

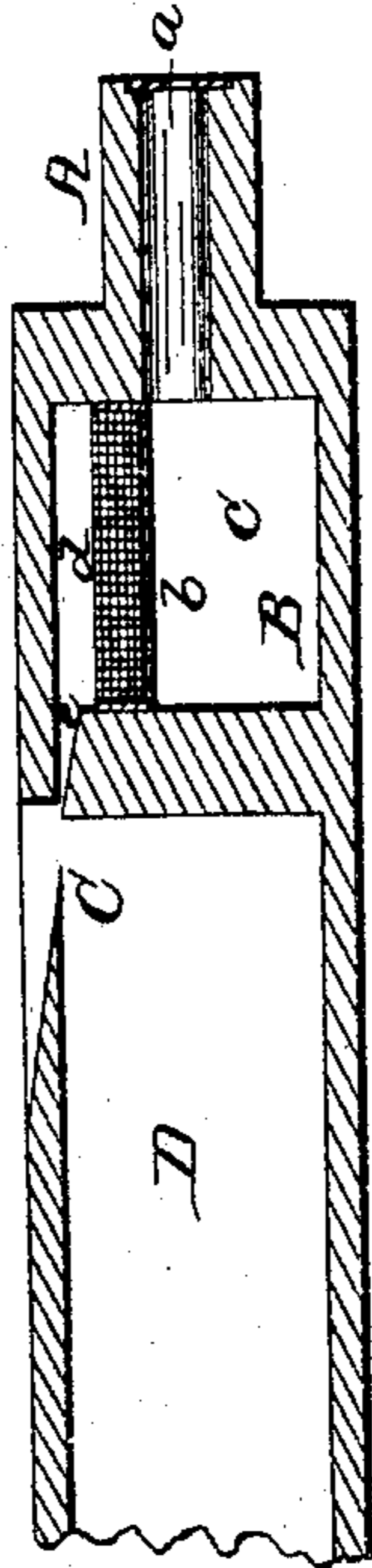
D. Boardman,

Organ Pipe,

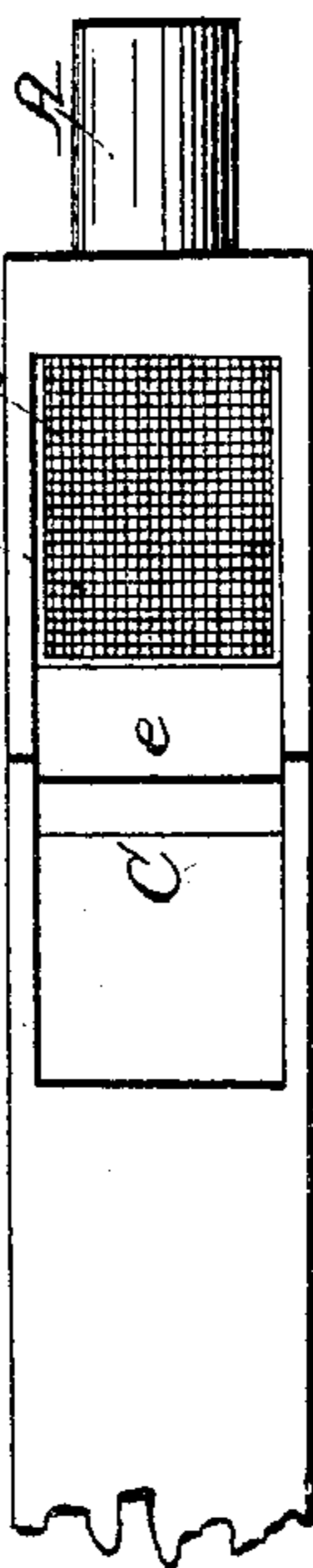
No 5,520,

Patented Apr. 18, 1848.

