

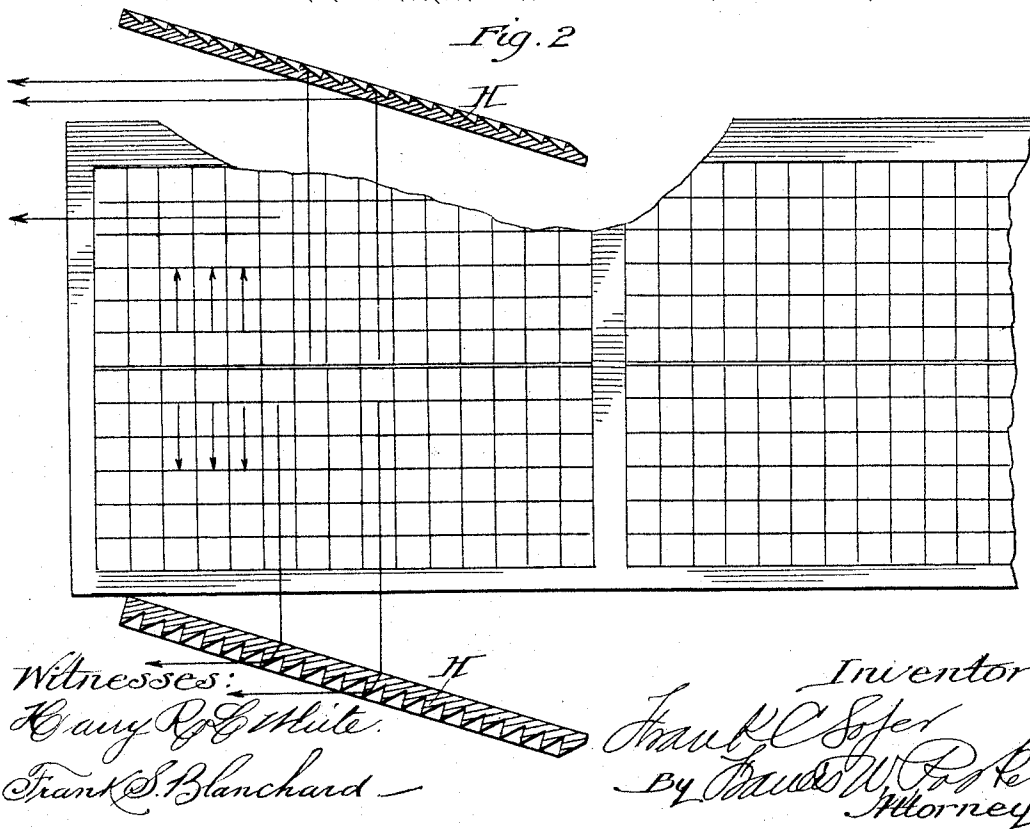
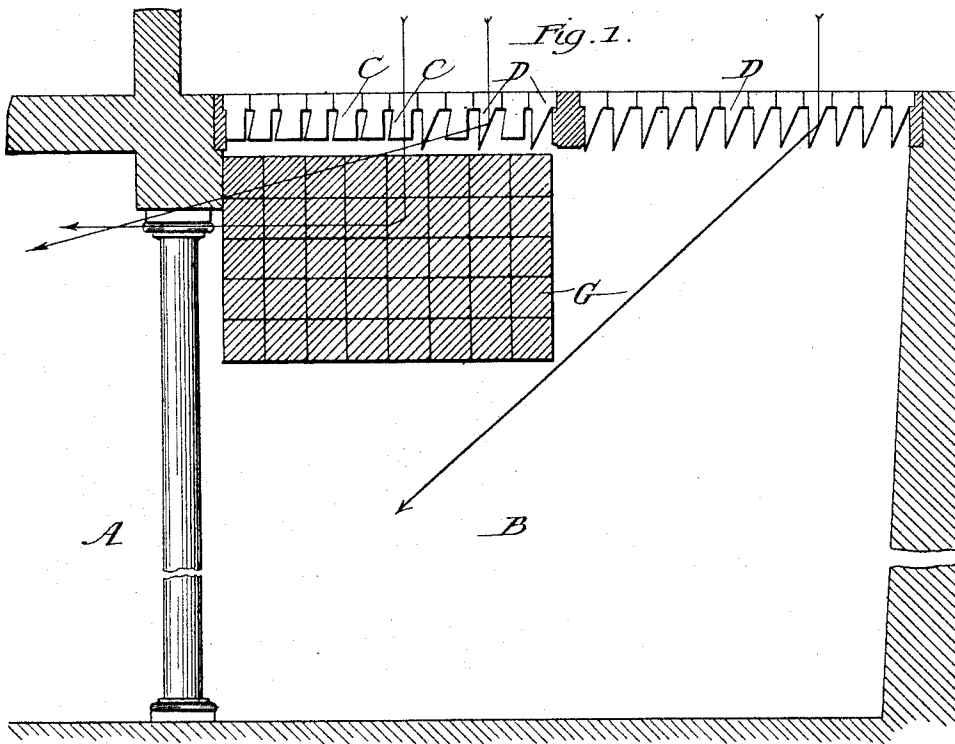
(No Model.)

