

(No Model.)

2 Sheets—Sheet 1.

J. JACOBS.
VENTILATING VAULT COVER.

No. 436,084.

Patented Sept. 9, 1890.

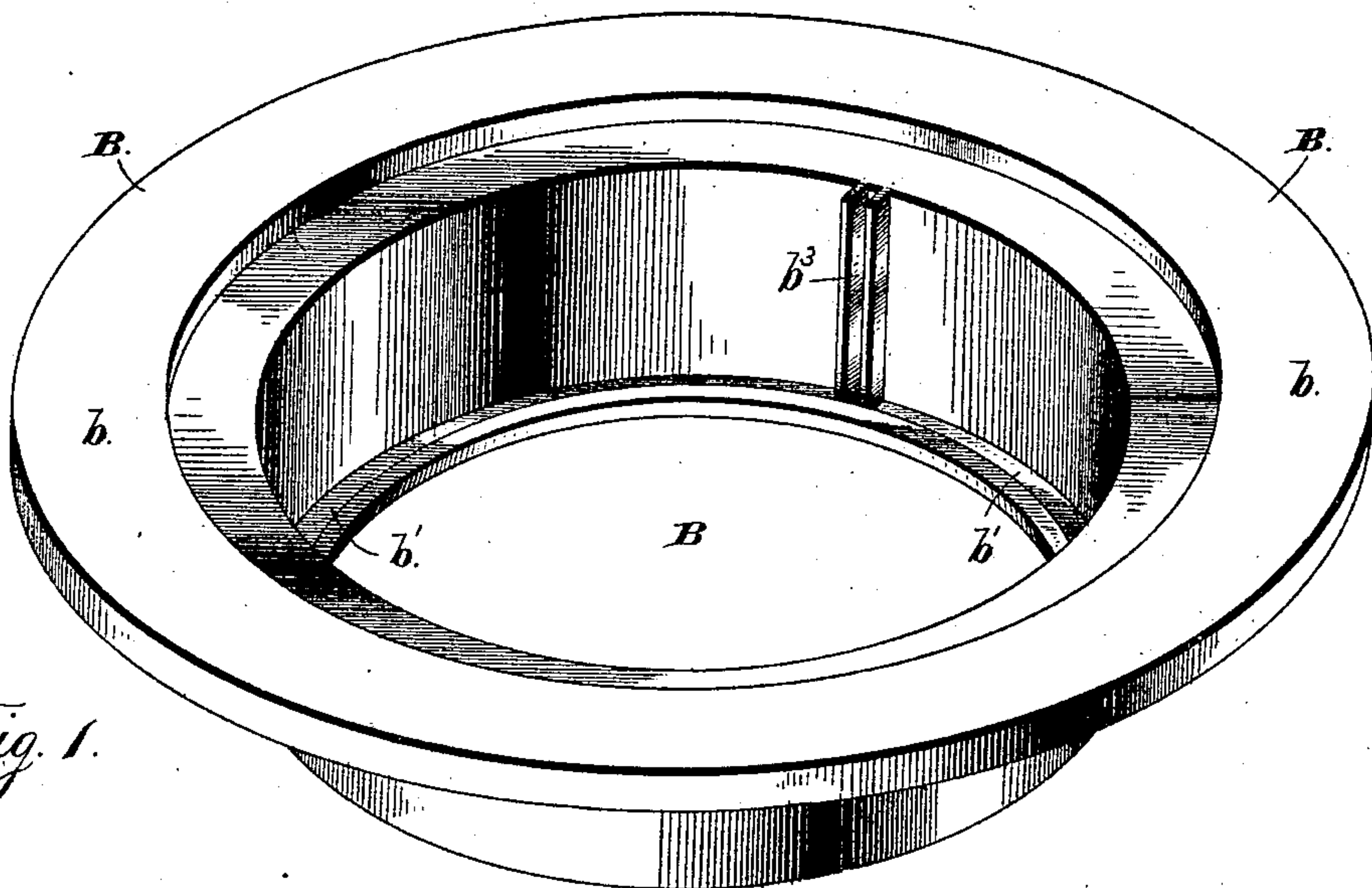
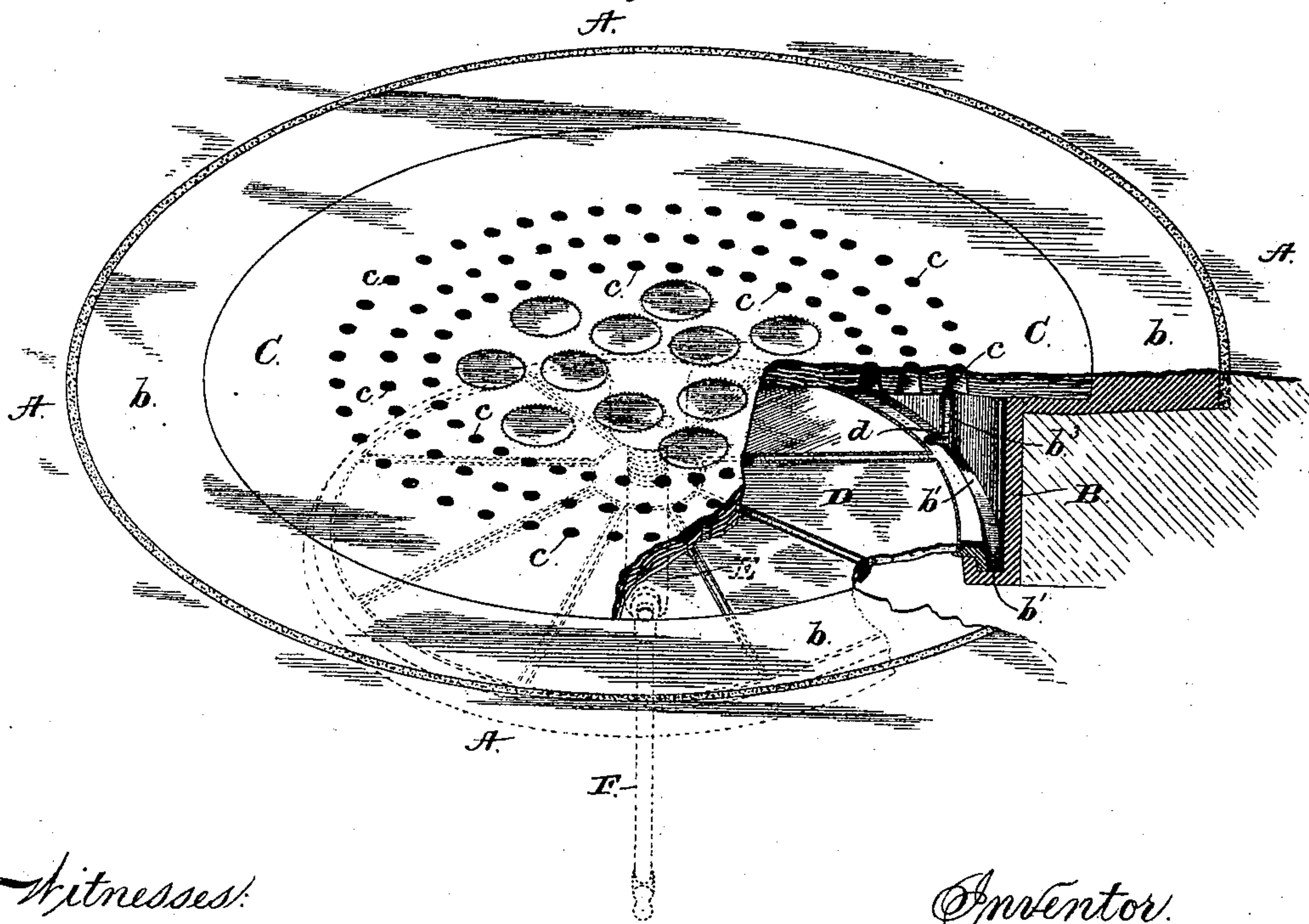


