(No Model.)

J. C. FRENCH.

VAULT OR FLOOR LIGHT.

No. 504,872. Patented Sept. 12, 1893.

Fig. 1.

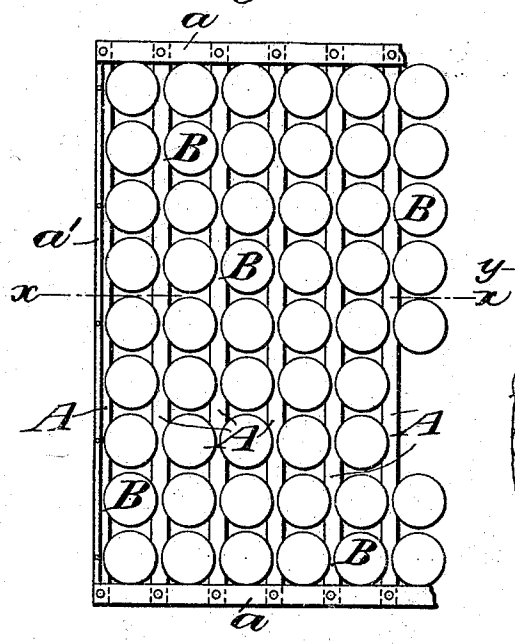


Fig. 2.

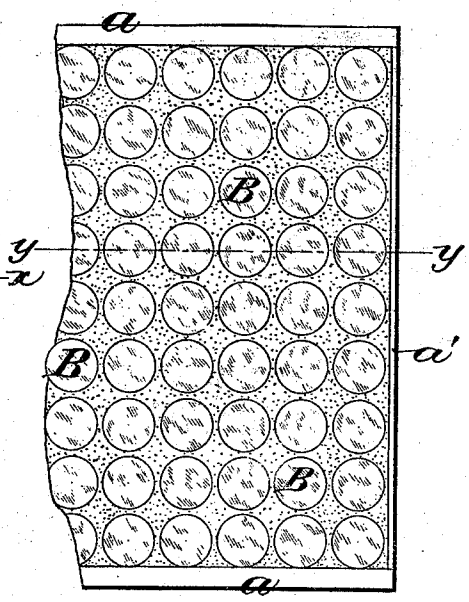


Fig. 3.

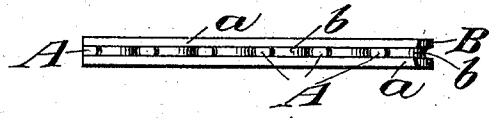


Fig. 4.

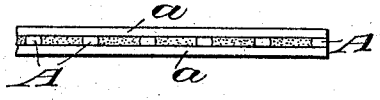


Fig. 5.

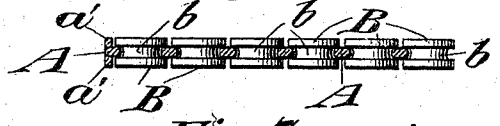


Fig. 6.

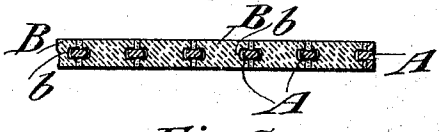


Fig. 7.

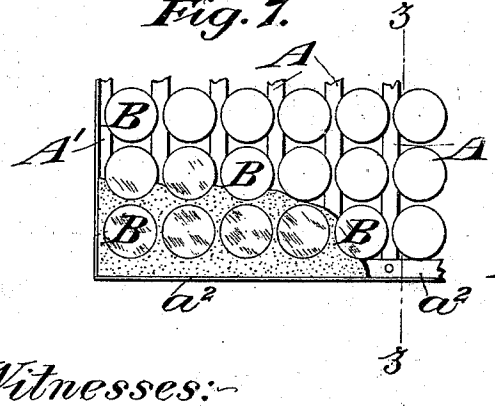


Fig. 8.

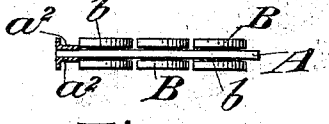
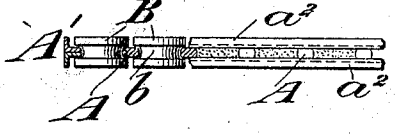


Fig. 9.



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Brown & Seward

UNITED STATES PATENT OFFICE.

JAMES C. FRENCH, OF NEW YORK, N. Y.