2 Sheets—Sheet 1.

F. C. SOPER.
DEVICE FOR LIGHTING BASEMENTS.

No. 586,251

Patented July 13, 1897.



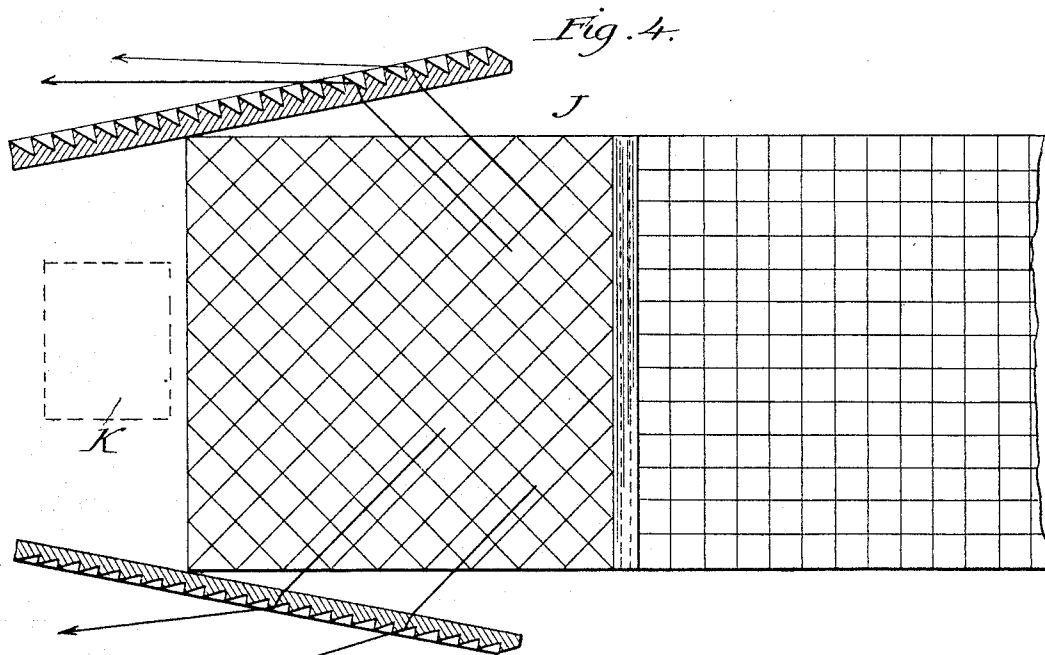
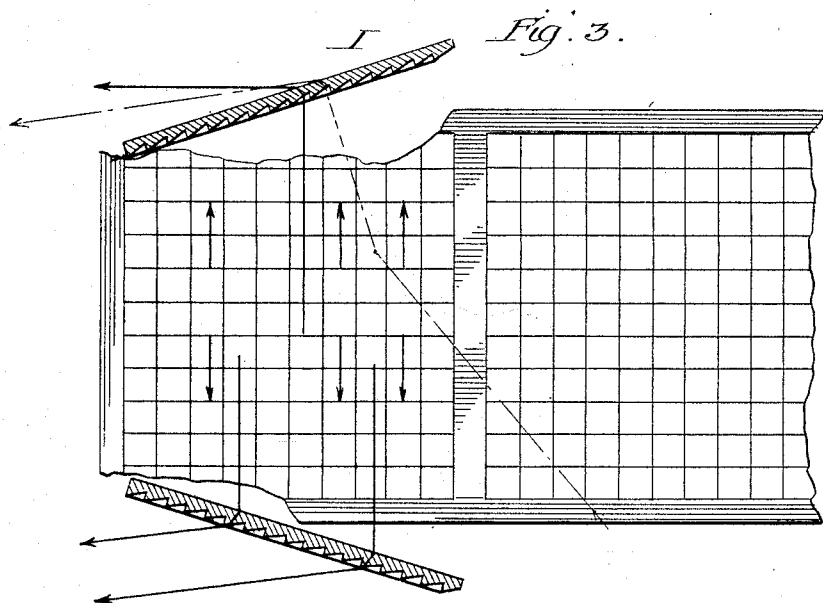
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2 Sheets—Sheet 2.

