

R. Burdett.

Reed Board for Organs.

N^o 107,755.

Patented Sept. 27, 1870.

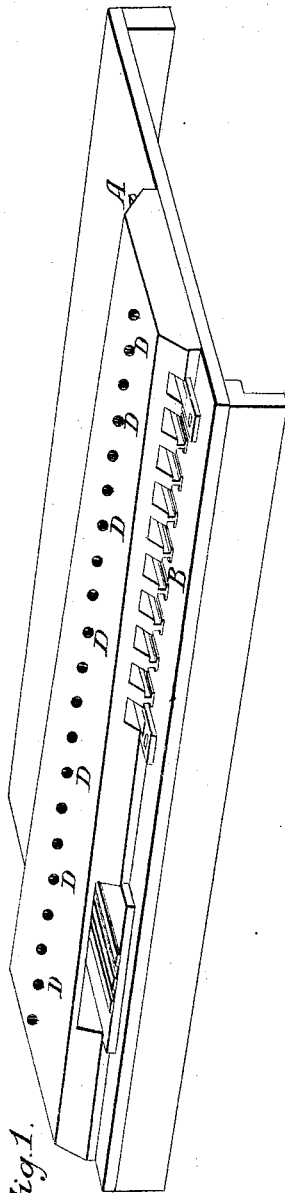


Fig. 1.

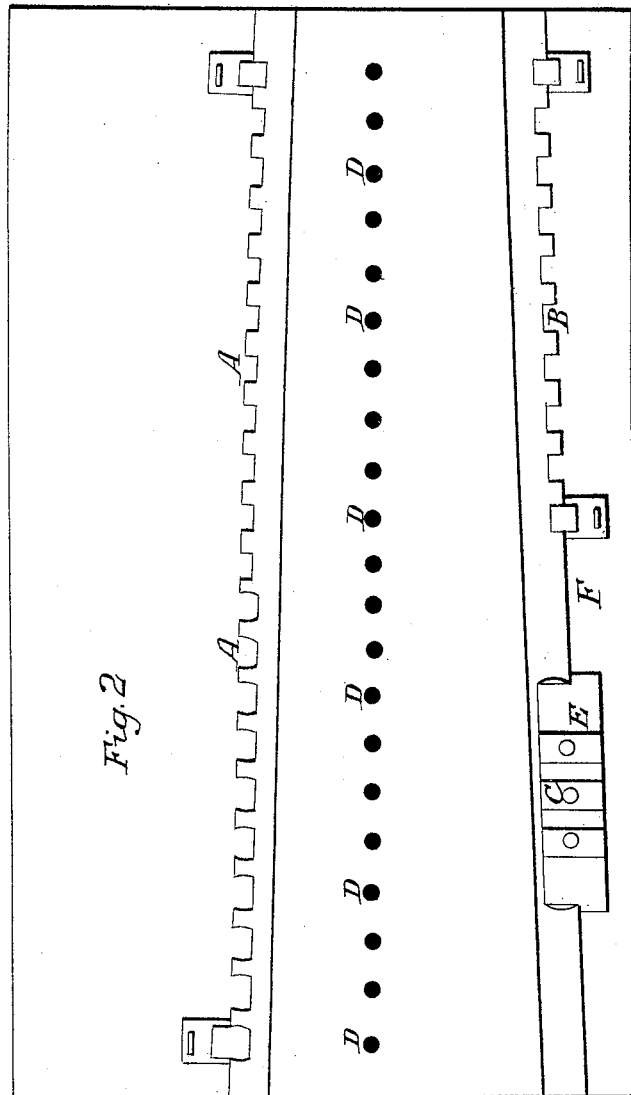


Fig. 2

Witnesses.

H. S. Miller
J. S. Brown

Inventor.

Riley Burdett.
By his atty
R. D. Smith

United States Patent Office.

RILEY BURDETT, OF CHICAGO, ILLINOIS.

Letters Patent No. 107,755, dated September 27, 1870.

IMPROVEMENT IN REED-BOARDS FOR ORGANS.

The Schedule referred to in these Letters Patent and making part of the same.

To whom it may concern:

Be it known that I, RILEY BURDETT, of Chicago, in the county of Cook, State of Illinois, have invented a new and useful Improvement in Reed-Organs; and the following is a full and accurate description thereof, reference being had to the accompanying drawing and the letters of reference thereon—

Figure 1 being a perspective, and

Figure 2, a plan view of my reed-board.

This invention relates to the construction of a "celeste" organ with a Manual sub-bass, in such a manner as to simplify the instrument, reduce the cost, and yet preserve the much-admired tone which distinguishes the larger and more expensive organ of this kind.

It is constructed similar to other reed instruments as respects the case, suction-bellows, keys, trackers, valves, and wind-chest; but the arrangement of the reeds and reed-board is altogether different. This is shown in the drawing, where the relative positions of the reeds are exhibited.

A is a unison set of reeds, extending through the scale or compass of the organ.

B is the celeste set of reeds.

C shows the sub-bass reeds, all of which are affixed to the plate E, or, if desired, they may be attached to separate plates.

The most desirable compass for the organ is five octaves, commencing on F F in the bass, and extending up to F *alt*. The celeste set of reeds commences on tenor F, or thereabout, and runs up three octaves. The sub-bass may commence on C C, but must be sufficiently large and heavy to be tuned one octave below the unison set and secure a powerful tone.

All of the reeds, excepting the sub-bass, are inserted in separate cells in the reed-board, in the usual manner; but the construction of the reed-board for the sub-bass differs altogether, there being only one

cell or chamber for all the reeds which consist of one octave, or thereabout.

This is an important improvement, as thereby the whole space occupied by all the reeds is a reverberating chamber for each reed, thus securing a degree of power, and also an improvement in the quality of the tone not attainable when each reed is a separate cell or chamber, as heretofore constructed.

D shows the hole through the reed-board for the trackers, which communicate to the valves from the keys, all of which are made quite similar to those in general use.

Another feature wherein the sub-bass differs from all others is, that no additional valves are needed, as the same valves which admit the passage of the air for the unison reed also admit it for the corresponding sub-bass reed.

The celeste set of reeds is tuned a little sharp or flat of the unison set, but only sufficiently so as to produce that agreeable waving, undulating quality of tone so pleasing and desirable.

Stop-dampers, constructed in the usual manner, are affixed to the sub-bass and celeste set, so that different combinations of tone may be produced at the pleasure of the performer.

What I claim as my invention, and desire Letters Patent therefor, is as follows:

1. The arrangement, in a single reed-board, of the principal set A, the celeste set B, and the sub-bass set C, substantially as described.
2. The arrangement of the sub-bass set C in the principal reed-board, so that the air-passages of both may be controlled by a single set of valves.
3. The reeds of the sub-bass set C, all located within a single cell in the reed-board, substantially as and for the purpose set forth.

Witnesses:

HERVEY SMITH,
GEO. F. BRIERLEY.

RILEY BURDETT.