Fig. 1.

Fig. 2.



Witnesses:

James Hutchinson.

Henry C. Hazard.

Inventor.

Jacob Jacobs, by
Chandler Russell, his Attys

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2 Sheets—Sheet 2.

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Fig. 3.

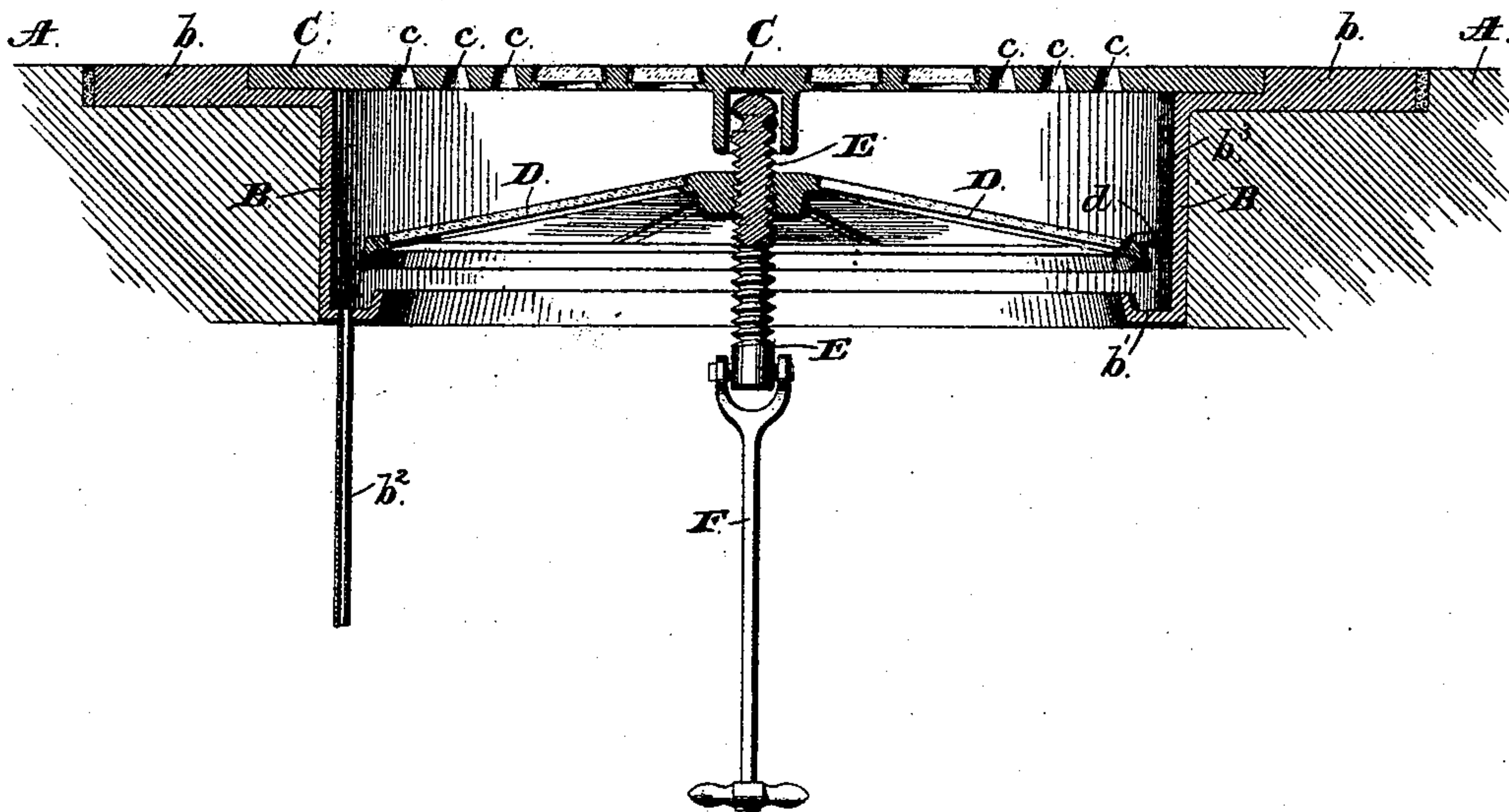
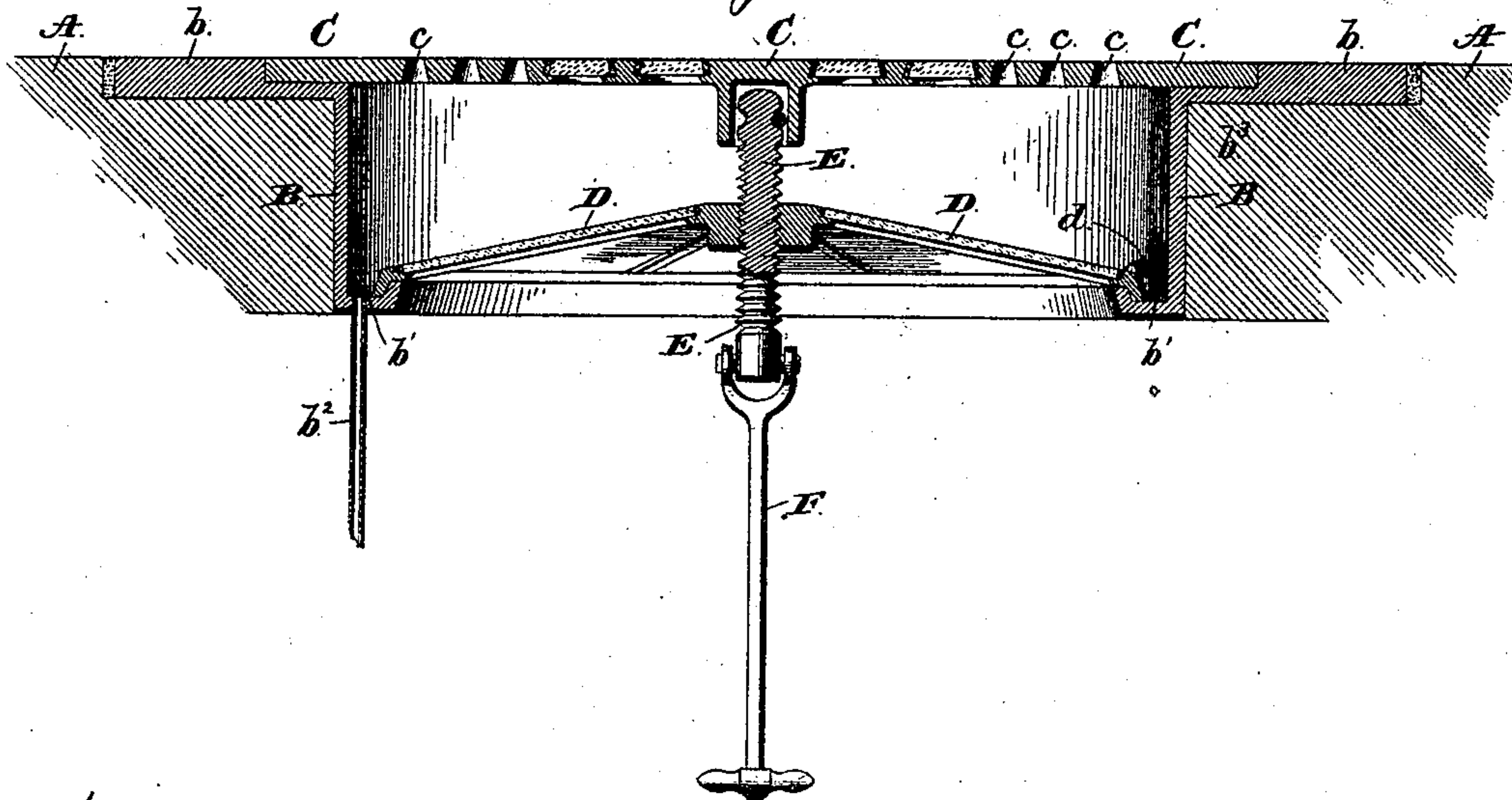


