(No Model.) 2 Sheets—Sheet 1.

J. JACOBS.

VENTILATING VAULT COVER.

No. 518,888. Patented Apr. 24, 1894.

Fig. 1.

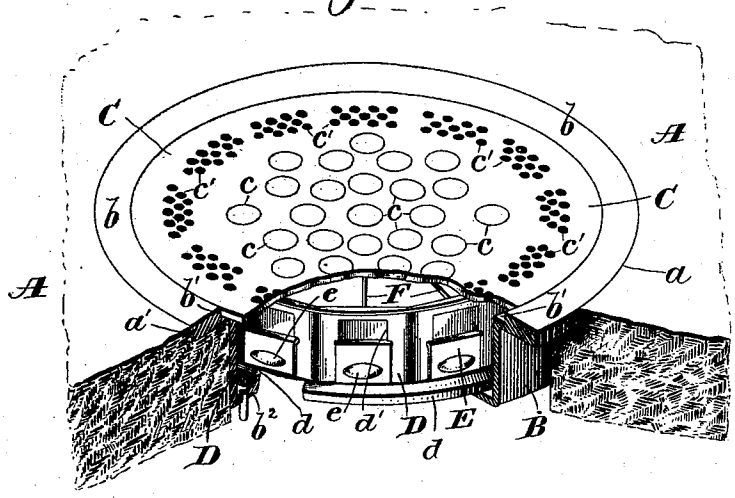
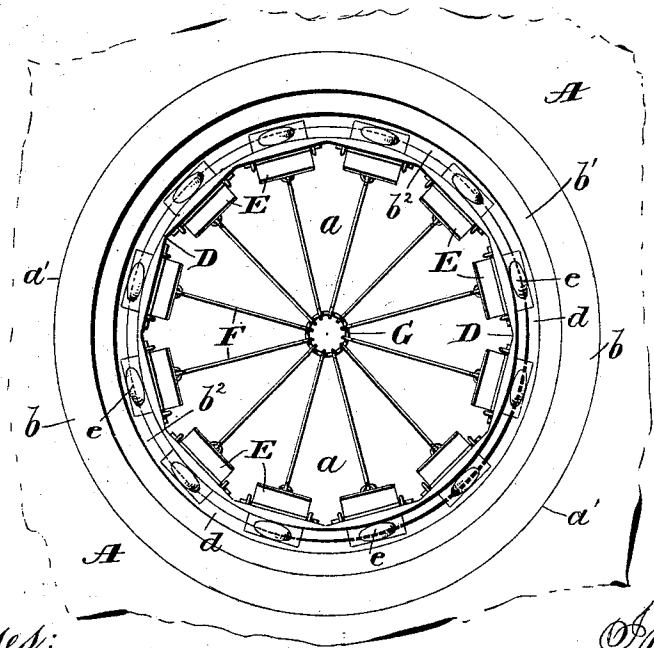


Fig. 2.



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

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

THE NATIONAL LITHOGRAPHING COMPANY,
WASHINGTON, D. C.

(No Model.) 2 Sheets—Sheet 2.

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Fig. 3.

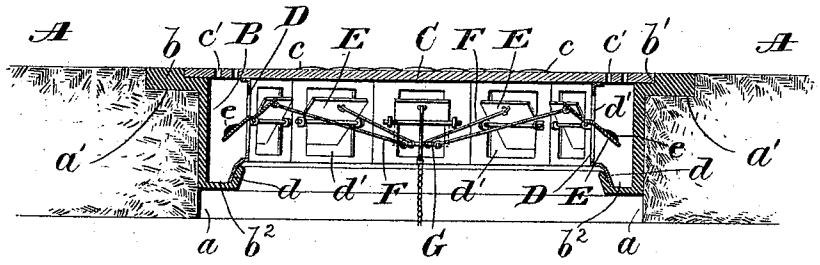
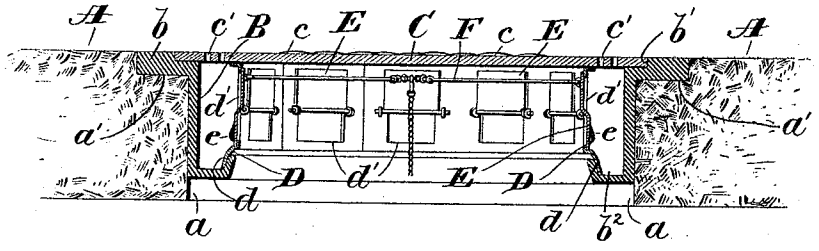


Fig. 4.



