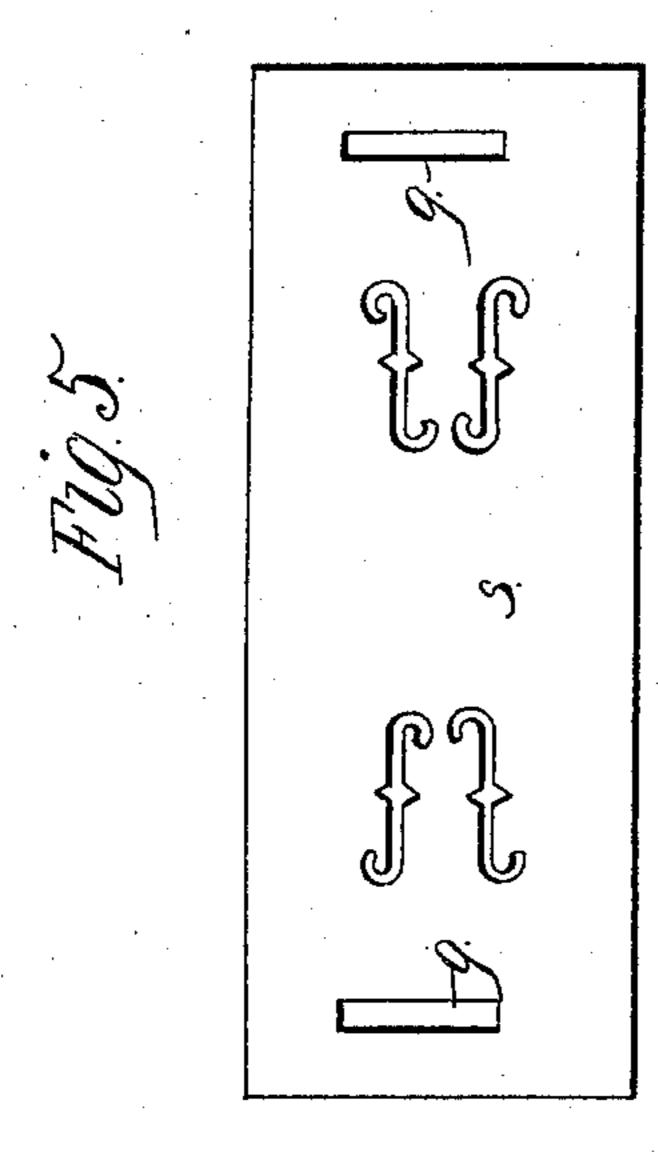
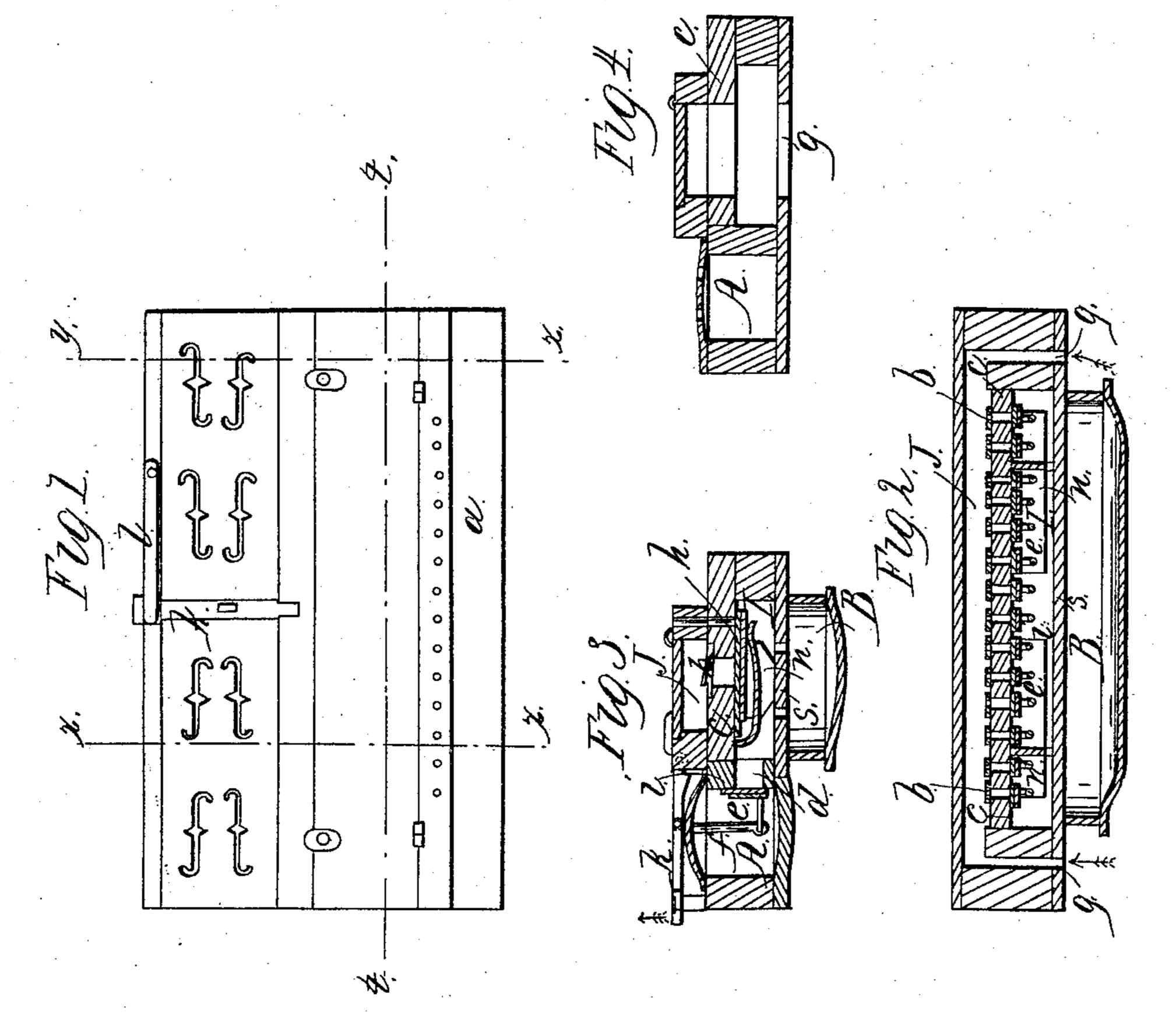
I.S.Shepard,

