H. SELLHEIM.

VAULT COVER.

APPLICATION FILED APR. 14, 1910.

1,032,864.

Patented July 16, 1912.

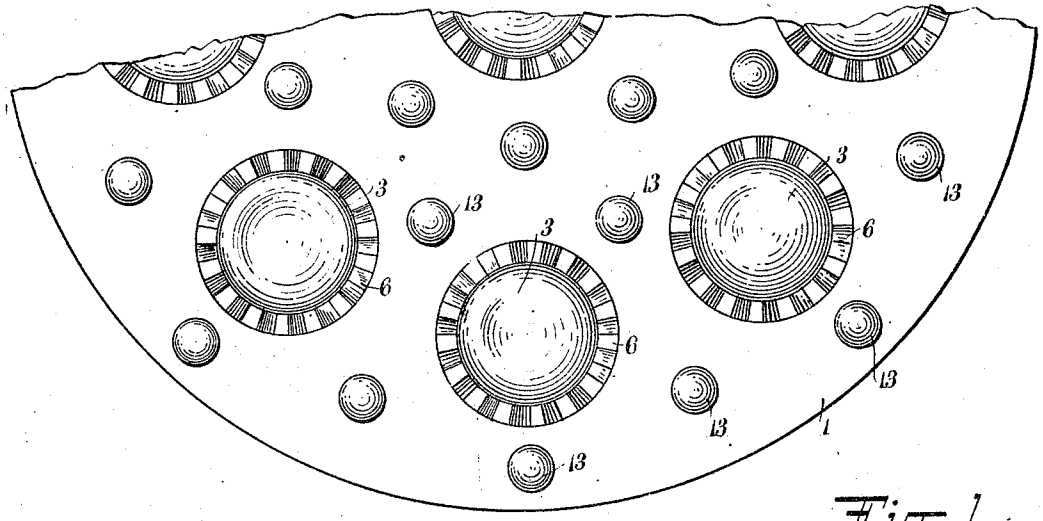


Fig. 1.

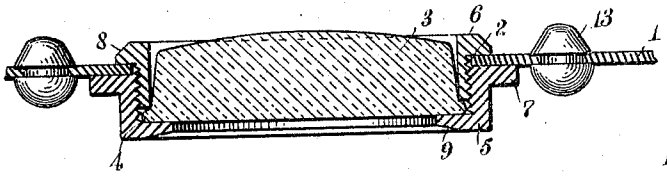


Fig. 2.

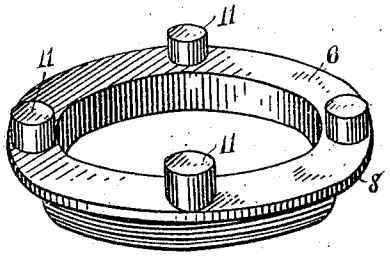


Fig. 3.

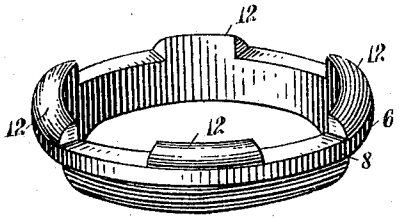
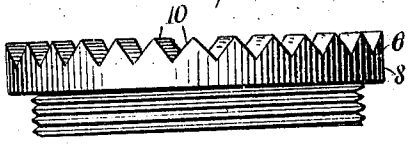


Fig. 4.

Fig. 5.



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UNITED STATES PATENT OFFICE.

HENRY SELLHEIM, OF NEW YORK, N. Y., ASSIGNOR OF THREE-FOURTHS TO PERCY BLOOM, OF BROOKLYN, NEW YORK.

VAULT-COVER.

1,032,864. Specification of Letters Patent. Patented July 16, 1912.

Application filed April 14, 1910. Serial No. 555,622.

To all whom it may concern:

Be it known that I, HENRY SELLHEIM, a citizen of the United States, and a resident of the city of New York, Ridgewood, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Vault-Cover, of which the following is a full, clear, and exact description.

This invention relates to a new and improved cover for cellars, vaults and the like, and is adapted to form a strong surface which will at the same time permit the passage of light to the cellar or vault below.

An object of this invention is to provide a device which will be simple in construction, inexpensive to manufacture, strong, durable, and readily renewable.

A further object of this invention is to provide a device in which the transparent members or lenses can be readily removed, for the purpose of renewing the same.

