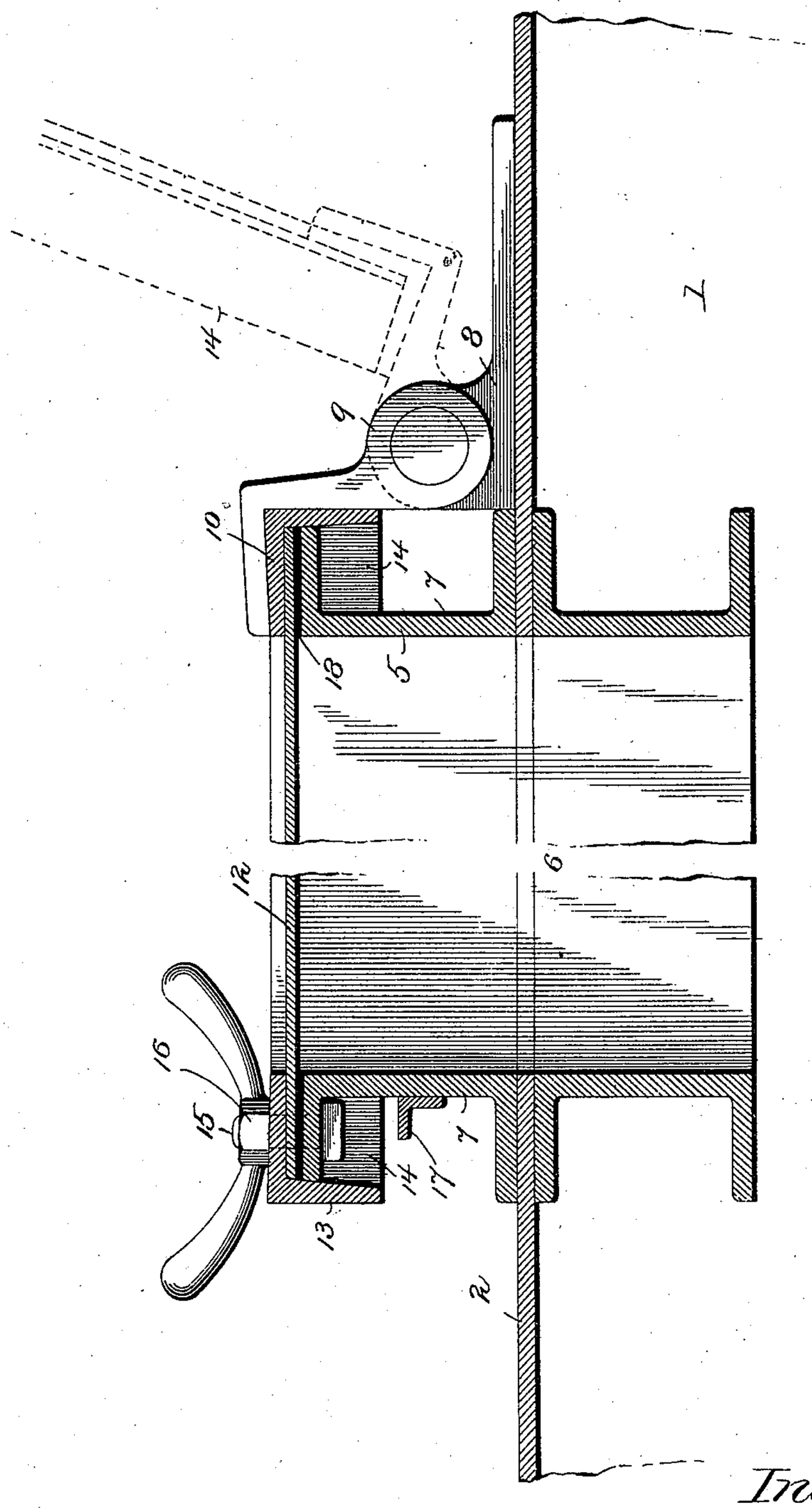
(No Model.)

