H. W. SMITH.

Reed-Organ Valve.

No. 207,907. Patented Sept. 10, 1878.

Fig. 1

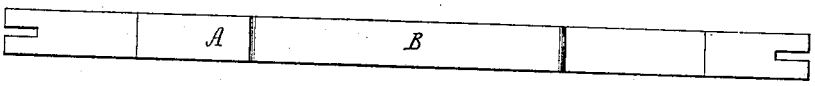
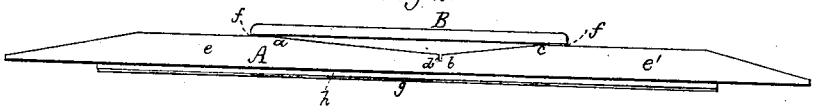


Fig. 2



Witnesses.
S. N. Piper
John R. Snow

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UNITED STATES PATENT OFFICE.

HENRY W. SMITH, OF WEST NEWTON, MASSACHUSETTS.

IMPROVEMENT IN REED-ORGAN VALVES.

Specification forming part of Letters Patent No. **207,907**, dated September 10, 1878; application filed July 8, 1878.

To all whom it may concern:

Be it known that I, HENRY W. SMITH, of West Newton, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in the Valves of Reed-Organs; and do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a top view, and Fig. 2 a side elevation, of a valve in accordance with my invention.

It is a long valve, constructed so as to be flexile or capable of being readily bent a little at and near its middle, and it is provided with a bridge extending over or across the said middle or the hollow or concavity there, and joined at or near its ends to the valve by yielding abutments or connections, the object being to produce a long valve capable of readily adapting itself to its seat when such may be more or less warped or out of place.

In constructing the said "duplex valve," I make the body part A in one piece of wood, and with a concavity, *a b c*, at or near its middle, and arranged in it as shown, and form at the vertex of the concavity a slit, *d*, carried transversely across the body. Across the concavity I extend a bridge or bar, B, which I join near its ends to the parts *e e'* of the valve by yielding abutments or connections *f f*, such as pieces of soft leather interposed between the valve and the bridge, and connected to them by glue or cement. The bearing-surface of the valve should be faced or cushioned with strips of leather *g* and cloth *h*, or in any other well-known manner.

The valve so made, when arranged on its seat, is to be forced against it by one or more springs having their free ends bearing against the back of the bridge. A flexile valve thus constructed will readily yield and adapt itself to its seat when the latter may be warped or out of place.

My valve is not constructed in two sections, joined by a continuous strip of packing, and to be pivoted at their outer ends and provided at the joint with a covering-plate, all as shown in the United States Patent No. 175,542. My valve is to be pivoted at one end only, and consequently is in one piece of wood, provided with the concavity and bridge and such flexile connections to the latter as set forth; therefore,

What I claim is—

1. The improved reed-organ valve, substantially as described, as having its body A provided with the concavity *a b c*, arranged in it as described, and with the bridge B extending across the concavity and joined to the body by flexile or yielding abutments or connections *f f*, as set forth.

2. The valve-body A, provided with the concavity *a b c* and cross-slit *d*, and also with the bridge B extending across the concavity and united to the body by yielding abutments *f f*, as explained.

HENRY W. SMITH.

Witnesses:
R. H. EDDY,
JOHN R. SNOW.