These and further objects, together with the construction and combination of parts, will be more fully described hereinafter and particularly set forth in the claim.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views, and in which—

Figure 1 is a fragmentary top plan view showing a circular section of a vault cover, with one form of retaining ring; Fig. 2 is a vertical section with a plain retaining ring; Fig. 3 is a perspective view of another form of retaining ring with a slightly different type of anti-slip projection; Fig. 4 shows a perspective view of a retaining ring with still another form of anti-slip projecting lugs; and Fig. 5 is a side view in elevation of the retaining ring shown in Fig. 1.

Referring more particularly to the separate parts of the device, 1 indicates a plate of any suitable form and material, preferably sheet metal, forming the body portion of a vault cover, provided at suitable intervals with openings 2. These openings are for the purpose of permitting the transmission of light into the cellar or vault located below the cover formed by the sheet of material 1. In order, however, that dust and dirt and rain may not be permitted to pass into the cellar below, these openings are normally closed by suitable transparent members 3, in the form of glass lenses. These glass lenses 3 may be of any suitable form, but preferably are provided with an annular bead 4 at the lower side and extending conically upward to form the frustum of a cone, the upper surface of which is somewhat circular.

An important feature of this invention is to so secure the lenses 3 to the plate 1 that they can be removed and replaced readily with the least amount of trouble. For this purpose, there are provided co-acting annular members 5 and 6 in the form of rings, having a screw-threaded engagement one with the other, and adapted to secure the lenses in between them. The lower member 5 is formed with an inwardly extending flange 9, which is adapted to engage under the bottom of the lens 3 and support it in the opening 2. This member 5 is also preferably provided with a circular flange 7, which abuts against the under surface of the plate 1 and forms a firm, practically water-tight contact with said plate 1. The inner cylindrical surface of the ring member 5 is screw-threaded to engage a corresponding screw-thread on the outer tubular portion of the ring 6. This ring 6 is provided with an annular flange 8, which is adapted to engage the upper surface of the plate 1 and thereby support the member 5 and the lenses 3 on the plate 1. It will be seen that when the members 6 and 5 are tightly screwed together they will clamp between them the material of the plate 1, thereby positively locking the lenses 3 in position.

The upper ring 6 may be formed with a comparatively smooth upper surface, as in the form illustrated in Fig. 2, but I prefer to provide these upper ring members with suitable projections or corrugations, to prevent the slipping of persons walking on the cover. Various forms of these projections may be used, and I have illustrated three preferred forms. In Figs. 1 and 5, the ring 6 is illustrated as being provided with a plurality of upwardly-extending angular serrations or teeth 10, which form a positive anti-slip surface in close juxtaposition to the lenses 3, absolutely preventing the slipping of persons walking on the cover. In the form illustrated in Fig. 3, the projections are shown in the form of upwardly-extending cylindrical lugs or projections 11. Still

another form is shown in Fig. 4, in which the projections or corrugations, indicated at 12, are formed with their inner edges coextensive with the ring member 6, and their outer and top surfaces merging one into the other in the form of a somewhat spherical face. These lugs 12 are spaced apart from each other by suitable intervals. On certain occasions when the openings 2, and thus the lenses 3 with their retaining members, are placed in close juxtaposition, there will be no necessity for any other form of anti-slip device for forming a good foothold on the cover. However, in certain cases where the openings 2 are spaced apart by considerable distances, it is desirable to place additional anti-slip members intermediate the lenses 3. I have illustrated one type of these members in Figs. 1 and 2, which may be in the form of suitable lugs or rivets 13, secured in suitable openings in the plate 1 at suitable spaced intervals one from the other.

The utility of the device will be readily understood when taken in connection with the above description. In assembling the device, the plate 1 of the required size and dimensions suitable to cover the opening above the vault, is provided with the desired number of openings 2. Lenses 3 of a size suitable to the openings 2 are then securely clamped in place by the retaining members 5 and 6, which engage the plate 1 on its upper and lower surfaces, and also securely clamp the lenses 3 between them. If for any reason, such as the breakage of one or more of the lenses 3, it is desired to replace these lenses, it can be readily done by unscrewing the members 5 and 6 and putting in new lenses in place of the old or broken ones.

While I have shown several embodiments of my invention, I do not wish to be limited to the specific details thereof, but desire to be protected in various changes, modifications and alterations which I may make within the scope of the appended claim.

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

A vault light, comprising a lens having a bead thereon, a bottom member having a flange thereon adapted to engage said bead on said lens, and a top member having a screw-threaded connection with said bottom member and adapted to engage the bead on the lens.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HENRY SELLHEIM.

Witnesses:
HORATIO WHITING,
PHILIP D. ROLLHAUS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."