Reed Organ,

Nº 13,365, Patented July 31,1855.





United States Patent Office.

GEORGE S. SHEPARD, OF CANAAN, NEW HAMPSHIRE.

IMPROVEMENT IN MUSICAL REED-INSTRUMENTS.

Specification forming part of Letters Patent No. 13,365, dated July 31, 1855.

To all whom it may concern:

Be it known that I, GEORGE S. SHEPARD, of Canaan, in the county of Grafton and State of New Hampshire, have invented a new and useful Improvement in Reed Musical Instruments; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification.

Figure 1 is a top view of a sufficient portion of a reed-instrument to enable my improvements thereto to be understood; Fig. 2, a longitudinal vertical section in the line t t of Fig. 1; Fig. 3, a transverse section in the line x x of Fig. 1; Fig. 4, a transverse section in the line y y of the said Fig. 1; and Fig. 5 is a view of a detached portion of the instru-

ment.

Similar letters indicate like parts in all the figures.

I make the supporting frame-work of my improved reed-instruments of any shape and size that may be required to give the proper support to the instrument. The socket-board c divides the valve-chamber I from the reedchamber J. The valve-chamber I is divided. from the sounding-chamber A by means of a partition i, which is perforated with the apertures d d, which apertures are closed by the outwardly-opening valves ee, that are connected to the levers f and k and to any suitable pedal in such a manner that said valves may be opened at pleasure. The said valves e e are closed by the action of the spring l on the lever k or by any other suitable means. The said valve-chamber I is also connected to the sounding-chamber B, which is suspended below it and communicates with it by means of suitable openings in the partition s, as represented in Figs. 3 and 5.

The reeds b b and the valves h are connected to the socket-board c in any well-known or usual manner, and the said valves may be operated in any well-known manner. The air to act upon the reeds is made to enter each end of the reed-chamber J through the oblong openings g g from any desired form or arrangement of bellows. Sounding-posts n n are inserted between the socket-board cand the bottoms of the valve-chamber I, which serve a purpose similar to what they do in stringed instruments. By opening to their full extent the valves e e, and thereby allowing the air to escape freely from the valvechamber into the sounding-chamber A, tones of great fullness and power will be produced, and by nearly closing said valves the softest possible tones will be produced.

The auxiliary sounding-chamber B adds greatly to the vibrating surface of the instrument and prevents the air in the valvechamber from reacting against the reeds when the valves ee are nearly closed, and thereby adds greatly to the fullness and even-

ness of the tones produced.

Having thus fully described my improvement in reed-instruments, what I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the auxiliary soundingchamber B and the swell-chamber A with the valve-chamber I, substantially in the manner and for the purpose herein set forth.

The above specification of my new and improved reed-instrument signed and witnessed this 19th day of June, 1855.

GEORGE S. SHEPARD.

Witnesses:

WM. P. WEEKS, WM. C. WEBSTER.