Fig. 4.



Witnesses:
Jas. E. Hutchinson.
Henry C. Hazard.

Inventor.
Jacob Jacobs, by
Cindle and Russell, his Attys

UNITED STATES PATENT OFFICE.

JACOB JACOBS, OF NEW YORK, N. Y.

VENTILATING VAULT-COVER.

SPECIFICATION forming part of Letters Patent No. 436,084, dated September 9, 1890.

Application filed January 10, 1890. Serial No. 336,479. (No model.)

To all whom it may concern:

Be it known that I, JACOB JACOBS, of New York city, in the county of New York, and in the State of New York, have invented certain

5 new and useful Improvements in Ventilating Vault-Covers; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which—
10 Figure 1 is a perspective view of the frame or curb used for inclosing the sides of a sidewalk opening. Fig. 2 is a like view of said frame, the ventilating cover and lower glazed frame in place, portions of said cover being
15 removed to show the parts beneath; and Figs. 3 and 4 are vertical central sections of the same and show, respectively, the arrangement of parts necessary for affording ventilation to the space beneath the walk and for cutting
20 off communication between such space and the upper side of said walk.

Letters of like name and kind refer to like parts in each of the figures.

The object of my invention is to afford means
25 whereby a space beneath a sidewalk may be easily and effectively ventilated when desired without causing an obstruction upon the walk or rendering necessary the admission of rain to such space; to which end such invention
30 consists in the construction and combination of parts, substantially as and for the purpose hereinafter specified.

In the carrying of my invention into practice I prefer to form a round opening within
35 a sidewalk A and inclose such opening with a metal frame B, that corresponds thereto in size and shape, and at its upper end is provided with a radial flange b , which projects over the surface of said walk or into a recess
40 formed in such surface and is cemented in place in the usual manner. At its lower end said frame has an inwardly and then upwardly extending flange that forms an annular gutter b' , from which gutter a pipe b^2 extends
45 to a sewer-trap or to any convenient receptacle for water.

