No. 631,292. Patented Aug. 22, 1899.

P. FYFE & A. PHILLIPS.

SIDE LIGHT FOR SHIPS.

(Application filed May 13, 1899.)

(No Model.)

FIG. 1.

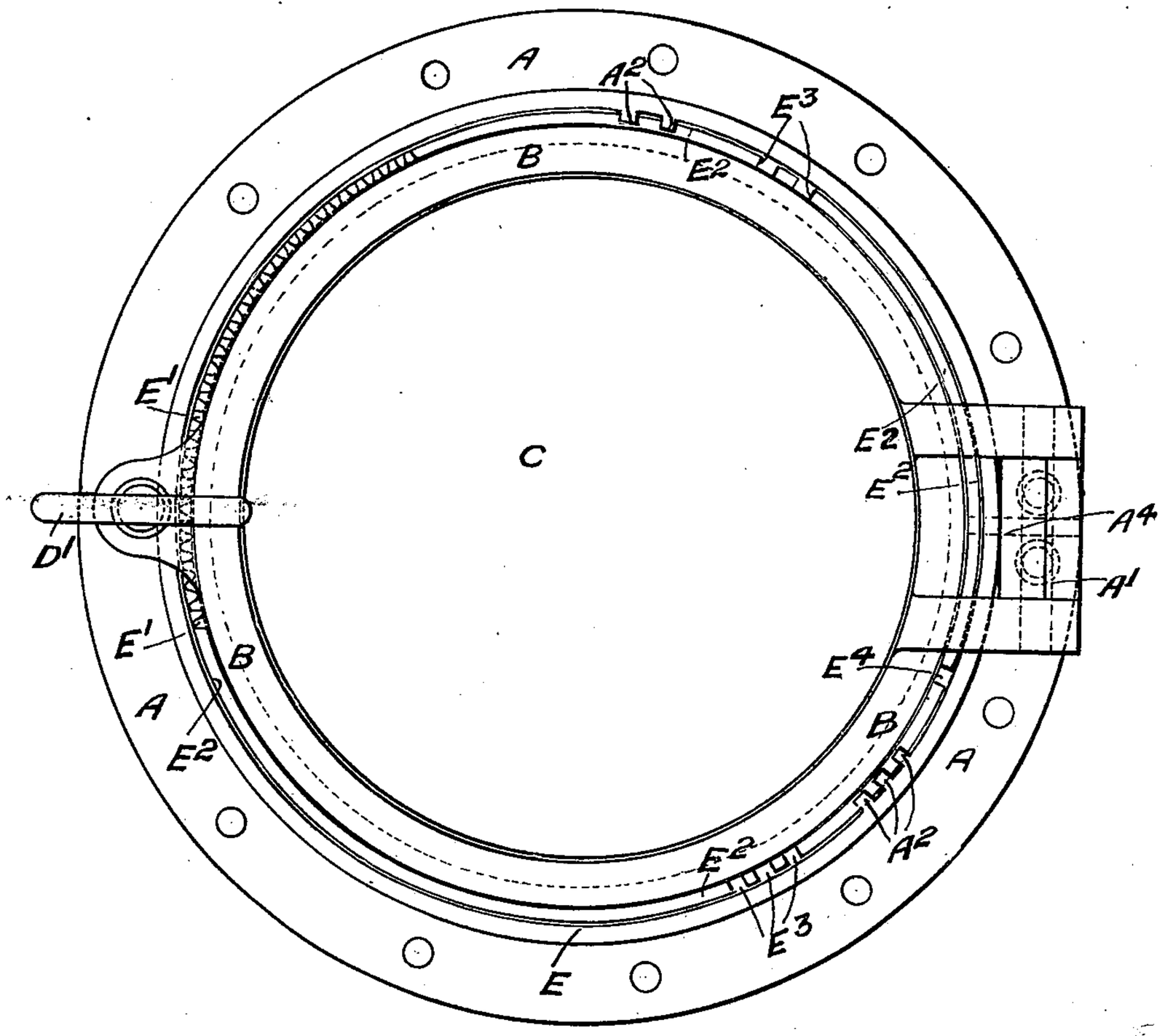
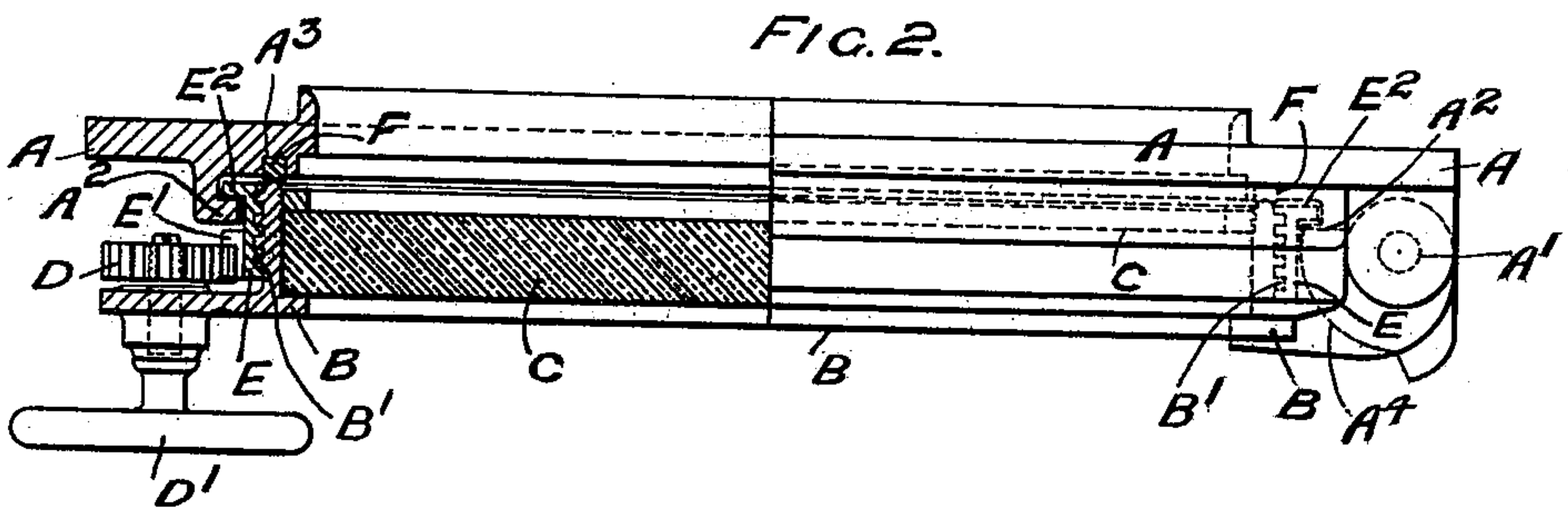


