

L. Goodrich.
Side Light.

No. 7,927.

Patented Feb. 4, 1851.

Fig. 1.

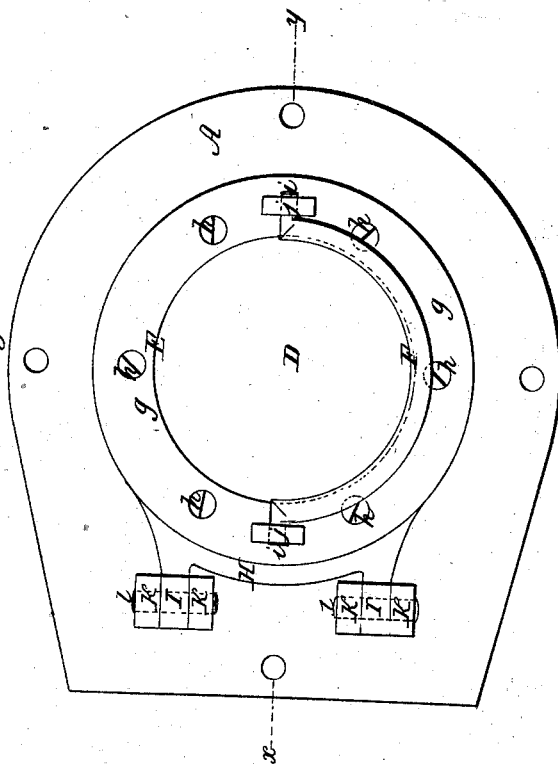


Fig. 2.

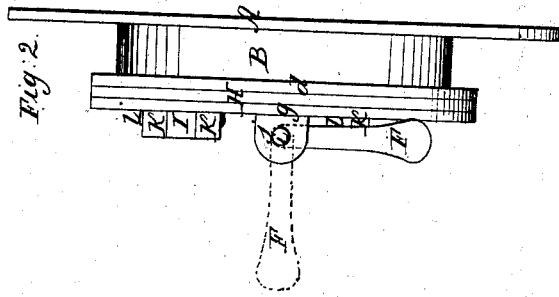


Fig. 3.

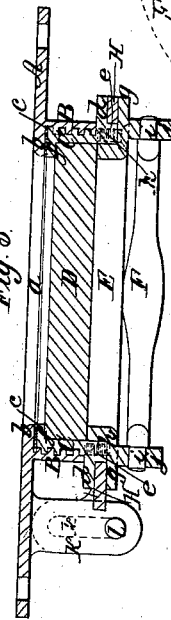
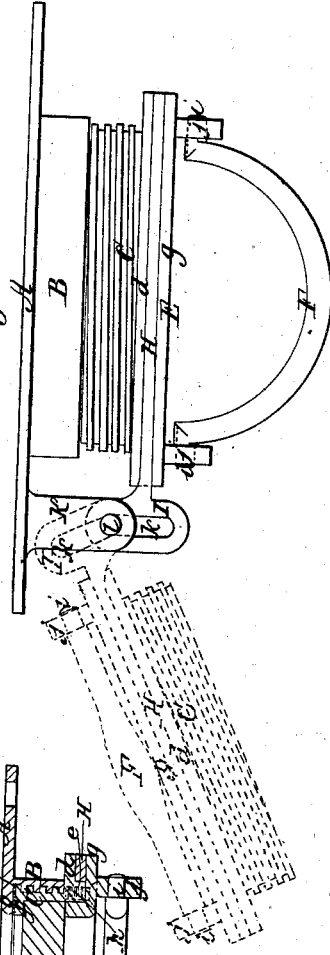


Fig. 4.



UNITED STATES PATENT OFFICE.

LEONARD GOODRICH, OF NEW YORK, N. Y.

SHIP'S LIGHT.

Specification of Letters Patent No. 7,927, dated February 4, 1851.

To all whom it may concern:

Be it known that I, LEONARD GOODRICH, of the city, county, and State of New York, have invented certain new and useful Improvements in the Side Lights Used for Admitting Light Between the Decks of Ships and other Vessels; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1, is a front view of one of my improved lights as seen in the inside of a vessel. Fig. 2, is a side elevation of the same. Fig. 3, is a horizontal section taken in the line *x, y*, in Fig. 1. Fig. 4, is a view looking from above.