J. R. OLDHAM.

HATCH FOR SHIPS.

No. 574,259. Patented Dec. 29, 1896.



Witnesses:
F. L. Ourand
J. L. Coombs

Inventor.
Joseph R. Oldham,
by Louis Bagger & Co.
Attorneys.

UNITED STATES PATENT OFFICE.

JOSEPH R. OLDHAM, OF CLEVELAND, OHIO.

HATCH FOR SHIPS.

SPECIFICATION forming part of Letters Patent No. 574,259, dated December 29, 1896.

Application filed March 9, 1896. Serial No. 582,445. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH R. OLDHAM, a citizen of the United States, and a resident of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Hatches for Ships; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, which forms a part of this specification.

My invention relates to improvements in hatches for ships whereby the hulls of ships are greatly strengthened and a tight joint made between the hatch and coaming, so as to effectually exclude water.

The invention consists, essentially, in forming the hatches of steel or other suitable metal and hinging them to the hatch-coamings, with their forward and after and side edges flanged down or fitted with angle-bars, in combination with hatch-coamings formed of channel-bars which are embraced by the flanges or angle-bars of the hatches, the hatches being bolted down on the coamings, so as to make a tight joint, as hereinafter fully described and claimed.

In the accompanying drawing the figure represents a transverse sectional view of a hatch and hatch-coaming constructed in accordance with my invention.

In the said drawing the reference-numeral 1 designates the hull of a vessel, and 2 the deck thereof.

The numeral 5 designates the hatch-coamings, and 6 the hatchways or openings leading to the hold. The hatch-coamings, which project up above the deck, consist of channel-beams 7, connected together at their ends to form a rectangular frame. One of said beams is formed near each end with a lug 8, and with these lugs are connected hinges 9, riveted or otherwise secured to an angle-beam 10, which in turn is riveted to the hatch 12. (See dotted lines.) A similar beam 13 is secured to the opposite end of the hatch and also to the sides, if desired, so as to make a water-tight joint all around the hatches, or the sides of the hatches are bent down at right angles, forming flanges 14.

The end edges of the hatch and the angle-bars secured thereto and the sides of the hatch are formed with bolt-holes for the passage of headed bolts, which also pass through coinciding holes in the hatch-coamings. These bolts are inverted and passed through said holes from beneath and their upper ends provided with hand-nuts 16, screwing thereon and clamping the hatches tightly down upon the coamings. An angle-lug 17 is secured to the coaming below each bolt to form a stop for the latter when the nut is removed to open the hatch, and thus prevent the bolt from falling onto the deck. An elastic gasket 18 is provided between the hatch and coaming.

The hatches may be opened and closed by hand or by steam or other power.

A hatch and coaming constructed as described will be found very efficient in use, as when in place it will be impossible for water to enter the hold through the hatchways.

Having thus fully described my invention, what I claim is—

1. In a ship or other vessel, the combination with the hatch-coaming consisting of channel-bars secured to the deck and provided with bolt-holes in the upper horizontal portions, of the metal hatch formed with coinciding bolt-holes near its edges and downwardly-depending flanges at the sides, the angle-bars at the ends, the hinges connected with one of these bars and with one of the bars of the coaming and the securing-bolts, passing through said bolt-holes, substantially as described.

2. In a ship or other vessel, the combination with the hatch-coaming consisting of channel-bars secured to the deck and formed with bolt-holes in the upper horizontal portions, of the hinged hatch provided with downwardly-depending flanges and formed with bolt-holes coinciding with the bolt-holes in said channel-bars, the inverted headed bolts passing through said holes, the nuts, and the angle-lugs secured to the coaming in vertical alinement with said bolts, substantially as described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

JOSEPH R. OLDHAM.

Witnesses:

GEO. B. MARTY,

NELLIE SNAVELY.