FIG. 2.



WITNESSES:
Ella L. Giles.
Oldmunde

INVENTORS
Peter Fyfe
Alexander Phillips
BY
Richards & Co
ATTORNEYS.

UNITED STATES PATENT OFFICE.

PETER FYFE AND ALEXANDER PHILLIPS, OF GLASGOW, SCOTLAND.

SIDE LIGHT FOR SHIPS.

SPECIFICATION forming part of Letters Patent No. 631,292, dated August 22, 1899.

Application filed May 13, 1899. Serial No. 716,701. (No model.)

To all whom it may concern:

Be it known that we, PETER FYFE, residing at 23 Montrose street, and ALEXANDER PHILLIPS, residing at 17 Anderston Quay, Glasgow, Scotland, have invented certain new and useful Improvements in Side Lights for Ships, (which was patented in Great Britain on the 20th day of October, 1898, No. 22,053,) of which the following is a specification.

This invention relates to improvements in ships' side lights or scuttles; and it has for its object to provide a window which can be rapidly and easily opened and closed and which when shut can be made absolutely watertight without undue expenditure of force on the part of the operator.

The invention is illustrated by the accompanying drawings, in which—

Figure 1 is a plan, and Fig. 2 a part vertical section and part side elevation, of the improved side light.

The improved side light comprises a circular frame A, adapted to be riveted or bolted to the vessel, a similarly-shaped frame B, hinged to the frame A at A′ and carrying the glass C and a spur-wheel D, and a screw-threaded collar E, engaging the fixed frame A and the hinged frame B and having spur-teeth E′ formed around a portion of its outer surface. The fixed frame A has a rubber or other soft ring F embedded in an annular recess A^3, against which the inner edge of the hinged frame B bears when the side light is closed. The outer surface of the vertical rim of the frame B has a single or double screw-thread B′ cut upon it, upon which is threaded the collar E, the flange E^2 of this collar E engaging projections A^2 of different form at various points on the fixed frame A. Notches E^3 are cut in the flange E^2 of the collar, corresponding in shape to the projections formed on the fixed frame A and through which the latter pass when the hinged frame B is being opened or shut. Another notch E^4 is provided in proximity to the hinge A′, which is adapted when the frame B is being opened to engage with a fin A^4 on the part A′ of the hinge at the same time as the notches E^3 clear the projection A^2 of the frame A, and retains the notches E^3 in their exact relationship to the projections A^2 until the frame B is again closed. The hinge A′ is formed to allow free play, so that the frame B will close tightly at all points upon its seat F.

In order to retain the frame B in contact with the fixed frame A after the former has been shut, the spur-pinion D, carried in the flange of the frame B and which is constantly in gear with the teeth upon the collar E, is turned by means of the handle D′, so as to rotate the collar E upon the frame B until the flange E^2 of said collar rests upon and engages the projections A^2 on the fixed frame A, the screw-threads upon the collar E after this engagement causing the frame B to be drawn rapidly and tightly against the rubber ring F.

Having now described the invention, what we claim, and desire to secure by Letters Patent, is—

In a side light or scuttle, the combination of a fixed frame, a frame hinged thereto, having screw-threads formed on its periphery, a collar or ring having like threads on its inner surface and a notched flange on its periphery engaging projections on the fixed frame, substantially as described.

In witness whereof we have hereunto set our hands in presence of two witnesses.

PETER FYFE.
ALEXANDER PHILLIPS.

Witnesses:
WALLACE FAIRWEATHER,
JNO. ARMSTRONG, Jr.