

W. A. Demuth,

Glass Light.

N^o 82,389.

Patented Sep. 22, 1868.

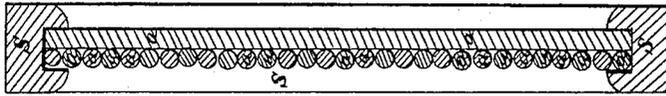


Fig. 3.

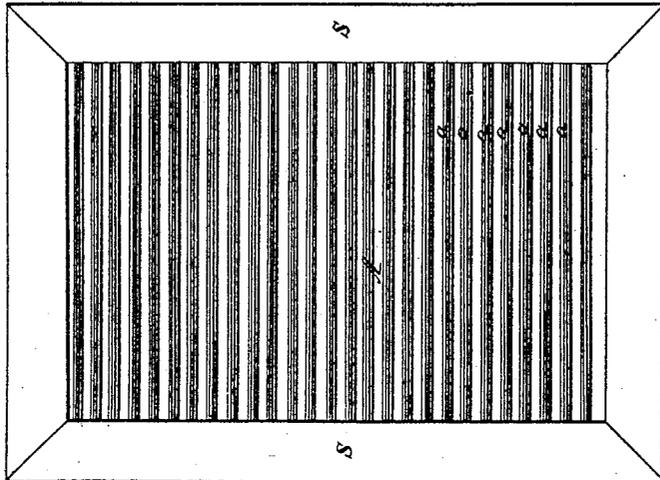


Fig. 2.

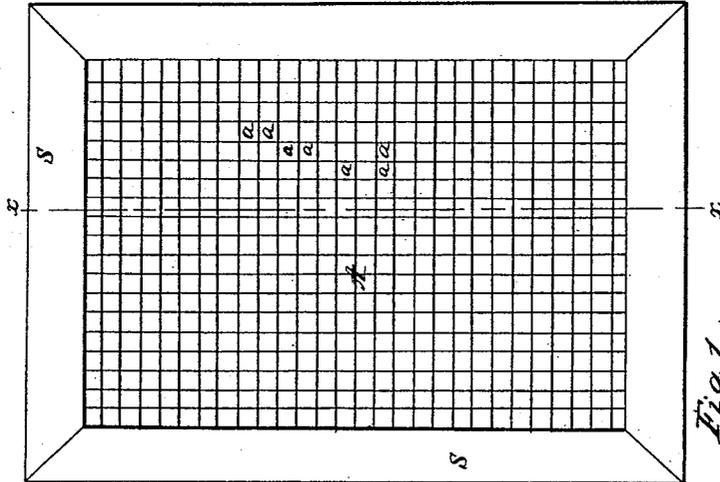


Fig. 1.

Witnesses:

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By *[Signature]*
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United States Patent Office.

WILLIAM A. DEMUTH, OF NEW YORK, N. Y.

Letters Patent No. 82,389, dated September 22, 1868.

IMPROVEMENT IN GLASS LIGHTS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, WILLIAM A. DEMUTH, of the city, county, and State of New York, have invented a new and useful Improvement in Glass Lights; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a front view.

Figure 2 is a front view.

Figure 3 is a sectional view, line *x x*, fig. 1.

The object of this invention is to construct a beautiful and cheap glass light for windows, lanterns, and other purposes, which shall be more ornamental and less expensive than plate-glass, and which shall be less liable to damage by fracture than any other glass lights now in use.

In the drawings, S represents the sash, and A the glass light which it supports. This light is composed of a series of parallel bars, rods, or sticks, *a a a*, of solid glass, the ends of which are confined in the sash by any suitable means. The rods may be of any color, according to the fancy of the proprietor. By arranging rods of different and variegated colors, a beautiful effect may be obtained. The cross-section of the rods may be round, square, hexagonal, or of any other form preferred. Their ends extending into the sash may be packed or protected with rubber, felt, or cloth, or in any other suitable manner, if desired, to prevent fracture by any sudden shock or jar of the window or door.

The advantages of thus constructing the lights are manifold and obvious. Besides the beautiful appearance it gives the window, the original cost of a light thus constructed is not more than one-third as compared with the cost of the common plate-glass used for windows, and in the larger sizes of lights not more than one-fifth.

The lights thus constructed can be made of any kind of glass. The purest and finest varieties of colorless flint-glass can be employed as easily as any other kind, whereas, if the lights are constructed as heretofore, whether plate-glass be used or not, only the poorer qualities can be employed at all. It has hitherto been found impracticable to make window-lights of flint-glass, and a kind of glass, not colorless, but having a greenish tinge, has been always used for the purpose. This difficulty is entirely obviated by my invention.

It is obvious that, if a stone be thrown through my improved light, or it be fractured at any point by the contact of any hard substance, the fracture will be merely local, not extending beyond the rods with which the stone or other object comes in actual contact. The rods thus broken can be readily taken out, and their places filled by others, at the most trifling expense, whereas, if the light were of plate-glass, a costly and valuable plate would be entirely ruined by the accident.

The lights can, by this means, be made of any thickness which will ever be required, one-eighth of an inch, one inch, two inches, or even thicker, if needed. They can thus be made to answer not only for doors and windows, but for sky-lights, vault-lights, &c.

By doubling the series of rods, and arranging one series across the other at different inclinations, as shown in figs. 1 and 3, very beautiful effects may be obtained. The variegated colors may, according to the inclination of the two series of rods, be thrown into squares or spirals, the beauty of which can be appreciated only by an actual view.

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

A glass light, constructed of solid glass rods, arranged in the manner described.

WILLIAM A. DEMUTH.

Witnesses:

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