Within the upper open end of the frame B is fitted a cover C, which preferably has a glazed central portion, and around its outer
50 portion is provided with ventilating-openings c and c , that are largest at their lower ends;

but, if desired, the lenses may be omitted and the entire cover provided with such ventilating-openings.

Beneath the cover C is a second cover D, 55 which has a convex upper surface and rests upon and extends over the edge of the gutter b' . Said cover is preferably provided with glazed light-openings, as shown, but may, if desired, be made solid. Swiveled at its upper 60 end within the lower side at the center of the cover C is a screw E, which from thence extends downward through a threaded opening in the cover D, and at its lower end is provided with a handle F, by means of which it 65 may be rotated. When thus revolved in one direction, said screw operates to raise said cover D, so as to leave a space between its lower side and the edge of the gutter b' , as shown in Fig. 3, while when rotated in an opposite 70 direction said screw will draw said cover down upon said gutter, as seen in Fig. 4. When the cover D is raised, as shown in Fig. 3, air is permitted to pass from the space beneath the walk to the space above the same, 75 or in an opposite direction, the freedom of movement being governed by the distance to which said cover is raised, while when moved downward to the lower limit of its motion said cover operates to close the air-passage 80 and cut off all communication between the external air and the space beneath the walk; but whether opened or closed the construction of the ventilating mechanism effectually prevents the entrance of water to such inclosed 85 space and permits of the free passage of light. It will be noticed that the upper cover is not moved, so that there is no obstruction caused to the sidewalk by the movements of the ventilating mechanism. 90

In order that the cover D may not have an axial motion while being raised, I provide at one or more points upon its periphery a tongue d , which projects radially into a vertical groove b^3 , that is formed upon or within the 95 contiguous wall of the frame B. Such construction in no manner interferes with the free vertical motion of said cover, but effectually prevents the latter from being turned by the screw E. 100

While I preferably employ a screw arranged as shown for raising and lowering the inner

cover, I do not confine myself to such means, as any other suitable device which will accomplish the same purpose will come within the spirit of my invention.

5 Having thus described my invention, what I claim is—

1. In combination with a stationary ventilating vault-cover, a second cover vertically movable with reference thereto, which is
10 placed beneath and suspended directly from the same, substantially as and for the purpose specified.

2. In combination with a stationary ventilating vault-cover, a second vertically-movable cover, which is placed beneath the former, and an adjusting and supporting screw
15 connecting them together, substantially as and for the purpose shown.

3. In combination with a stationary ventilating vault-cover, a second vertically-movable cover placed beneath the former, an adjusting and supporting screw connecting them together at their centers, and a frame or casing having beneath the movable cover an inwardly-projecting flange to co-operate with
25 the latter, substantially as and for the purpose set forth.

4. In combination with an annular frame which is fitted into a vault-opening and provided around its lower end with an inwardly-projecting flange and with a perforated vault-cover that is fitted to and secured over or within the upper end of such frame, a second vertically-movable cover of less diameter
30 than the interior of said frame and adapted to co-operate with the flange thereon, and connections between said covers, whereby the movable cover is supported from the other wholly at or near the centers thereof, substantially as and for the purpose described.
40

5. In combination with an annular frame provided at its lower end with an inwardly-

projecting flange, a stationary ventilating-cover seated in its upper end, a second vertically-movable cover below the other, and an
45 adjusting and supporting screw attached to the upper cover at its center and passing through a threaded opening in the center of the lower cover, substantially as and for the purpose specified.

6. As an improvement in ventilating vault-covers, the combination of an upper stationary cover, a lower vertically-movable cover, a seat for the latter, a screw passing through
50 said cover at or near its center to raise and lower it with reference to its seat, and a tongue-and-groove connection between said cover and the wall of the vault-opening, substantially as and for the purpose specified.

7. In combination with an annular frame, a stationary ventilating-cover seated in its upper end, a second vertically-movable cover below the other, a screw for raising and lowering said movable cover, a seat for the latter, and a tongue-and-groove connection between
60 the wall of said annular frame and said cover, substantially as and for the purpose shown and described.

8. In combination with a stationary ventilating vault-cover, a second vertically-movable cover placed beneath the former, an adjusting and supporting screw connecting them together, a frame or casing provided at its lower end with a seat for the movable cover, and a tongue-and-groove connection between
75 the latter and said frame, substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 18th day of December, A. D. 1889.

JACOB JACOBS.

Witnesses:

D. G. BEECHING,
E. J. JACOBS.