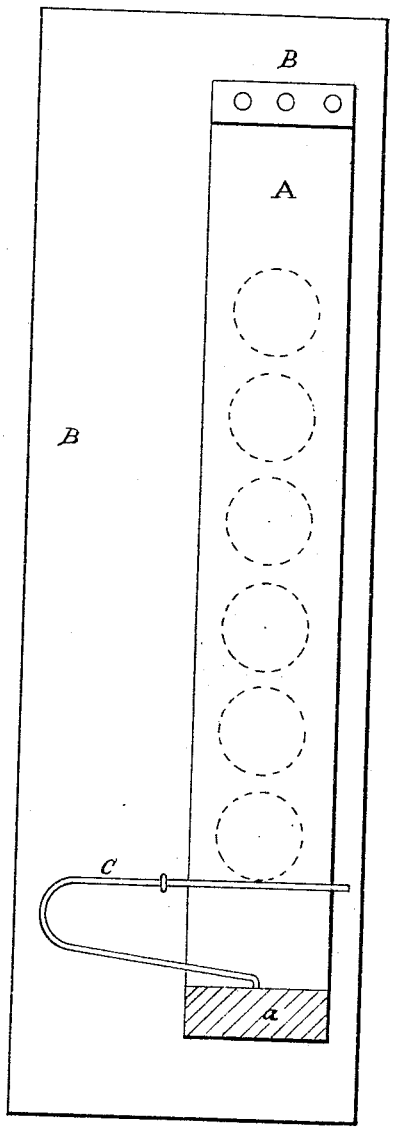
A. K. HEBARD.

Organ-Bellows Valve.

No. 197,031. Patented Nov. 13, 1877.



WITNESSES.

Philippe Mabille

Chas. E. Holzman

INVENTOR.

Albert K. Hebard

UNITED STATES PATENT OFFICE.

ALBERT K. HEBARD, OF CAMBRIDGEPORT, ASSIGNOR TO MASON & HAMLIN ORGAN COMPANY, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN ORGAN-BELLOWS VALVES.

Specification forming part of Letters Patent No. **197,031**, dated November 13, 1877; application filed June 27, 1877.

To all whom it may concern:

Be it known that I, ALBERT K. HEBARD, of Cambridgeport, in the State of Massachusetts, have invented certain Improvements in Bellows-Valves, of which the following is a specification:

My invention relates to the valves of organ-bellows; and consists in attaching one end of the valve to a spring of sufficient force to secure instantaneous action without impeding the free passage of air in operating the bellows.

The valve in common use is a strip of leather covering a series of holes, and securely fastened at each end.

It is obvious that a valve so secured, and drawn until it will lie evenly on the board, possesses only the amount of elasticity contained in the substance of which it is composed.

Leather, commonly used for valves, has very little elasticity at first, soon becoming dry and rigid.

By the greatest care in selecting material, a valve can be be made that will operate passably at first, but will soon get to working badly, either impeding the current of air, causing an additional amount of labor in blowing, or flutter when forced, or become noisy by flapping.

In my improvement one end of the valve A is secured to the board B (see accompanying figure) in the usual way, while the other end is fastened to a block of wood, in the center of which, on the side toward the valve, is a hole for the reception of the spring C.

The spring C is secured to the board B at a right angle with the valve A, the end being bent so as to enter the hole in the block *a*, thus securing the end of the valve from lateral motion, and keeping it always in place on the board B.

It is evident that a valve constructed in this manner will always remain as originally adjusted, and will have among its advantages: First, it will not flap from being too loose; second, it will not flutter from over tension; third, it will not obstruct the free passage of air, so as to make the bellows hard to operate; fourth, it will not fail to work quickly and surely by curling or becoming too long by stretching; fifth, it will work equally well in either a horizontal or upright position, or even inverted; sixth, weather has no effect upon it.

I claim as my invention—

1. The valve A, of leather or other flexible material, secured to the bellows B at one end, and to a block, *a*, and spring C at the other, substantially as described.

2. The flexible valve A of an organ or other bellows, having a spring applied, substantially as described, whereby the same is extended uniformly and made self-adjusting.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ALBERT K. HEBARD.

Witnesses:

PHILIPPE MABILLE,

GEO. F. STONE.