

(No Model.)

J. REES.  
IRON SHIP.

No. 267,371.

Patented Nov. 14, 1882.

Fig. 1.

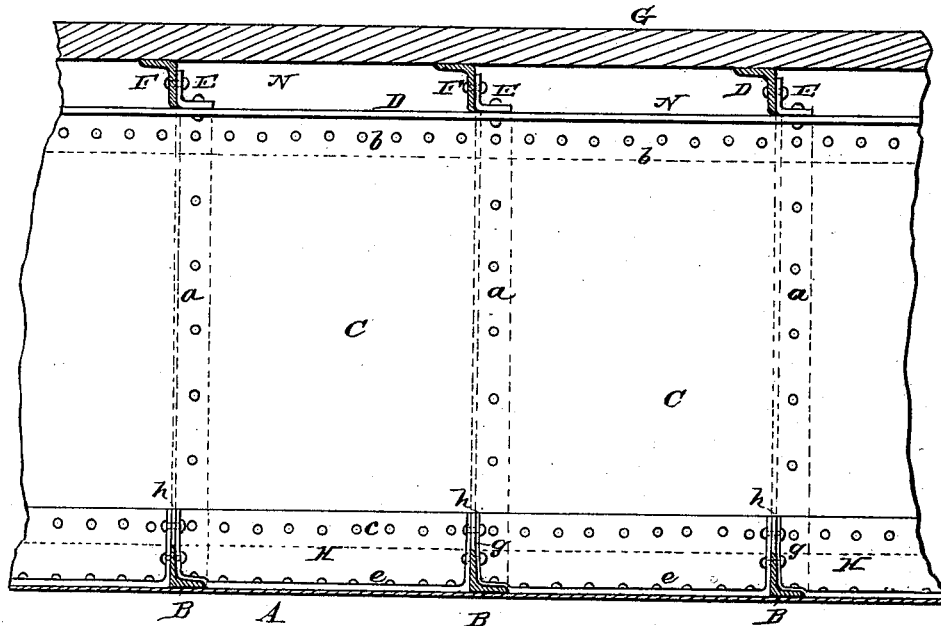


Fig. 2.

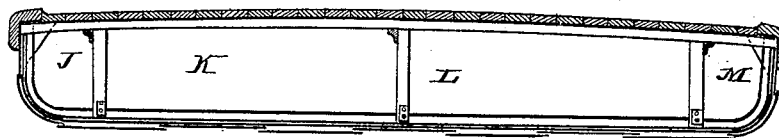


Fig. 3.

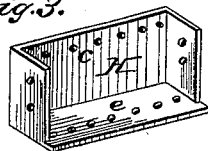
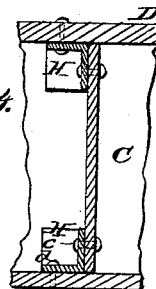


Fig. 4.



WITNESSES

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# UNITED STATES PATENT OFFICE.

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## IRON SHIP.

SPECIFICATION forming part of Letters Patent No. 267,371, dated November 14, 1882.

Application filed March 22, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES REES, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful improvement in the construction of steamboats and other water-craft; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates to an improvement in the construction of steamboats and other water-craft, particularly the longitudinal partitions or "bulk-heads" in the hull thereof, especially the upper and lower side of said partition, between the ribs of the hull; and it consists in the combination of a flanged attachment plate with the partition-plates and ribs of the vessel, as will hereinafter more fully and at large appear.

To enable others skilled in the art with which my invention is most nearly connected to make and use it, I will proceed to describe its construction and operation.

In the accompanying drawings, which form part of my specification, Figure 1 is a longitudinal section of the hull of the vessel. Fig. 2 is a transverse section of the hull of the vessel. Fig. 3 is a perspective view of the flanged attachment plate. Fig. 4 is a vertical and transverse section of the partition or bulk-head, with the flanged attachment plates riveted to the top and bottom sides thereof.

Reference being had to the accompanying drawings, A represents the hull of the vessel, constructed of sheet iron or steel; B B B, the ribs, which are constructed of angle-iron, to which ribs the sheet-metal plates of the shell are riveted. The partitions or bulk-heads C are constructed of sheet-metal plates riveted together at *a*. To the upper side of the partition or bulk-head C are riveted, at *b*, strips D, of angle-iron, to which are riveted angle attachment pieces E, which are riveted to the beams F, which support the floor G, or deck of the vessel. To the lower side of the partition or bulk-head C is riveted, at *c*, the flanged attachment plate H represented in Fig. 3, which attachment plate is fitted between the ribs B,

constructed of angle-iron, and its flanges *g*, riveted to said ribs, as indicated at *d*, and to the shell of the vessel, as indicated at *e*. Between the flanges *g* of the attachment plate H are placed pieces of sheet metal *h*. By fitting the flanged attachment pieces H between the ribs B, and riveting them thereto and to the shell of the vessel, as indicated at *e*, the partition or bulk-head C can be made watertight, so that the compartments J K L M formed by said partitions or bulk-heads C will be completely shut off from each other, so that in case of a leak occurring in one of the compartments the other compartments will not be affected thereby, the advantage of which will be apparent to navigators. In Fig. 1 the partition or bulk-head C is represented as having open spaces N between its upper side and deck G of the vessel; but when desired these may be closed by the use of the flanged attachment pieces H, secured to the beams F, deck G, and to the upper side of the partition or bulk-head C.

By the employment of the flanged attachment pieces H in combination with the ribs B, the attachment of the partition or bulk-head C to the shell of the vessel and making it watertight is greatly simplified and facilitated, and increased strength of the vessel secured.

Having thus described my improvement, what I claim as of my invention is—

1. In a vessel constructed of sheet iron or steel, the combination of the flanged attachment pieces H, constructed as shown in Fig. 3, ribs B, and partition or bulk-head C, substantially as herein described, and for the purpose set forth.

2. In a vessel constructed of sheet iron or steel, the combination of the flanged attachment pieces H, constructed as shown in Fig. 3, ribs B, and partition or bulk-head C, beams F, and deck G, substantially as herein described, and for the purpose set forth.

JAMES REES.

Witnesses:

A. C. JOHNSTON,  
C. S. JOHNSTON.