## C. W. VOGEL.

## Reed-Organ Stop-Actions.

No.147,201.

Patented Feb. 3, 1874.

Fig.I.

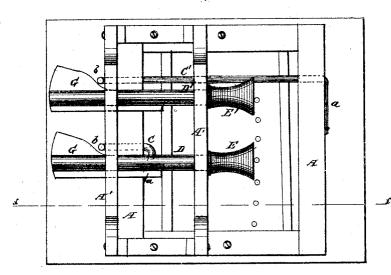


Fig. 2.

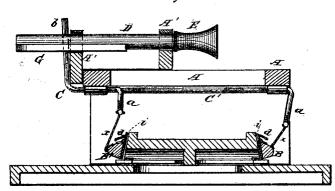
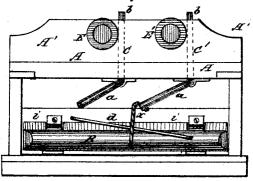


Fig. 3.



WITNESSES: P. G. Dieterical r Vogel

ATTURNEY

## UNITED STATES PATENT OFFICE.

C. WILLIAM VOGEL, OF NORWICH, CONNECTICUT.

## IMPROVEMENT IN REED-ORGAN STOP-ACTIONS.

Specification forming part of Letters Patent No. 147,201, dated February 3, 1874; application filed January 2, 1874.

To all whom it may concern:

Be it known that I, C. W. VOGEL, of Norwich, in the county of New London and State of Connecticut, have invented certain new and useful Improvements in Cabinet-Organs; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to stops for cabinet-organs; and it consists in the construction and arrangement of the mechanism for lifting the valves from the reeds; and also in providing each valve with a piece of leather or other suitable material to slide on the board to which the valve is hinged, for the purpose of preventing wind from passing in on the back of the valve.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a plan view. Fig. 2 is a vertical section on line x x, Fig. 1. Fig. 3 is a front

elevation of the same.

A represents the key-frame, and B B' two of the valves of a cabinet-organ constructed in in any of the known and usual ways. Under the key-frame A, in suitable bearings, are placed a series of rods or levers, C C', corresponding in number with the stop-valves B B' in the organ. At the front end of each rod or lever C is an arm, a, extending at right angles, and connected, by a catgut-string, x, with the valves B B'. At the rear end of each rod C C' is another arm, b, extending vertically upward when the valve is closed. d represents the spring which closes the valve. A' is a frame, arranged on the key-frame A, and in this top frame are horizontal rods D D', corresponding in number with the rods C C' and valves B B'.

On the front end of each rod D D' is attached the usual knob E or E', for pulling the rod out, or pushing it in. On the rear portion of each rod D D' is attached a wedge, G G', which, when the rod is pulled out by its knob, operates against the arm b of the rod C, for instance, and turns the same in its bearings, so that the arm a and string x will raise or lift the valve from the reeds.

When the  $\operatorname{rod} D$  is pushed in a gain the spring d closes the valve, and turns the  $\operatorname{rod} C$  back

again in its position.

On each valve B B' is secured a strip, i, of leather or other suitable material, which strip extends the whole length of the valve, and extends up along the board to which the valve is hinged.

When the valve opens, the leather strip *i* slides up and down, and presses tight against said board, thereby preventing the wind from passing in on the back of the valve, and causing it to pass only directly in front of the reeds.

Having thus fully described my invention, what I claim as new, and desire to secure by

Letters Patent, is—

1. The combination, with the valve B and rod D, of the wedge G, rocking rod or lever C with arms ab, and the spring x, all constructed and arranged substantially as and for the purposes herein set forth.

2. A strip, *i*, of leather or other suitable material, attached to the valve B, and arranged to slide along the board to which the valve is hinged, substantially as and for the purposes

herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

C. WILLIAM VOGEL.

Witnesses:
ALBERT Y. PARK,
MILLARD F. AVERY.