(No Model.) 2 Sheets—Sheet 1.

T. HYATT.

SKY OR VAULT LIGHT ROOF AND ROOF PAVEMENT.

No. 284,559. Patented Sept. 4, 1883.

Fig. 1.

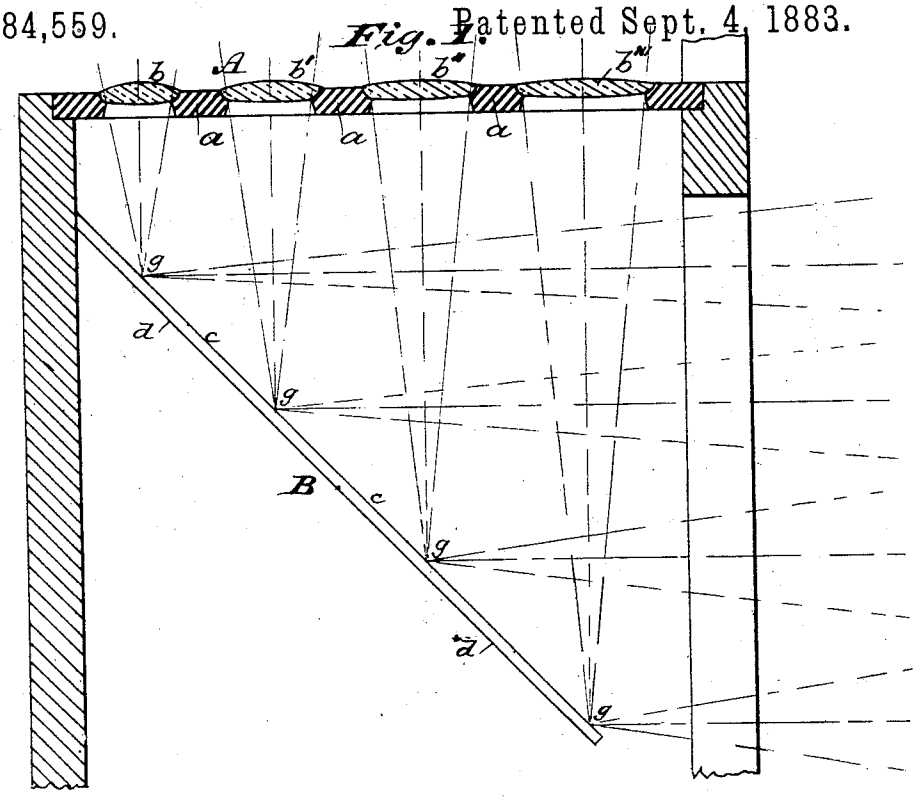
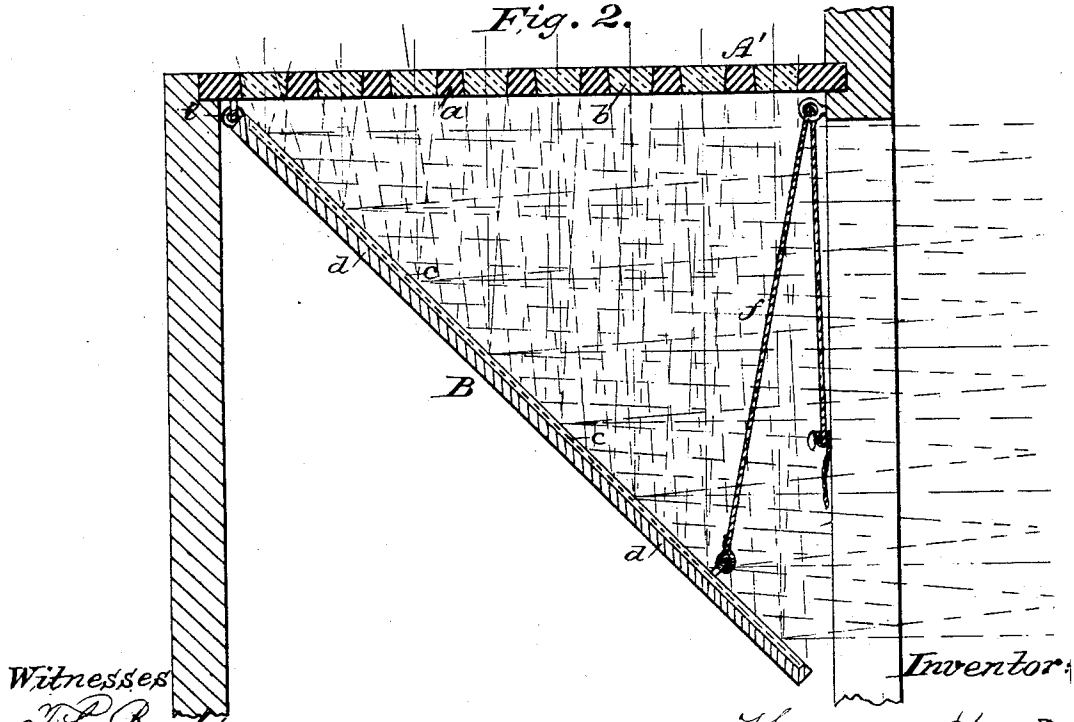


Fig. 2.



