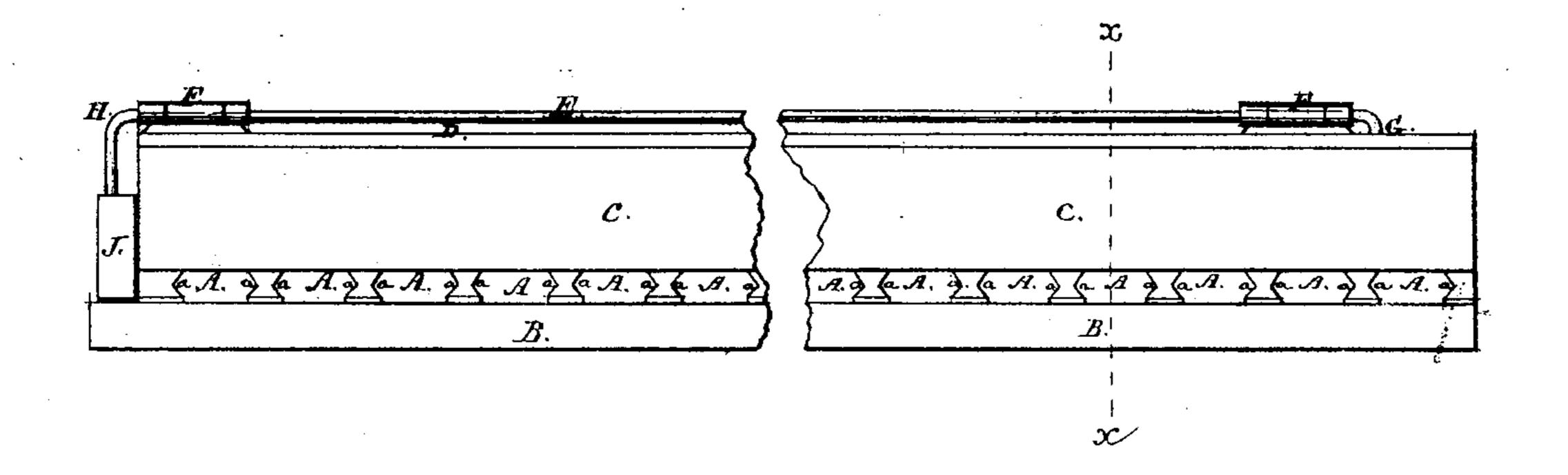
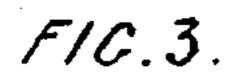
A. K. HEBARD. ORGAN STOP.

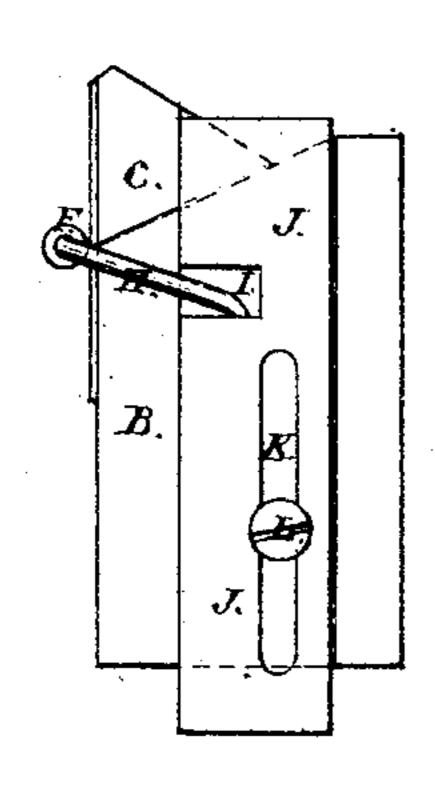
No. 105,571.

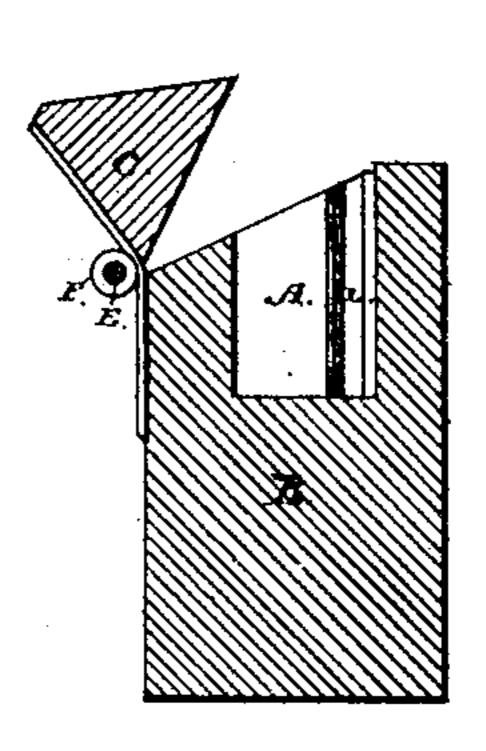
Fig. 1. Patented July 19, 1870.