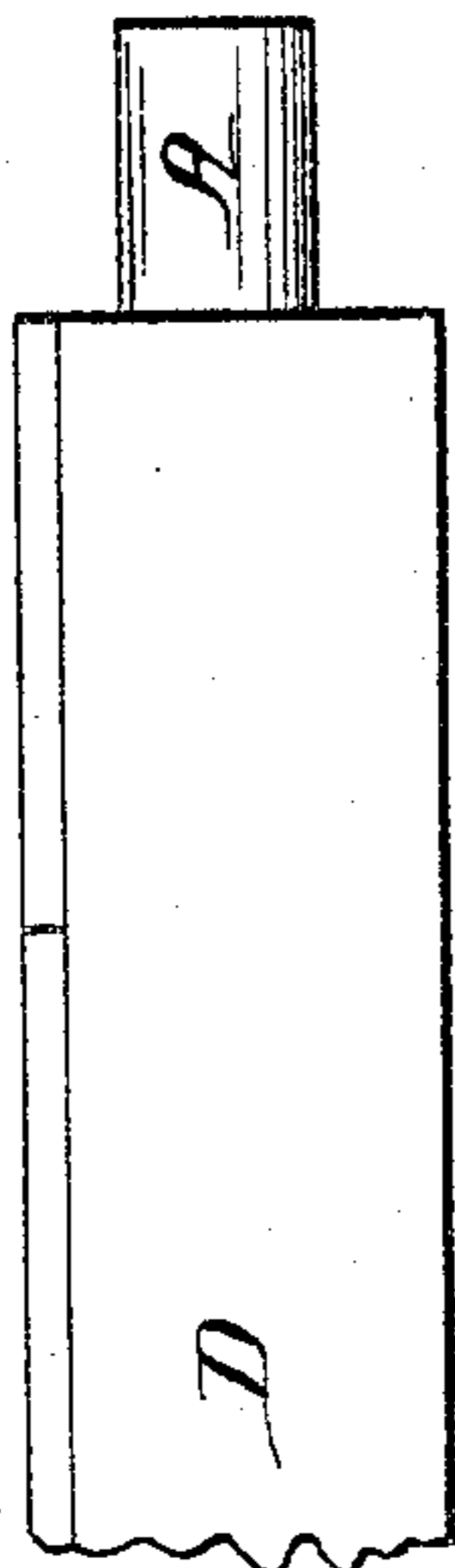
Fig; 3.



Fig; 2. b, d.



Fig; 1.



UNITED STATES PATENT OFFICE.

DAVID BOARDMAN, OF MOUNT VERNON, NEW HAMPSHIRE.

ORGAN-PIPE.

Specification of Letters Patent No. 5,520, dated April 18, 1848.

To all whom it may concern:

Be it known that I, DAVID BOARDMAN, of Mount Vernon, in the county of Hillsborough and State of New Hampshire, have
5 invented a new and useful Improvement in Organ-Pipes; and I do hereby declare that the same is fully described and represented in the following specification and accompanying drawings, letters, figures, and references thereof.

10 Of said drawings Figure 1 represents a side view of a common organ pipe made of wood, and having my improvement applied within it. Fig. 2 is a top view of it, in which
15 the cover of the wind chamber is supposed to be removed. Fig. 3 is a central longitudinal and vertical section of the said pipe.

In the said drawings, A represents the neck of the pipe or that part of it at which
20 the air is made to pass into it.

B is the chamber which receives it, and from which it escapes out, and is directed against the knife edge C.

D is the main chamber of the pipe.

25 My improvement consists in placing a partition of coarse cotton cloth, or other proper substance punctured with holes, across the chamber B and just above the air induction entrance *a*. The said partition is
30 shown at *b*. It is made to divide the cham-

ber B into two parts C and *d*. When air is blown through the passage *a*, and into the pipe it will first pass into the space *c*, below the cloth partition. From thence it will rush through the meshes of cloth or between the
35 threads of which it is composed, and find its way into the space *d*, from which it will pass out of the opening *e*. By means of the partition of cloth the air is divided into a great number of small streams before it rushes
40 out of the eduction passage *e*. By such division or by some other cause not known the tone of the pipe is very highly improved.

I do not confine my invention to the use of cotton cloth alone for a partition, as there
45 are other materials which may be substituted, and be made to produce a like effect.

That which I claim is—

The employment and use of a partition of cotton cloth (or other proper equivalent)
50 within an organ pipe in the manner and for the purpose of improving the tone as specified.

In testimony whereof I have hereto set my signature this eighth day of April, A. D. 55
1847.

DAVID BOARDMAN.

Witnesses:

NATHANIEL BRUCE,
LUCY B. BRUCE.