

H. C. DAVIS.
SHIP.
APPLICATION FILED JULY 15, 1909.

938,645.

Patented Nov. 2, 1909.

Fig. 1

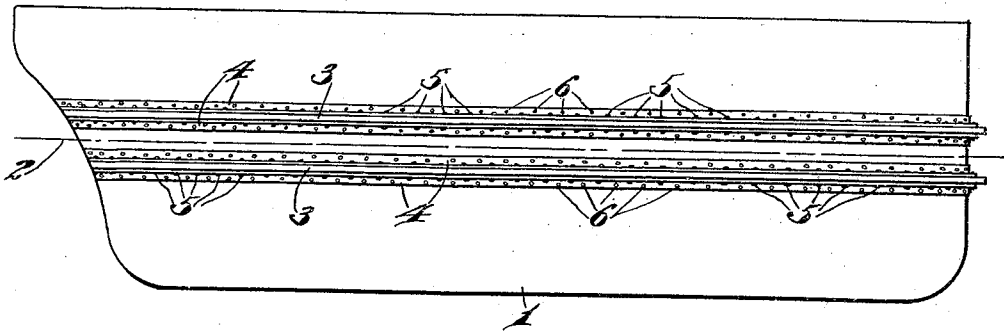


Fig. 2

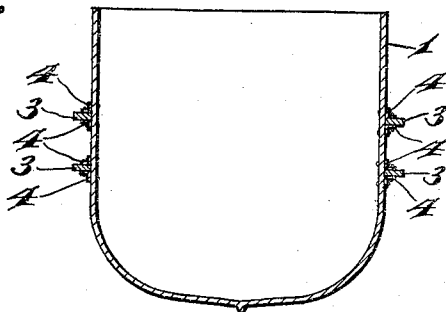


Fig. 3

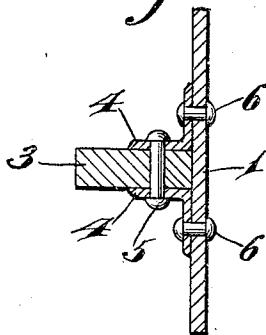
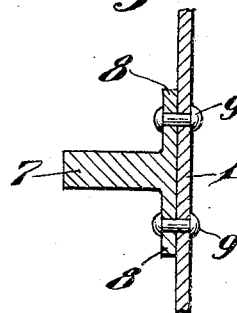


Fig. 4



Inventor

Henry C. Davis,

By

Joshua R. Post,

Attorney

Witnesses
J. W. Roseman,
J. A. F. Mulhall.

UNITED STATES PATENT OFFICE.

HENRY C. DAVIS, OF PHILADELPHIA, PENNSYLVANIA.

SHIP.

938,645.

Specification of Letters Patent.

Patented Nov. 2, 1909.

Application filed July 15, 1909. Serial No. 507,672.

To all whom it may concern:

Be it known that I, HENRY C. DAVIS, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Ships, of which the following is a specification.

My invention relates to improvements in ships, and more particularly to an attachment for ships located adjacent the water line and on the outside of the hull, to sustain the shock of collision, and prevent serious damage to the ship in the event of collision. In collisions between ships serious damage is only done when the hull is broken adjacent the water line, and water rushes into the ship and sinks the same.

To obviate this my invention was devised and will now be described in detail.

The invention consists in the securing of a protecting band of metal or other suitable material around the hull of the ship adjacent the water line.

In the accompanying drawings, Figure 1, is a view in side elevation of the hull of a ship illustrating my improvements. Fig. 2, is a view in cross section. Fig. 3, is an enlarged fragmentary view in cross section, and Fig. 4, is a view similar to Fig. 3, illustrating a modification.

1 represents the hull of a ship, and 2 the water line. Above and below the water line and adjacent thereto, my improved protecting bands are secured. Each band comprises a heavy bar 3, preferably of metal, although it may be of other material, disposed edgewise, and secured between angle bars 4 by means of rivets 5, said angle bars in turn secured by rivets 6 to the hull 1. With these protecting bands secured upon the ship above and below the water line as illustrated, any collision between ships must

be against the bars 3, and as these bars are very strong, no serious damage can be done 45 the ship at the water line, and any damage above the water line can be readily repaired.

In the modification shown in Fig. 4, I have dispensed with the angle bars 4, and provide a bar 7 of general T-shape in cross section, 50 the flanges 8 above and below the bar being secured by rivets 9 to the hull 1.

Other modifications might be resorted to without departing from my invention, and I do not therefore restrict myself to the pre- 55 cise details illustrated and described, but consider myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of the claims.

Having thus described my invention what 60 I claim as new and desire to secure by Letters Patent is:

1. In combination with a ship's hull, protecting bands secured around the hull above and below the water line, said bands each 65 comprising heavy bars of metal disposed edgewise against the hull, and flanges fixed to said bars and projecting above and below the bars, and rivets securing said flanges to said hull. 70

2. In combination with a ship's hull, bands secured around the hull above and below the water line, said bands each comprising a heavy bar of metal disposed edgewise against the hull, angle bars at opposite sides of said 75 first mentioned bars, rivets securing said angle bars to the first mentioned bars, and rivets securing the angle bars to the hull.

In testimony whereof I have signed my name to this specification in the presence of 80 two subscribing witnesses.

HENRY C. DAVIS.

Witnesses:

R. H. KRENKEL,
J. A. L. MULHALL.