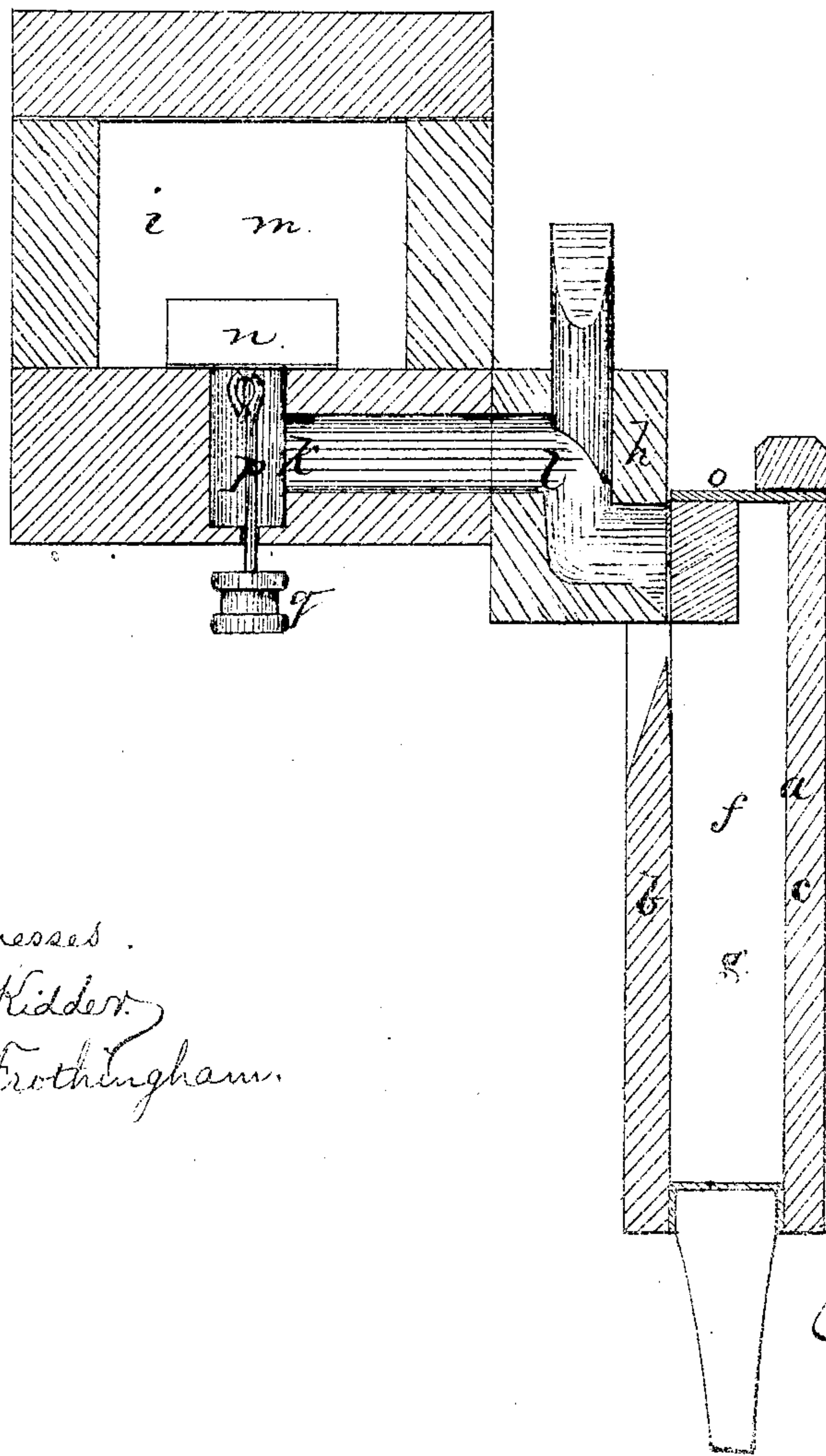
