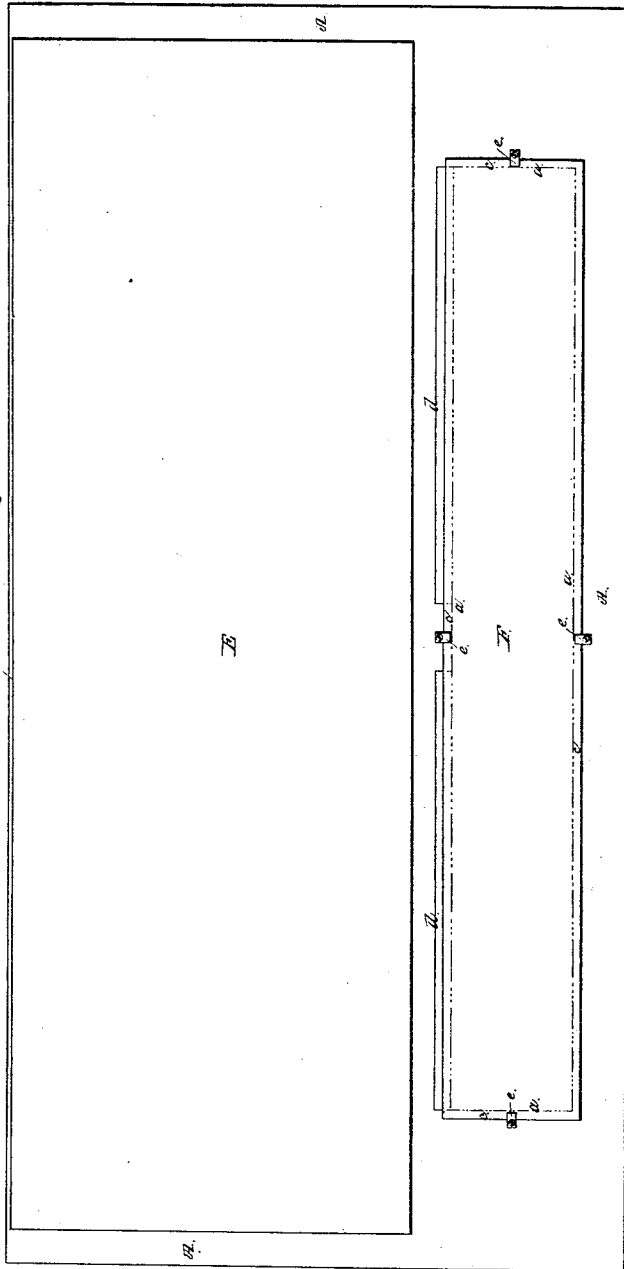
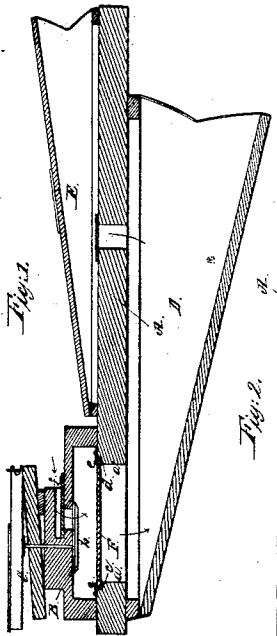


*A. Goodrich,
Reed Organ.*

N^o 4,915.

Patented Mar. 15, 1864.



Witnesses:

*Jas. Combs
Geo. Reed*

Inventor:

*A. Goodrich
per *Munn & Co*
Attorneys*

UNITED STATES PATENT OFFICE.

REUBEN GOODRICH, OF PITTSFIELD, MASSACHUSETTS.

IMPROVEMENT IN MELODEONS.

Specification forming part of Letters Patent No. **41,915**, dated March 15, 1864.

To all whom it may concern:

Be it known that I, REUBEN GOODRICH, of Pittsfield, in the county of Berkshire and State of Massachusetts, have invented certain new and useful Improvements in Melodeons and other Reed Musical Instruments; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a transverse vertical section of the foundation-board, air-receiving chamber, pumper, socket-board, and key-board of a melodeon, illustrating my invention. Fig. 2 is a plan view, with the socket-board removed, on a larger scale than Fig. 1.

Similar letters of reference indicate corresponding parts in both figures.

This invention consists, first, in interposing between the socket-board containing the reeds and the air-receiving chamber of the exhaust-bellows in a melodeon or other reed musical instrument a sound-board of glass or other sonorous substance; secondly, in causing the air after it has passed the reeds to pass through one or more slots or narrow passages at one edge of the sound-board instead of through a hole or holes in the foundation-board directly under the valves, as in most reed instruments now manufactured.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A is the foundation-board; B, the socket-board; C, the key-board; D, the air-receiving chamber, and E the pumper, all represented as constructed and arranged in the usual manner, except that there is provided in the foundation-board under the socket-board an opening, *a*, of nearly the full length and width of the cavity *b* of the latter board.

F is the sound-board, which constitutes the principal feature of my invention, fitted snugly into a rabbet, *c*, which is provided for its

reception in the edge of the opening *a*, and secured in place by buttons *ee*, or other suitable means. *dd* are slots or narrow passages provided between the back edges of the opening *a* and the sound-board for the air to pass from the cavity *b* of the socket-board into the air-receiving chamber D of the bellows. These slots or passages are formed by beveling the upper portion of the back edge of the opening *a*, as shown in Fig. 1, and extend nearly the full length of the said opening, as shown in Fig. 2. I propose, generally, to make the sound-board of glass; but metal or any other sonorous material might be used.

The pumper and the air-receiving chamber operate in the usual manner, and the air enters the reed-sockets at *f*, Fig. 1, and passes through the reeds and valves in the usual manner, through the cavity *b*, over the upper surface and rear edge of the sound-board F, through the slots or passages *d* and opening *a*, and through the bellows, as indicated by arrows in Fig. 1.

By the use of the sound-board F the tone of the instrument is very much improved, being round and full from all the reeds instead of muffled, as in all or many of the reeds of the instruments heretofore constructed.

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

1. The employment, in a melodeon or other reed musical instrument, of a sound-board of glass or other sonorous material interposed between the socket-board and the air-receiving chamber of the exhaust-bellows, substantially as and for the purpose herein specified.

2. Causing the air after passing through the reeds to pass through one or more slots or narrow openings, *dd*, provided at the edge of the sound-board, substantially as herein specified.

REUBEN GOODRICH.

Witnesses:

GEO. H. FLETCHER,
EDWIN F. SANDYS.