F. C. SOPER.
DEVICE FOR LIGHTING BASEMENTS.

No. 586,251.

Patented July 13, 1897.



Witnesses:

Harry B. White.
Frank S. Blanchard

Inventor:

Frank C. Soper
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UNITED STATES PATENT OFFICE.

FRANK C. SOPER, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE LUXFER PRISM PATENTS COMPANY, OF SAME PLACE.

DEVICE FOR LIGHTING BASEMENTS.

SPECIFICATION forming part of Letters Patent No. 586,251, dated July 13, 1897.

Application filed April 20, 1897. Serial No. 632,968. (No model.)

To all whom it may concern:

Be it known that I, FRANK C. SOPER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Devices for Lighting Basements, of which the following is a specification.

My invention relates to a device for lighting basements and the like, and has for its object to provide a new and improved device for this purpose, of which the following is a description, reference being had to the accompanying drawings, wherein—

Figure 1 is a view of a basement, showing one form of my device. Fig. 2 is a view of my device as seen above and with parts broken away. Figs. 3 and 4 are views similar to Fig. 2, showing modified constructions.

Like letters refer to like parts throughout the several figures.

A is the basement; B, the vault in front of the same.

C C are prism-tiles placed so as to throw the light to the side.

D D are prism-tiles placed so as to throw the light forward.

G is a prism-plate hung or suspended in any convenient manner to one side of the prism-tiles. I have shown this prism-plate as suspended in various manners and as acting in some instances as a reflector and in other instances allowing the light to pass therethrough and changing the direction of such light by refraction.

As shown at H in Fig. 2, the prism-plate acts as a reflector, and as shown at II' it acts by refraction.

The prism-plates in Fig. 3 both act by refraction, but are placed at different angles, as shown.

In Fig. 4 the prism-tiles J are so positioned as to throw the light diagonally forward. This construction is particularly adapted to be used when the pier K or the like is located in front of the prism-tiles, so as to obstruct the light when it is thrown straight forward.

I have spoken of basements, but of course any other room to be illuminated can be operated upon in the same way where the conditions are appropriate. It is often desirable

to secure in a room like the basement A a much greater degree of illumination than can be secured by simply using the prism-tiles which throw the light forward into the room, as indicated at D in Fig. 1, while at the same time it is not desirable to suspend a vertical prism-plate, which would thus separate, as it were, the basement and the vault from each other. I therefore in the case illustrated in Figs. 1 and 2 place two deflectors, one at each side, and I place the prism-tiles C so that a portion will throw the light toward one deflector H and a portion toward the other deflector H'. These deflectors are preferably the well-known prism-plates consisting each of a series of prism-lights built up in a series of prism-plates, preferably by electroglazing.

A single prism-plate may be used or any number, the number and construction depending, of course, upon the conditions to be met.

The prism-tiles may be made to throw the light in any given direction, and some of them may throw the light directly forward, as indicated in the drawings. I have not, however, on this small scale attempted to accurately figure out or illustrate the angles of the prisms so as to get any given result. I am simply attempting to illustrate the matter diagrammatically, as it were, in order to make my invention clear.

I claim—

1. A device for lighting basements and the like comprising a series of prism-tiles arranged in a pavement-like body substantially at right angles to the building, said tiles arranged in groups, one group adapted to throw the light into the room to be illuminated, the other groups adapted to throw the light on opposite sides, in combination with deflectors placed at the sides and adapted to receive the light from such side-throwing prism-tiles and to direct it forward into the room to be lighted.

2. A device for lighting basements and the like comprising a series of prism-tiles arranged in a pavement-like body, substantially at right angles to the building, said tiles arranged in groups, one group adapted to throw the light into the room to be illuminated, the other groups to throw the light on opposite

sides, in combination with transparent prism-deflectors placed at the sides and adapted to receive the light from such side-throwing prism-tiles and to direct it forward into the
5 room to be lighted.

3. A device for lighting basements and the like comprising a series of prism-tiles arranged in a pavement-like body, substantially at right angles to the building, said tiles arranged in groups, one group adapted to throw
10 the light into the room to be illuminated, the

other groups adapted to throw the light on opposite sides, in combination with transparent prism-plates placed at the sides and adapted to receive light from such side-throw-
15 ing prism-tiles and to direct it forward into the room to be lighted.

FRANK C. SOPER.

Witnesses:

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