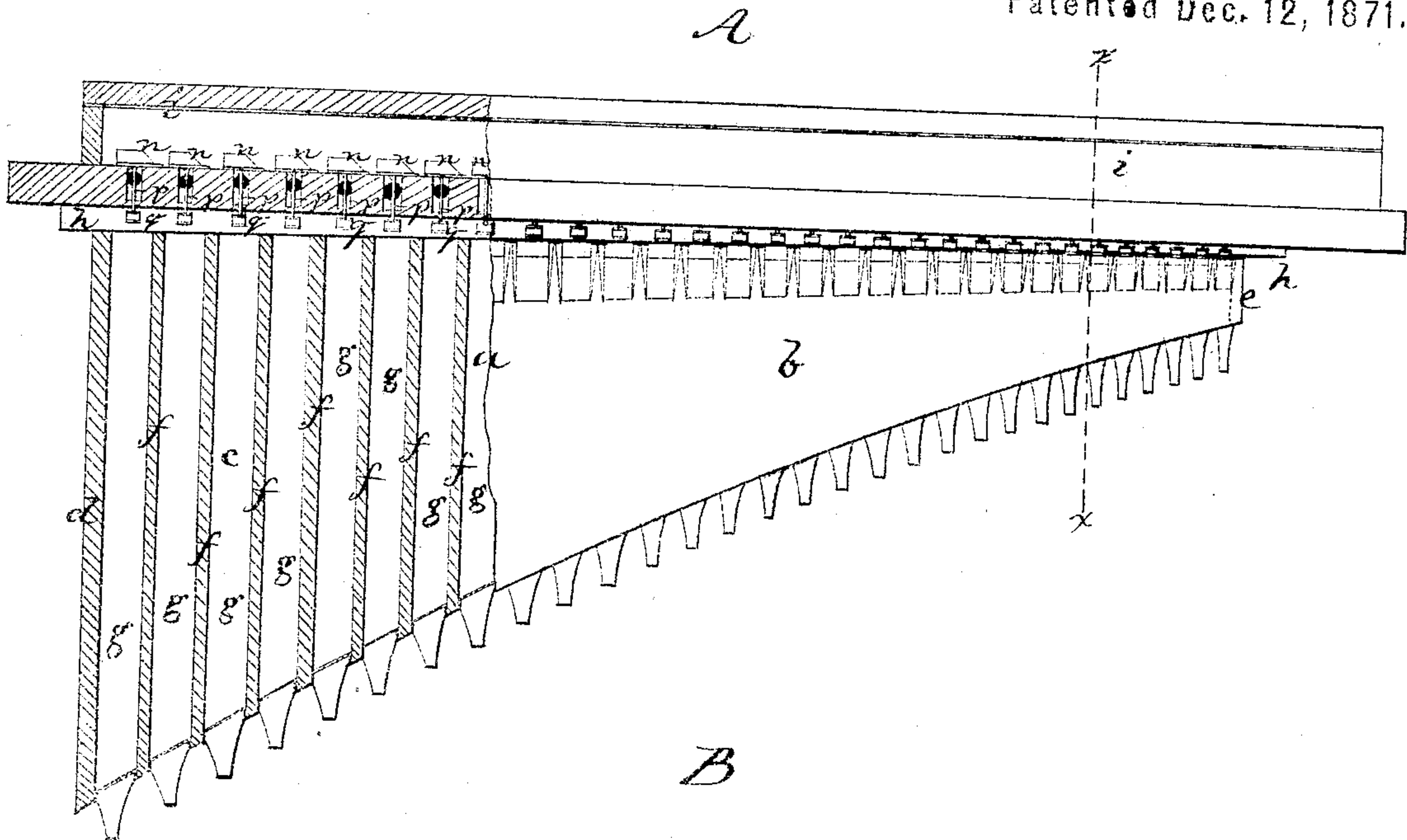