VAULT OR FLOOR LIGHT.

SPECIFICATION forming part of Letters Patent No. 504,872, dated September 12, 1893.

Application filed August 24, 1892. Serial No. 443,967. (No model.)

To all whom it may concern:

Be it known that I, JAMES C. FRENCH, of New York, in the county and State of New York, have invented a new and useful Improvement in Vault or Floor Lights, of which the following is a specification.

My invention relates to an improvement in vault or floor lights in which the metallic frame may be formed of malleable or wrought metal and in which the edge of the metal frame is exposed at the margin only and the light made the same upon both sides so that it may be reversed, if desired.

A practical embodiment of my invention is represented in the accompanying drawings, in which—

Figure 1 is a face view of a portion of one of the lights, showing the condition of the parts before the cement has been filled in. Fig. 2 is a similar view as it appears after the cement has been filled in. Fig. 3 is an end view of the section represented in Fig. 1. Fig. 4 is an end view of the section represented in Fig. 2. Fig. 5 is a section through line x, x of Fig. 1. Fig. 6 is a section through line y, y of Fig. 2. Fig. 7 is a face view of a portion of a light in which the marginal pieces of the frame are formed of angle iron. Fig. 8 is a section on line z, z of Fig. 7, and Fig. 9 is an edge elevation, partly in section, of Fig. 7.

The frame of the light consists of a series of bars A, placed apart a distance equal to the diameter of the central portions of the transparent or translucent eyes or windows B. The bars A are connected at their ends by cross strips a located upon opposite sides of the bars B and riveted or otherwise firmly secured to the bars. The side bars A at the margins are provided with narrow ribs or flanges a' riveted or otherwise fixed to the opposite sides of the side bar A in order to bring its edge flush with the faces of the end strips a. The eyes or windows B consist of disks connected by a stem b of reduced diameter, or they may be properly described as short cylinders of transparent or translucent material provided with a groove intermediate of their ends to receive the adjacent edges of two consecutive bars A. The frame and the eyes or windows may be assembled by inserting the series of eyes between two consecutive bars A before the bars are fixed to the end strips. To complete the light, the spaces between the eyes or windows and the margin of the frame is filled up with cement holding the eyes slightly separated from each other. When the cement is filled in flush with the marginal frame, it will wholly conceal the bars A and there will be no metallic frame visible excepting around the margin of the light. As the bars A are located centrally with respect to the opposite ends of the eyes or windows, the light will bear the same appearance whichever face be presented outward and may therefore be reversed at pleasure.

In the frame shown in Figs. 7, 8 and 9; I have formed the strips a^2, corresponding to the cross strips a of Fig. 1, of angle iron and have so applied them to the bars A as to have their flanges extend in opposite directions from the end of the light, as clearly represented in Fig. 8. I have also shown the marginal side bar A′ as formed of two angle iron sections placed in proximity to each other with their flanges extending in opposite directions, as clearly indicated in Fig. 9. When this structure is employed, the flanges on the angle iron marginal strip A′ will be made enough deeper than those on the end strips to account for the thinness of the bars A so that the faces of the marginal flange on both the side and end strips will be flush. This structure renders it feasible to make the frame in a very inexpensive manner of wrought or malleable metal, no part of it being required to be cast, and when finished presents a neat appearance and is very durable.

What I claim is—

1. The vault or floor light, comprising a group of eyes or windows having their opposite ends of greater diameter than the stem portions connecting the ends, a supporting frame consisting of rigid bars connected with one another and engaging the eyes or windows upon opposite sides of their reduced stem portions and cement filling interposed between the eyes or windows of the light and concealing the said eye holding bars, substantially as set forth.

2. The vault or floor light, comprising series of eyes or windows having their central portions of reduced diameter, bars engaging

the reduced portions of the eyes or windows, marginal frame pieces extending in opposite directions from the plane of the eye holding bars and the cement filling interposed between the eyes and the marginal frame pieces, concealing the eye holding bars and forming faces substantially similar upon opposite sides of the light, substantially as set forth.

3. The vault or floor light, comprising a supporting frame consisting of a border flanged upon its opposite sides and a series of parallel bars connecting two opposite sides of the border and spaced apart, series of translucent eyes having reduced stems and held between the parallel bars, and a cement filling upon opposite sides of the parallel bars between the eyes, and concealing the structure with the exception of the eyes and the edges of the flanged border, substantially as set forth.

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