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UNITED STATES PATENT OFFICE.

JACOB JACOBS, OF NEW YORK, N. Y.

VENTILATING VAULT-COVER.

SPECIFICATION forming part of Letters Patent No. 518,888, dated April 24, 1894.

Application filed June 9, 1893. Serial No. 477,093. (No model.)

To all whom it may concern:

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

Figure 1 is a perspective view of my apparatus as arranged for use in a side walk, a portion of the walk and of the frame of the apparatus being broken away to show the interior construction. Fig. 2 is a plan view of said apparatus from the upper side, the cover being removed and the louvers shown open, and Figs. 3 and 4 are sections upon a vertical central line and show, respectively, the louvers when opened and when closed.

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

The object of my invention is to enable the space beneath a side-walk to be easily and effectively ventilated without causing an obstruction upon the walk or permitting rain to enter such space, and my said invention consists in the construction and combination of parts, substantially as and for the purpose hereinafter specified.

In the carrying of my invention into practice, any desired form of opening *a* may be employed in the side-walk A but I preferably make such opening round, as shown, and inclose the sides of the same by means of a metal ring B that at its upper end is provided with a flange *b* which extends horizontally outward and rests within a groove *a'* in the side walk, with its top flush with the face of said walk. Within the upper, inner corner of the ring B is formed a rabbet *b'* that receives the edge of a metal disk or cover C, which cover has its central portion provided with glazed light openings *c* and *c* and between the same and its periphery has concentric rows of small openings *c'* and *c'* for the passage of air. At the lower end of the ring B, upon its inner face, is formed a gutter b^2 which is provided with suitable means for conveying away water and receives the outwardly and downwardly projecting edge *d* of a metal ring D, which ring from thence extends upward to or near the lower face of the cover C, and within its sides is provided with a series of equi-distant openings *d'* and *d'* that extend from near its lower edge nearly to its upper edge. Within each of the openings *d'* is a metal plate E which near its center, vertically is pivoted at its side edges to or upon the ring, has a width somewhat greater than that of its opening and at the point of its pivotal connection is offset so as to cause its upper portion to bear against the inner face of said ring and its lower portion to bear against the outer face of the same when turned to a vertical position, as shown in Fig. 4. Said plate or louver has a weight *e* secured upon its outer face, at its bottom edge, which operates to maintain it normally in a closed position and to its upper end has secured one end of a rod F that from thence extends inward and is attached to a ring G which serves to connect the inner ends of all of such rods. If now the ring G is pulled downward, each of the louvers E will be turned upon its pivotal bearings and the openings *d'* and *d'* will be unclosed to permit of the passage of air; while by releasing said ring from downward pressure said louvers will automatically resume their normal positions and the passage of air through said openings will be prevented.

The inner line of the openings *c'* and *c'* of the covering plate C is just outside of the upper edge of the ring D so that water passing downward through the former would pass into and be conveyed harmlessly away from the gutter b^2, while for purposes of ventilation, air will pass freely between the space beneath and the space above the walk, through said openings *c'* and *c'* and the louvered openings *d'* and *d'*. Any desired means may be employed for manipulating the louvers.

Having thus described my invention, what I claim is—

1. In combination with a stationary vault cover provided with ventilating openings, a ring below such cover, within the line of such openings, and provided with openings in its side for the passage of air, and independent plates to close said openings connected to a common operating means, substantially as and for the purpose specified.

2. In combination with a stationary vault cover provided with ventilating openings, a

ring below such cover provided with openings in its side for the passage of air, and a pivoted plate for each opening that is offset so that a portion thereof is on each side of its opening and adapted to engage the inner and outer sides of the ring, respectively, substantially as and for the purpose shown.

3. In combination with a stationary vault cover provided with ventilating openings, a vertically arranged ring below such cover, provided with openings in its side for the passage of air, pivoted plates for the openings and rods running from the plates to the center of the ring where they are connected together, substantially as and for the purpose specified.

4. In combination with a stationary vault cover provided with ventilating openings, a vertically arranged ring below such cover provided with openings in its side, pivoted weighted plates to cover such openings, and means to swing the plates in opposition to the action of the weights, substantially as and for the purpose shown.

In testimony that I claim the foregoing I have hereunto set my hand this 19th day of May, 1893.

JACOB JACOBS.

Witnesses:
GEO. W. TEEL,
DAVID G. BEECHING.