Witnesses
T. C. Bright
R. H. Rund.

Inventor:
Thaddeus Hyatt

N. PETERS, Photo-Lithographer, Washington, D. C.

(No Model.) 2 Sheets—Sheet 2.

T. HYATT.

SKY OR VAULT LIGHT ROOF AND ROOF PAVEMENT.

No. 284,559. *Fig. 3.* Patented Sept. 4, 1883.

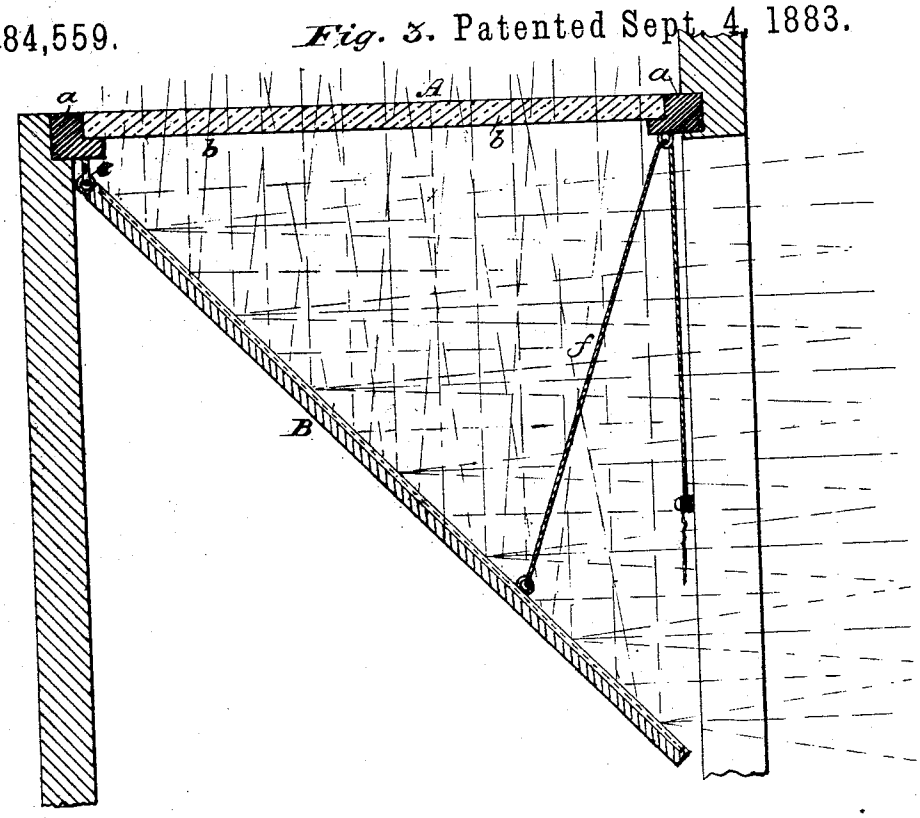
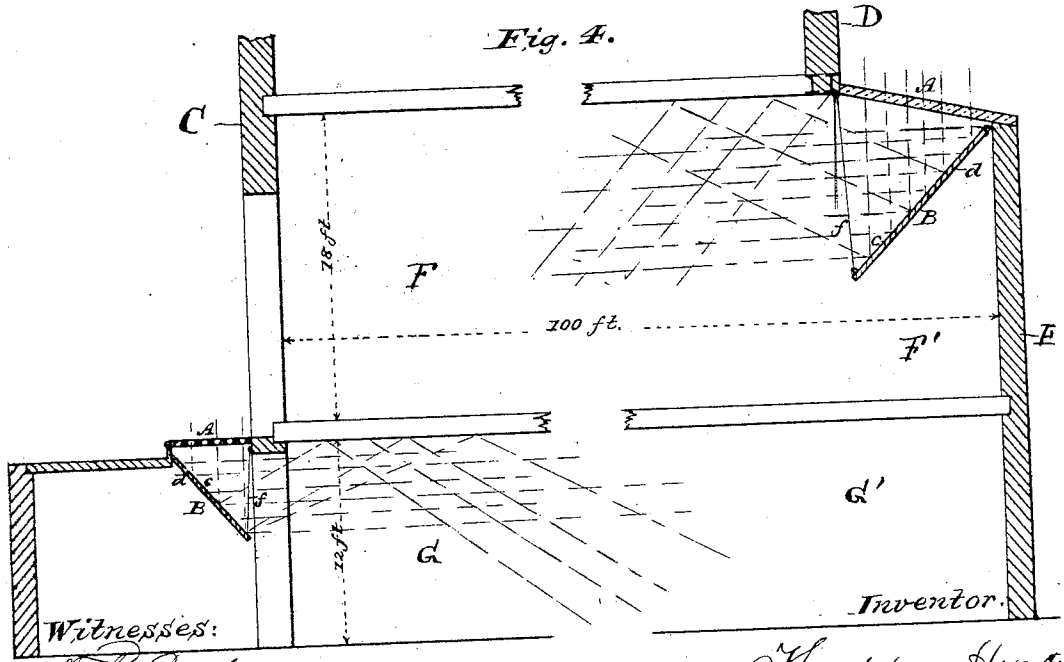


Fig. 4.