Similar letters of reference indicate corresponding parts in each of the several figures.

The nature of my invention consists in inserting the glass in a metal frame or socket which screws into a socket on a metal plate secured to the planking of the vessel so as to make a water tight joint and at the same time hangs within a circular hinged swinging frame or door in which it is capable of turning freely; the hinges of the swinging frame or door are so constructed as will be hereinafter described to admit of the frame or socket in which the glass is inserted being screwed into or unscrewed from the socket first mentioned. The frame or socket of the glass is provided with a strong handle by which it is unscrewed when it is required to open it to admit air, this handle hangs down when not in use so that it is not liable to be broken off.

To enable others skilled in the art to make and use my invention I will proceed to describe fully its construction and operation.

A, is a plate of metal which will be secured to the inside of the vessel, it has an aperture *a*, (see Fig. 3), of circular form of nearly the same size as the glass through which the light is admitted, this aperture is surrounded by a socket B, in which there is a female screw extending the whole depth of the socket, there is a seat *b*, around the aperture *a*, (see Fig. 3), at the back of the socket which is faced with a circular ring of leather or other elastic or compressible material *c*.

C, (Figs. 2, 3, and 4), is a metal socket

provided with a flanch *d*, near its front end, the depth of the socket from the flanch to the back is the same as that of the socket B, and it is provided with a male screw on its outside fitting the female screw in the said socket B; a small cylindrical part *e*, (Fig. 3) projects in front of the flanch.

D, is the glass which fits in the socket C, resting against a seat *f*, at the back, its thickness is little less than the depth of the inside of the socket E, is a flanged socket whose depth at the back of its flanch *g*, is nearly equal to the depth from the front of the socket C, to the glass, it fits in the socket C, and is secured to it by screws *h, h, h*, the joint is made water tight around the glass by a small quantity of putty or other material the spaces between the flanges *d, g*, around *e*, forms a channel or groove. F, is a drop handle of bow form provided with pivots *i, i*, hung in lugs *j, j*, fast upon the face of the socket E, this handle when not in use falls to the position shown in Figs. 1, 2, and 3, but when used to open the light is raised to the position shown in Fig. 4, and in red lines in Fig. 2.

H, is a frame or door consisting of a plate of metal of sufficient thickness to fit easily between the flanches *d, g*, and having a circular aperture fitting to the part *e*, of the socket C, which must be inserted in it before the socket E, is attached, it has two lugs I, I, cast or soldered on it which fit each between a pair of lugs K, K, on the plate A. there is a slot *k*, in each lug I, having semicircular ends, and a pin *l*, is securely inserted in each pair of lugs K, K, which passes through the slot *k*; by means of the slot *k*, the frame H, is enabled to move back and forth in a right line toward and from the plate A, and can also swing, the lugs I, I, and the pins *l, l*, forming hinges.

In Figs. 1, 2, and 3, the light is shown shut, the socket or frame C, being screwed in to the socket B, and fitting close to the ring *c*, the flange *d*, also fitting close to the outer face of the socket B, making the opening perfectly water tight. When it is desired to open the light for ventilation or other purposes the handle F must be raised and the sockets C, unscrewed until it is entirely clear of the socket B, as shown in Fig. 4, it can then be thrown back to the position shown in red lines in the above named figure.

It will be understood that without the slot *k* or an equivalent it would be impossible to screw the socket C, into or out of that B, while it swung on a hinge, but owing
5 to the said slot the frame H, is allowed to receive a sufficient amount of motion in a right line to allow of the screwing or unscrewing of the socket. The drop handle F,
10 lays close to the inside of the door when not in use and therefore is not likely to be broken by accident. As frequently happens with the screws and fastenings of the common side lights, than which my improved
15 side light is more secure, and less likely to damage by violence.

Having thus fully described my invention I will now proceed to state what I

claim as new and desire to secure by Letters Patent—

I claim hanging the screwed socket or 20 frame C, containing the glass so as to turn freely within a frame H, which swings on a hinge K, K' I, provided with a slot *k*, or its equivalent whereby the socket C, can
25 be screwed into or unscrewed from the fixed socket B, and when unscrewed be swung back, substantially as herein described.

In testimony whereof I have hereunto signed my name before two subscribing witnesses.

LEONARD GOODRICH.

Witnesses:

O. D. MUNN,

R. W. FENWICK.