CARL FOGELBERG.

Improvement in Key Boards for Reed and Pipe Organs.

No. 121,768.

Patented Dec. 12, 1871.



Witnesses.
J. B. Kidder.
Mr. W. Frothingham.

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by his Atty's
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UNITED STATES PATENT OFFICE.

CARL FOGELBERG, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN KEY-BOARDS FOR REED AND PIPE ORGANS.

Specification forming part of Letters Patent No. 121,763, dated December 12, 1871.

To all whom it may concern:

Be it known that I, CARL FOGELBERG, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improvement in Reed and Pipe Organs or Key-Board Musical Instruments; and I do hereby declare that the following, taken in connection with the drawing which accompanies and forms part of this specification, is a description of my invention, sufficient to enable those skilled in the art to practice it.

My invention relates particularly to an improvement in pipes or in a system of pipes for reed organs or key-board musical instruments.

In all such instruments, so far as I know, the pipes are tubes, each complete and independent of the others. In large organs such pipe construction is practical and reliable, but in small organs, which are more or less portable, and which are sent complete from the ware-rooms, and are to be ready for use when they reach their destinations, not being packed and forwarded in parts and set up by a workman, as are church organs, such independent or individual construction and arrangement is more or less unreliable. Each pipe in all such instruments has its own fastenings, and as the pipes have to be removable, it requires great skill to place all the pipes in their proper relative positions, as well as great labor in applying or removing them, and from shrinkage of wood and imperfect fastenings the pipes are at all times liable to become loose and shaky, to the obvious injury of the power and tone of the instrument. My invention is designed to remedy these defects resulting from the system of independent pipes.

In my construction I form the whole series of pipes in one pipe-case or box, each pipe being a compartment of said case, which is a long box or chest, formed of two parallel side boards, placed at a distance apart equal to the width or diameter suitable for each pipe, and provided with cross-partitions placed at regular distances apart to leave spaces between them corresponding to the space between the side boards, the opposite sides of each partition forming two walls for two adjacent pipes, the case being made short at one end and long or deep at the other end, to conform to the lengths of the various pipes of the series. It is in such construction of the

pipes or pipe-case or chest that my invention consists.

The drawing represents a series of organ-pipes or pipe-passages embodying the improvement.

A shows the pipes, and the air and valve-box or passage from which they lead. B is a section on the line *x x*, showing the parts in full size, A showing the parts in quarter size. *a* denotes the pipe-box or case, made up of the two outer or side boards *b c* and the end walls *d e*, the boards *b c* being of irregular depth, as seen at A, but being placed parallel and having a clear space between them, as seen at B. The case is made of a length to embrace the whole series of the pipes, and is provided with the cross-partitions *f*, placed at equal distances apart, so as to form with the boards *b c* the organ-pipes or passages, each passage *g*, except the two end ones, being bounded by the inner surfaces of the two side boards, and one surface of each of two adjacent partitions, *f*, the inner surfaces of the end walls *d e* forming, respectively, one of the surfaces of each end passage. The space between the two boards *b c* and that between each two adjacent partitions are preferably the same, and the quadrangular space formed by the four surfaces is of the requisite area for each pipe. The pipe-case is shown as depending from a long tube-box, *h*, by which the pipes are connected with a valve-box, *i*, having a series of valve-passages, *k*, each connecting at one end with the passage *l* leading through the tube-box, and at its upper end with a long air-chest or box, *j*, common to all the valve-passages, the communication between each valve-passage *l* and the air-space *m* being controlled by a valve or clapper, *n*. The top of the pipe-case is surmounted by a long flap-valve, *o*, covering the open tops of all of the pipes. Each valve *n* has depending from it a stem or wire, *p*, at the bottom of which is a button, *q*, the buttons *q* and valves *n* being operated by the keys of the instrument.

I claim—

The series of reed-organ pipes or pipe-passages *g*, formed by the walls or boards *b c* and the cross-partitions *f*, and covered or controlled by the valve *o*, substantially as shown and described.

Witnesses: CARL FOGELBERG.

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M. W. FROTHINGHAM.

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