FIC.2.







John & Mayall Daniel Flaherty, INVENTOR.
Albert K. Hebard

per

Brown Brothers

Attorneys.

Anited States Patent Office.

ALBERT K. HEBARD, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 105.571, dated July 19, 1870.

IMPROVEMENT IN ORGAN-STOPS.

The Schedule referred to in these Letters Patent and making part of the same.

To all persons to whom these presents shall come:

Be it known that I, Albert K. Hebard; of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Organ-Stops; and that the following is a full and exact description of the same, reference being had to the accompanying drawing.

The present invention relates to an arrangement of parts interposed between the register of the organ and the hinged cover to the reeds, &c., for opening and

closing the same.

The invention consists in a connection between the register and the cover to the reeds, &c., disposed and arranged in such a manner that, in the opening of the stop, the pressure of the spring upon the reed-cover to hold it closed will be relieved by the action of said connection before the said cover is raised or opened.

The invention also consists in operating or opening and closing the reed-cover by and through the spring arranged to hold the reed-cover closed, said spring being connected in a suitable manner with the regis-

ter therefor.

In the accompanying drawing my improvements in organ-stops are illustrated—

Figure 1 being a view of a series of reed-chambers, with the cover thereto closed;

Figure 2, an end view; and

Figure 3, a transverse section in plane of line x x, fig. 1.

A, in the drawing, represents a series of reed-chambers as arranged in a common frame, B, and properly constructed with angular grooves a, for the reception of the reeds.

C, a cover to the reed-chambers A, hinged to the frame B, along one edge or side, D, thereof, in suitable manner to be closed upon and opened from the reed-chambers, as shown, respectively, in figs. 2 and 3.

E, a spring wire or rod passing along the length of reed-frame, connecting the two hinges F of the cover

together, forming the center thereof.

This wire or rod, at one end, G, is fastened or driven into the reed-cover, and at the other end, H, is bent at right angles, or thereabout, and interlocked with a notch, I, of a block, J, arranged to slide upon one end of the reed-frame, being guided by its slot K moving on the headed staple L, fixed in the block.

To this block or slide J a register is to be connected in any suitable manner, so that through the register the block can be slid on the reed-frame, moving by its

slot on the staple L.

By the movement of the block or slide J upon the reed-frame through the connection described, between it and the reed-cover, such cover must necessarily be opened, that is, raised from the reed-chambers, or closed, that is, brought down upon them, according to the direction of the movement of the block.

The said slide, in the closing of the said cover, partially twists the wire-rod E, which thus acts as a torsion-spring to hold the cover closed, and, in the opening of the cover, releases such twist or torsion of the wire E before commencing to lift or swing open the

cover.

By my improved arrangement and connection between a register and reed-cover described, it is manifest that, in lieu of lifting against the spring provided to hold the cover closed, as in the register connection and arrangement employed before this invention, the pressure of the spring is relieved before the cover commences to rise or open, an advantage of much importance, from the fact that it facilitates the working of the register.

In lieu of arranging the register connection with the stop, to open and close the stop through the holding-spring, it might be arranged otherwise to open and close the same, that is, the releasing of the spring and the operating of the stock to be done through distinct and separate means, but operating the one after the

other, as described.

The arrangement and connection described are deemed best, as it is most simple, and combines in itself both operations or movements.

Having thus described my invention,

What I claim, and desire to secure by Letters Patents, is—

1. A cover or stop, C, to reeds, in combination with a spring, E, and slide J, to which the register is connected, when relatively arranged for relieving the pressure of the spring on the stop, substantially as and for the purpose described.

2. A cover or stop, C, to reeds, in combination with a spring, E, when the spring connects the stop and register together, and constitutes the means of moving the stop through the register, substantially as described.

The above specification of my improvement in organstops signed by me this 16th day of April, A. D. 1870.

ALBERT K. HEBARD.

Witnesses:

ALBERT W. BROWN, EDWIN W. BROWN.