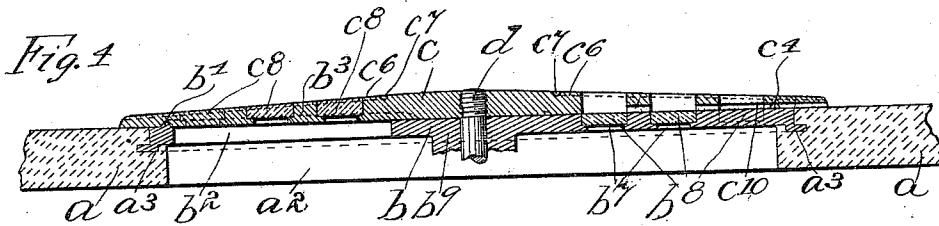
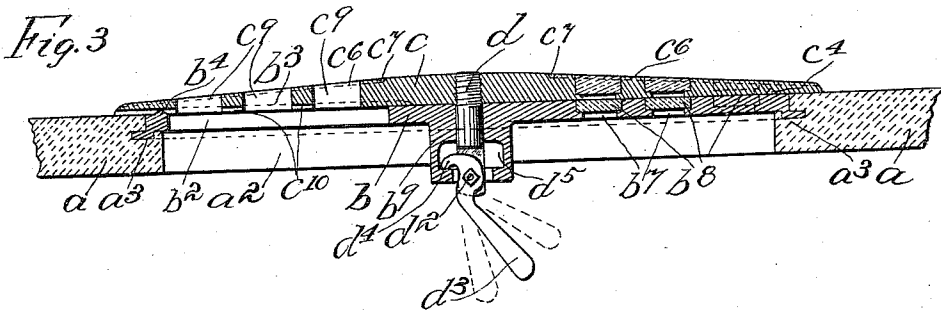
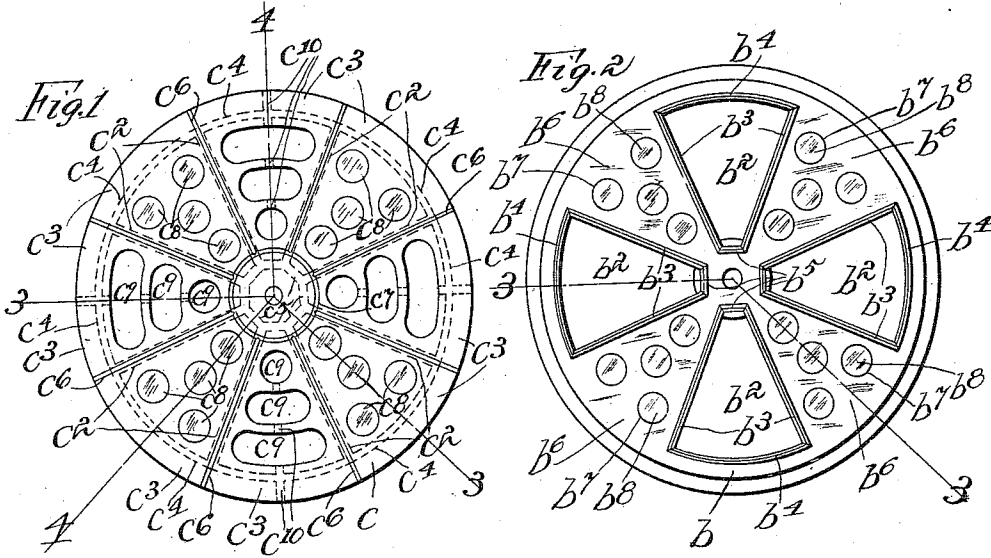


K. E. LUNDIN.
VAULT LIGHT.

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Patented Feb. 28, 1911.

985,357.



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VAULT-LIGHT.

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To all whom it may concern:

Be it known that I, KNUT E. LUNDIN, a citizen of the United States, and residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Vault-Lights, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to vault lights; and the object thereof is to provide an improved combination device of this class adapted to serve both for the purpose of light or illumination and for ventilation; and with this and other objects in view the invention consists in a device of the class specified constructed as hereinafter described and claimed.

My improved vault light consists of a stationary bottom part and a rotatable top part; and the invention is fully disclosed in the following specification, of which the accompanying drawing forms a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which:—

Figure 1 is a plan view of the rotatable top part of my improved vault light, Fig. 2 a similar view of the bottom part thereof, Fig. 3 a section on the line 3—3 of Fig. 1 and 3—3 of Fig. 2, and showing said parts in position for use, and Fig. 4 a section on the line 4—4 of Fig. 1 and 3—3 of Fig. 2, and showing the parts in position for use.

