

*S. Leach,
Steering Apparatus.*

No. 100419.

Patented Mar. 1, 1870.

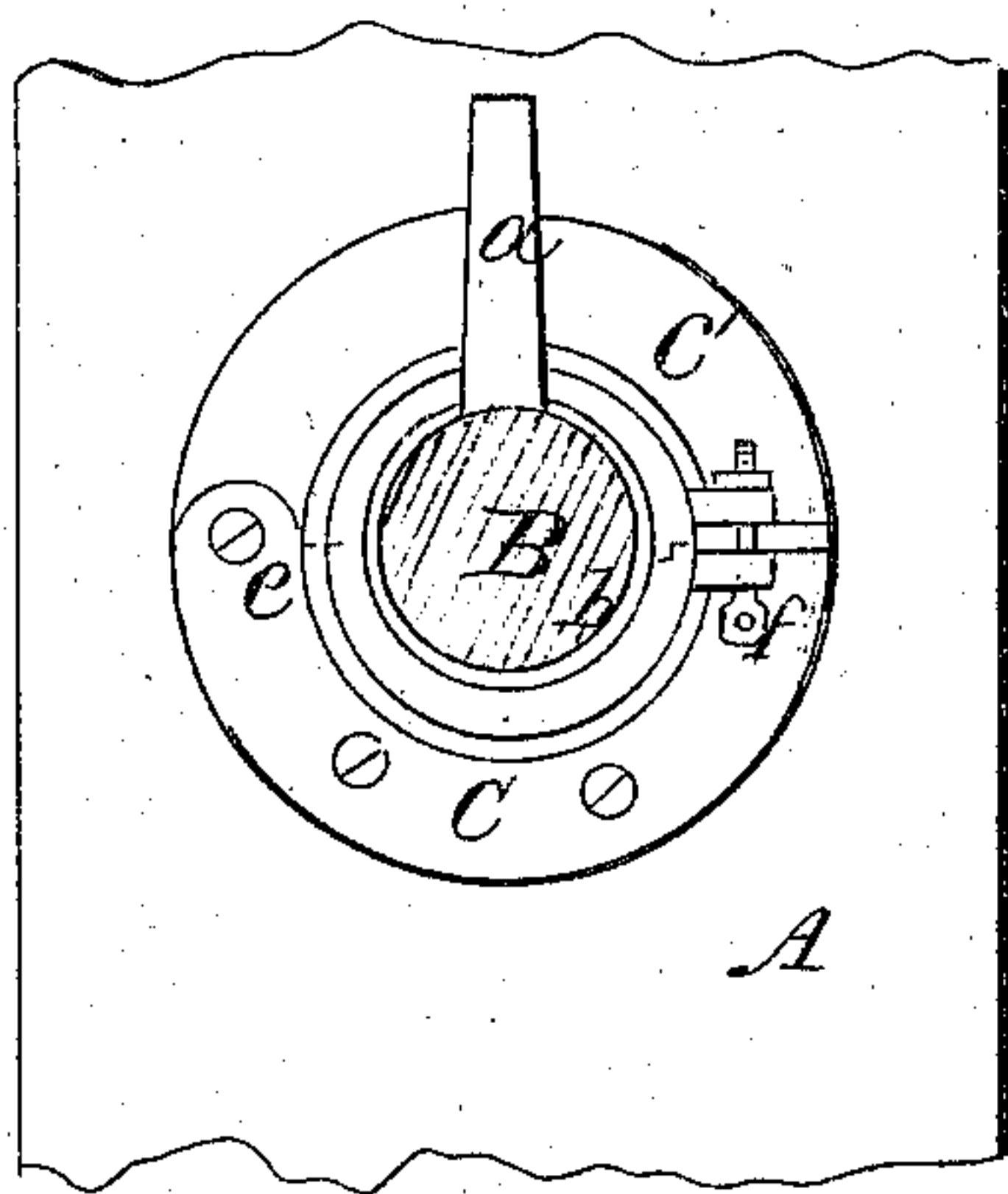
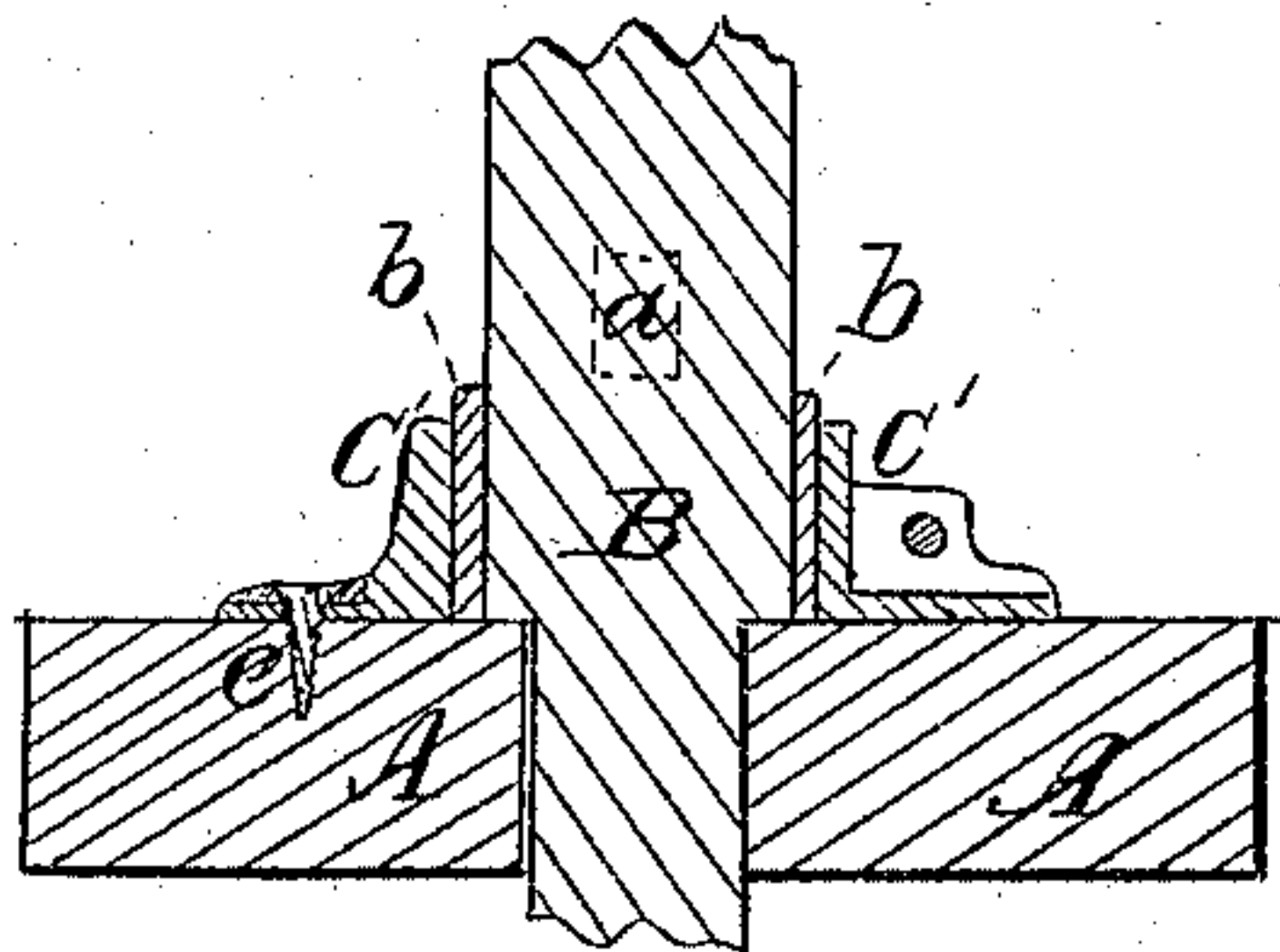