Witnesses:
T. C. Brecht
R. R. Smith

Inventor.
Thaddeus Hyatt

N. PETERS, Photo-Lithographer, Washington, D. C

UNITED STATES PATENT OFFICE.

THADDEUS HYATT, OF NEW YORK, N. Y.

SKY OR VAULT LIGHT ROOF AND ROOF-PAVEMENT.

SPECIFICATION forming part of Letters Patent No. 284,559, dated September 4, 1883.

Application filed August 9, 1883. (No model.) Patented in England March 4, 1874, No. 783.

To all whom it may concern:

Be it known that I, THADDEUS HYATT, of the city, county, and State of New York, have invented certain new and useful Improvements in Sky or Vault Light Roofs and Roof-Pavements, which I call "Combination Daylight-Reflector Roofs;" and I do hereby declare that the following is a full and exact description of the same, reference being had to the annexed drawings, making part of this specification.

The object of my invention (which relates to lighting the interiors of buildings) is to enable the illuminating-grating area-roof in front and the ground-floor extension-roof or skylight at the rear of the building to reflect their transmitted light into the interior, where the direct rays do not penetrate.

Figure 1 represents a roof made of illuminating-gratings A, where the convexity of the lenses differs, underneath which is placed a daylight-reflector, B. *a a* represent the metal part of the grating; *b b' b² b³*, the glasses; *c c*, the mirror or reflecting-face of B; *d d*, the back of the wood frame that holds *c*. The broken lines indicate light-rays.

Like letters refer to like parts in all the figures.

Fig. 2 represents a roof made of illuminating-gratings as they are ordinarily constructed, the glasses in the grating being uniform. *e* is the attachment that fastens the reflector B to the grating A, but permitting it to be raised and lowered; *f*, a cord for raising or lowering one end of the reflector.

Fig. 3 represents a glass pavement or skylight roof, there being no metal grating-protector in the combination.

Fig. 4 represents in vertical section a building constructed with my improved or combination roof. C is the front wall of the building; D, main rear wall above ground floor; E, rear wall at the extreme end of the building; F, ground floor; F', extension of ground floor beyond D; G, basement; G', extension of basement.

Fig. 1 represents an illuminating-grating in which the convexity of the lenses, as shown by *b*, *b'*, *b²*, and *b³*, differs—the focus of *b* being at *b g* on the face of the mirror B, that of *b'* at *b' g*, that of *b²* at *b² g*, and that of *b³* at *b³ g* on the face of the reflector.

I employ the term "daylight-reflector" in its ordinary or trade signification—that is to say, I employ it to mean specifically a highly-polished plate of metal or of silvered glass (not necessarily corrugated or made with an uneven surface) made or manufactured specially to be used for the purpose of reflecting light in order to produce illumination.

By the common mode of employing daylight-reflectors they are combined with the exteriors of buildings. By my method of employment they are combined with the interiors. Combined with the exterior of a building, the function of a daylight-reflector is to introduce light into the building from without. Combined with the interior of a building, as I combine them, the function of the daylight-reflector is to locate or localize the light after it has entered the building, which difference in function may be compared to the difference of function existing at a theater between the man at the door, who introduces people in, and the "usher," who seats them after they get in. My daylight-reflector is the usher, not the ticket-taker.

The common mode of employing daylight-reflectors is to combine them with windows or vertical openings in the walls. By my method of employment the daylight-reflectors are combined with roofs. The difference in the degree of usefulness of the appliance as a means of illumination for the interiors of buildings is the difference between the size of a window and that of a roof.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. Broadly, combination daylight-reflector roofing plates or tiles made by combining illuminating-gratings and daylight-reflectors, substantially as and for the purposes herein set forth and illustrated.

2. Combination illuminating roofing plates or tiles made by combining daylight-reflectors with illuminating-gratings set with lenses of different convexities, substantially as and for the purposes herein set forth and illustrated.

3. Combination daylight-reflector roofing plates or tiles made by combining daylight-re-

flectors with glass panes, plates, or sheets, substantially as and for the purposes herein set forth and illustrated.

4. Combination daylight-reflector roofs and roof-pavements constructed of combination illuminating-plates made by combining daylight-reflectors with either glass panes, plates, or sheets, or with illuminating-gratings, substantially as and for the purposes herein set forth and illustrated.

5. Combination daylight-reflector roof, illuminated apartments of buildings, made by combining daylight-reflectors with light-transmitting roofs and the apartment-space covered thereby, substantially as and for the purposes herein set forth and illustrated.

THADDEUS HYATT.

Witnesses:
R. K. ELLIOT,
J. W. AMAN.