In the drawing forming part of this specification, I have shown at *a* a part of a pavement beneath which is a vault to be illuminated and ventilated, and the pavement *a* is provided with an opening *a*², and in the practice of my invention, I provide a combination vault light and ventilator comprising a stationary circular bottom plate *b* and a rotatable circular top plate *c*. The bottom plate *b* is set into the pavement as shown at *b*³, said pavement being preferably composed of concrete, and the said bottom plate *b* is provided at intervals with radial and segmental openings or apertures *b*² four of which are shown around which are side beads or ribs *b*³, an outer curved bead or rib *b*⁴, and in the form of construction shown a short inner end bead or rib *b*⁵ is employed.

The spaces *b*⁶ of the bottom plate *b* between the openings or apertures *b*² are pro-

vided with circular openings *b*⁷ in which are placed the usual glass lenses or bull's-eyes *b*⁸, and said plate *b* is also provided centrally thereof with a downwardly directed projection *b*⁹ through which passes a pin *d* secured in and centrally of the top plate *c*. The lower end of the pin *d* is slotted, and pivoted therein at *d*² is an arm *d*³ having a nose piece *d*⁴ which fits in and is adapted to turn in an annular groove or chamber *d*⁵ in the downwardly directed projection *b*⁹ of the plate *b*, and by means of this construction the arm *d*³ may be manipulated so as to raise and rotate the top plate *c*.

The top plate *c* is provided on the under side thereof with radial grooves *c*² which correspond with the side ribs *b*³ of the openings or apertures *b*² in the plate *b*, and by which the bottom surface of the plate *c* is divided into sectorial parts *c*³, and in the bottoms of these parts are grooves *c*⁴ which correspond with the ribs *b*⁴ of the plate *b*, and short grooves *c*⁵ near the center of said plate which correspond with the ribs *b*⁵, and when the plates *b* and *c* are in their normal position the ribs *b*³, *b*⁵ and *b*⁴ of the plate *b* fit in the grooves *c*², *c*⁵ and *c*⁴ of the plate *c*. The plate *c* is also preferably provided on its outer side with radial grooves *c*⁶ which are directly over the radial grooves *c*², and the inner end portions of which connect with a circular groove *c*⁷.

The alternate sectorial portions *c*³ of the plate *c* are provided with bull's-eyes *c*⁸ which are arranged similar to the bull's-eyes *b*⁸ in the plate *b*, and the other alternate sectorial portions *c*³ of the plate *c* are provided with openings *c*⁹ three of which are shown in each of said parts, and these openings correspond with the openings or apertures *b*² in the plate *b*.

In the normal position of the plates *b* and *c* as shown in Figs. 3 and 4, the bottom surface of the plate *c* is flush with the top surface of the plate *b* and the various ribs or projections on the top surface of the plate *b* fit in the corresponding grooves in the bottom surface of the plate *c*, and the sectorial parts *c*³ of the plate *c* in which the openings *c*⁹ are formed are provided on their under sides with radial grooves *c*¹⁰, which serve when said plates are in their normal position to drain off any water that may collect in the openings *c*⁹, and the grooves *c*¹⁰ cut the grooves *c*⁴ in the bottom of the sectorial

parts c^3 of the plate c in which the openings c^9 are formed.

- When the openings c^9 in the plate c are over the openings or apertures b^2 in the plate b , the device serves both for the purpose of ventilation and that of illumination, but when the openings c^9 of the plate c are over the sectorial parts b^6 of the plate b , the bull's-eyes c^8 of the plate c are over the openings or apertures b^2 in the plate b and the device serves only for the purpose of illumination or for supplying light to the vault.

- As hereinbefore stated the top plate c may be raised and rotated into any desired position by means of the arm d^3 , and in this way the device may be made to serve for either of the purposes specified whenever desired by simply manipulating said arm as will be readily understood; and my invention is not limited to the exact construction shown and described, and changes therein and modifications thereof may be made, within the scope of the appended claims, without departing from the spirit of my invention or sacrificing its advantages.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. A combination vault light and ventilating device, comprising a stationary bottom plate and a rotary top plate, the bottom plate being provided with a central downwardly directed projection and the top plate with a pin which passes downwardly through said projection, said projection being also provided with an annular groove

around said pin, and an arm pivoted in the lower end portion of said pin and provided with a nose piece movable in said groove whereby the top plate may be raised and rotated.

2. A combination vault light and ventilating device, comprising a stationary bottom plate and a rotary top plate, said plates being divided into sectorial portions, the alternating portions in each plate being provided with lenses or bull's-eyes and the other portions with apertures or openings, the openings in the bottom plate being substantially sectorial in form and being provided with or inclosed by radial and concentric ribs on the top surface of said plate, and the bottom surface of the top plate being provided with grooves which correspond with said ribs, the bottom plate being also provided with a central downwardly directed projection and the top plate with a pin which passes downwardly through said projection, said projection being also provided around said pin with an annular groove, and an arm pivoted in the bottom portion of said pin and provided with a projecting member movable in said groove whereby the top plate may be raised and rotated.

In testimony that I claim the foregoing as my invention I have signed my name in presence of the subscribing witnesses this 20th day of March 1909.

KNUT E. LUNDIN.

Witnesses:

H. R. CANFIELD,
C. E. MULREANY.