Fig. 2.



Witnesses.

*L. L. Manton
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Inventor,

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By T. W. Porter Atty*

United States Patent Office.

SEWALL LEACH, OF PENOBSCOT, MAINE, ASSIGNOR TO HIMSELF, J. D. LEACH, AND SABIN HUTCHINGS, OF SAME PLACE.

Letters Patent No. 100,419, dated March 1, 1870; antedated February 19, 1870.

IMPROVED RUDDER-COLLAR.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, SEWALL LEACH, of Penobscot, in the county of Hancock, and State of Maine, have invented a new and useful Improvement in Rudder-Collars; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to which it appertains to practice it.

This invention relates to a new and useful improvement in the collar which encircles the rudder-head at the upper surface of the vessel's deck; and

The invention consists in a metallic collar vertically divided in two equal parts, one part of which is firmly secured to the deck, while the other half is arranged to be adjusted relative to the fixed half, so as to prevent the usual lateral motion of the rudder-head, and the consequent pounding and thumping in rough weather.

In the accompanying drawings—

Figure 1 is a top or plan view, and

Figure 2 is an athwart-ship vertical section.

Similar letters of reference indicate corresponding parts in the several figures.

In the drawings—

A represents the deck, and B the rudder-head;

while *a* is the tiller, and *b*, a thin metallic casing upon the rudder-head.

C represents the half of the collar which is secured to the deck by screws, as shown, and

C' is the adjustable half which is pivoted upon screw *e*, as shown.

f is a screw-bolt, which passes through lugs formed upon C and C' respectively, as shown, and upon which is fitted a screw-nut. By actuating the bolt *f*, any desired degree of pressure may be exerted upon rudder B, by the collar C and C'.

An elastic packing may be combined with the collar, if in any case it may be found necessary.

By the use of this collar the rudder is kept noiseless, and having no lateral motion, much of the usual friction and wear is avoided, while the danger of the rudder being unshipped in heavy seas is greatly lessened if not entirely avoided.

Having thus described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

A rudder-collar, adjustable substantially as described and shown.

Witnesses:

SEWALL LEACH.

J. D. LEACH,

SABIN HUTCHINGS.