

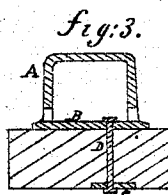
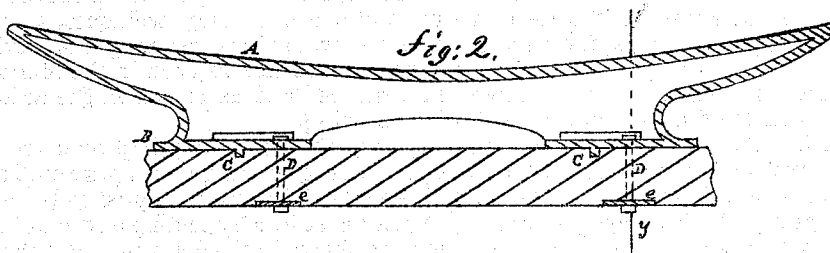
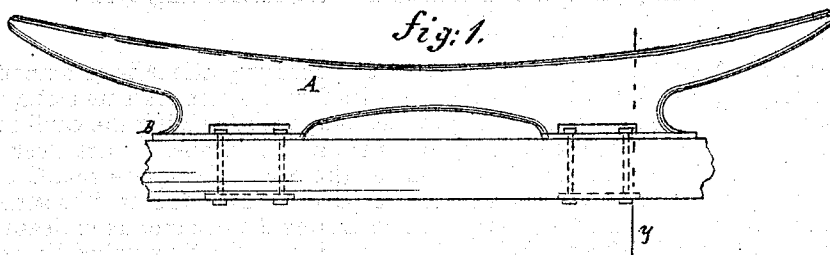
(137.)

J. A. WOOD.

Improved Cavil.

No. 122,692.

Patented Jan. 9, 1872.



Witnesses.

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UNITED STATES PATENT OFFICE.

JOHN A. WOOD, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN CAVILS.

Specification forming part of Letters Patent No. 122,692, dated January 9, 1872.

To all whom it may concern:

Be it known that I, JOHN A. WOOD, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Hollow Metallic Cavil for 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 drawing and to the letters of reference marked thereon.

The nature of my invention consists in making a new article of manufacture, viz., a hollow cast-iron cavil for steamboats and other water-craft, said cavil being so constructed that it may, through the medium of bolts or their equivalent, be attached to the deck or other part of the boat in a secure and permanent manner.

To enable others skilled in the art to make and use my new article of manufacture, I will proceed to describe more fully its construction.

In the accompanying drawing, which forms part of my specification, Figure 1 is a side elevation of my improved hollow cast-iron cavil, and represents it secured to a section of the deck of a boat. Fig. 2 is a longitudinal section of the same. Fig. 3 is a transverse section of the same at line *y* of Figs. 1 and 2.

The cavil A may be of any form or size desired, but in every case is constructed of cast-iron or other suitable metal by casting. This is accomplished through the medium of suitable patterns so constructed as to have their own core of green sand, or by means of patterns and dry-sand core. The casting of the cavil and manner or method of casting I leave to the judgment and skill of the molder. The base B of the cavil is provided with projections C, which are fitted into cavities made in the part of the boat to which the cavil is to be at-

tached. These projections, in combination with the bolts D and plates indicated at *e*, are used for the purpose of holding the cavil in a fixed and permanent manner to the deck or other part of the boat. The plate should be set into the part to which the cavil is attached, as shown in Figs. 2 and 3 and as indicated in Fig. 1 by dotted lines. By thus embedding the plate *e* it will prevent the many accidents and injury to boats which so often occur with boats which are provided with cavils secured to their guards in the old and well-known manner. The projecting plates and nuts or bolt-heads, when projecting below the under surface of the guards of boats, have always been a source of trouble and cause of many accidents, all of which will be avoided by securing the cavil in the desired place and position in the manner herein described and as shown in the accompanying drawing.

The advantage of my improvement in cavil consists in providing a cheap, strong, and durable article. This is accomplished by constructing it of cast-iron by casting and making it hollow, as shown in the drawing and hereinbefore described. Cavils of cast-iron will cause less friction and wear on the "lines" which work on or around them. The foregoing advantages, with others, it will be apparent to boat-builders, will not only demonstrate the usefulness, but also its great advantage as a new article of manufacture.

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

The hollow metallic cavil for steamboats and other water-craft, substantially as herein described, and for the purpose set forth.

Witnesses: JOHN A. WOOD.

A. C. JOHNSTON,
JAMES J. JOHNSTON.

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