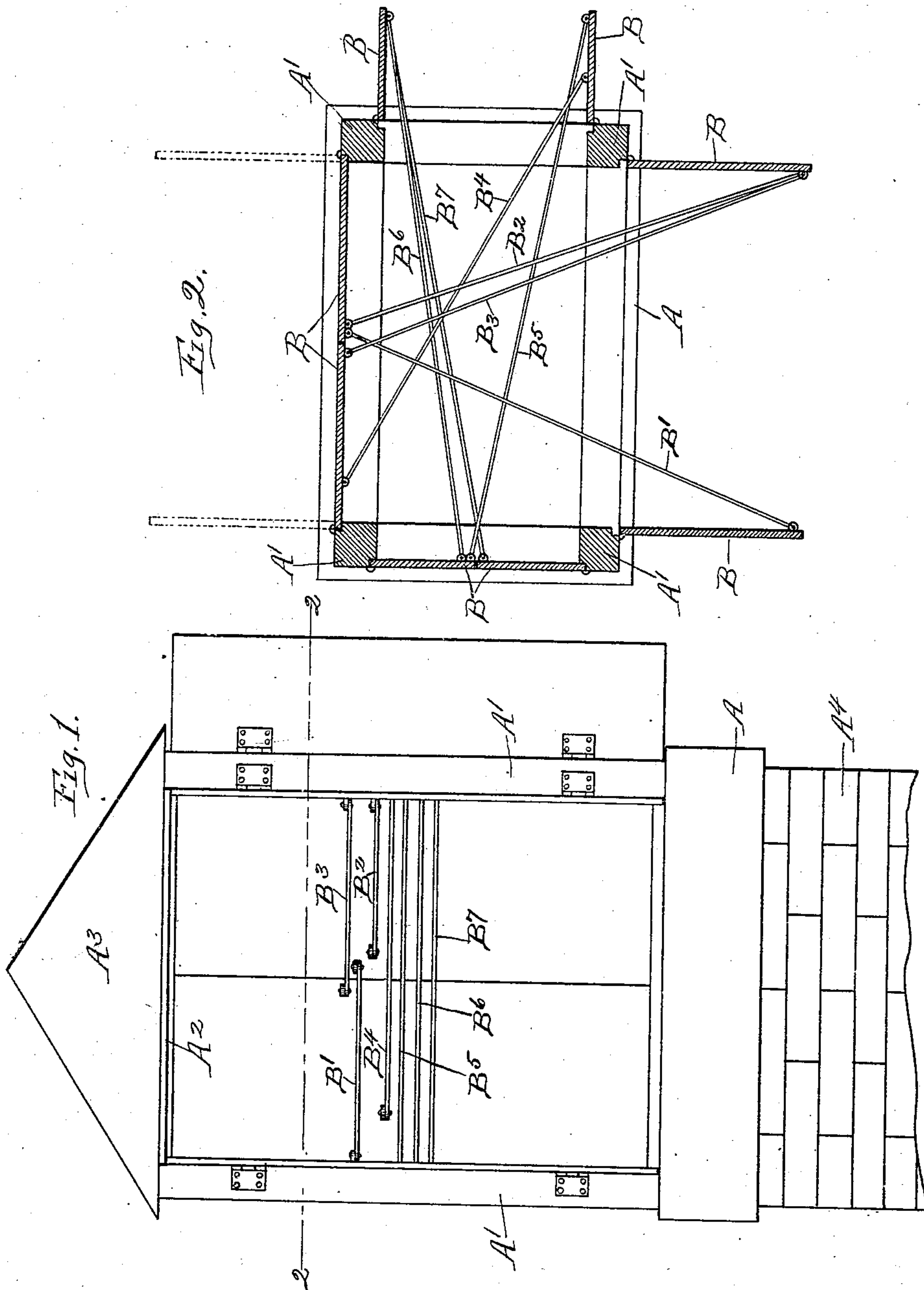


(No Model.)

C. SEEWALD.
VENTILATOR.

No. 551,603.

Patented Dec. 17, 1895.



Witnesses:

Theo. H. Barnum
R. J. Brown

Inventor:

Charles Seewald,
By Mosher & Curtis
Attys.

UNITED STATES PATENT OFFICE.

CHARLES SEEWALD, OF TROY, NEW YORK.

VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 551,603, dated December 17, 1895.

Application filed September 16, 1895. Serial No. 562,596. (No model.)

To all whom it may concern:

Be it known that I, CHARLES SEEWALD, a citizen of the United States, residing at Troy, county of Rensselaer, and State of New York, have invented certain new and useful Improvements in Ventilators, of which the following is a specification.

The invention relates to such improvements; and it consists of the novel construction and combination of parts hereinafter described and subsequently claimed.

Reference may be had to the accompanying drawings, and the letters of reference marked thereon, which form a part of this specification.

Similar letters refer to similar parts in both the figures therein.

Figure 1 of the drawings is a side elevation of my improved ventilator in position for use on a chimney. Fig. 2 is a horizontal section of the same on the broken line 2 2 in Fig. 1.

My improved ventilator comprises a rectangular frame or base A, having the upright corner-posts A' connected at their upper ends by another rectangular frame A² and superposed hood A³. The base is secured to the top of the chimney A⁴ in such a position that the opening of the chimney registers with the opening through the base of the ventilator. The spaces between the corner-posts and upper and lower rectangular frames are adapted to be closed by the doors B. Each space is provided with two doors hinged respectively to the corner-posts inclosing such space, as seen in Fig. 2.

All the doors are so connected with each other by means of the rods B¹, B², B³, B⁴, B⁵, B⁶, and B⁷ that the movement of one of the eight doors communicates a corresponding movement to open or close the other seven doors. For example, if the open door, to which one end of rod B¹ is pivoted, is closed, the rod B¹ opens the opposite door to which its other end is pivoted. That door acts to close the opposite door to which it is connected by rod B². The latter door opens the door with which it is connected by rod B³. The

latter door closes the door with which it is connected by rod B⁴. The latter door acts to open the door with which it is connected by rod B⁵. The latter door acts to close the door with which it is connected by rod B⁶, and the latter door acts to open the door with which it is connected by rod B⁷. From this it appears that if either one of the doors shown in an open position in Fig. 2 is closed, the connecting-rods will at the same time close all the other open doors and open all the closed doors.

So long as the wind comes from that side of the ventilator which has the doors closed, the operation of the ventilator is assisted by the wind which increases the draft out through the spaces between the open doors.

Should the direction of the wind change so as to come from that side which has its doors open—as, for example, the right-hand side, as seen in Fig. 2—it would tend to reverse the draft but for the fact that it immediately acts upon the open doors to close them and at the same time to open the doors on the opposite sides which are shown closed in the drawings.

However frequently the wind changes its direction it as frequently closes and opens the doors, so as to maintain the doors closed on the side or sides from which the wind comes, and to maintain the doors on the opposite sides in an open position favorable for the best operation of the ventilator.

What I claim as new, and desire to secure by Letters Patent, is—

The combination with a ventilator shaft having a hood and oppositely located openings; of movable valves for controlling the respective openings; and connections between each valve and the other valves whereby the movement of one valve operates all the other valves, substantially as described.

In testimony whereof I have hereunto set my hand this 14th day of September, 1895.

CHARLES SEEWALD.

Witnesses:

FRANK C. CURTIS,
GEO. A. MOSHER.