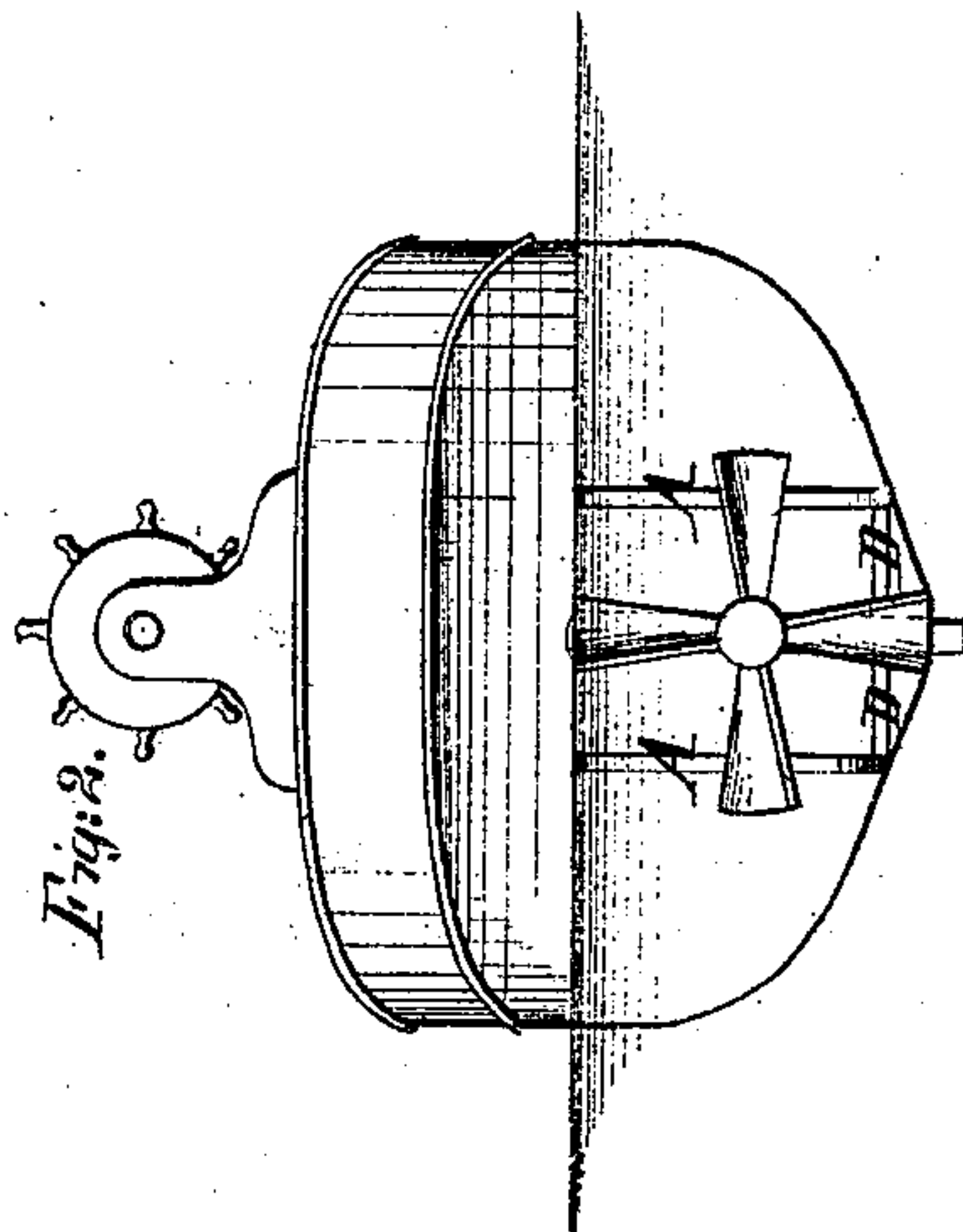
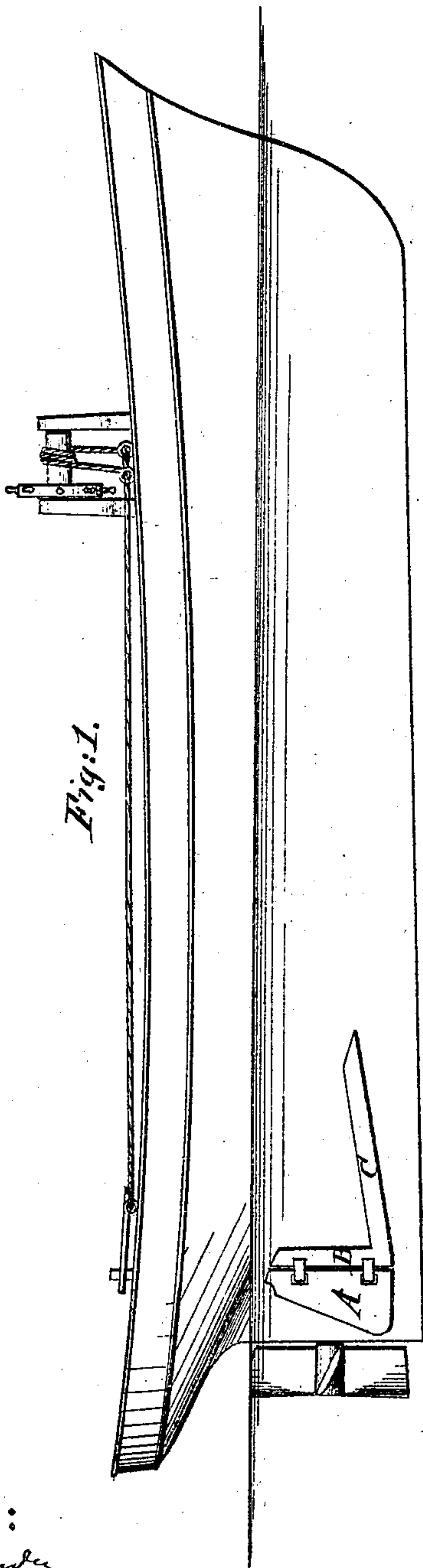


A. A. Scank,
Steering Apparatus.
No. 96,622. *Patented Nov. 9, 1869*



Witnesses:
M. Vorländer
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United States Patent Office.

A. A. SCANK, OF NYACK, NEW YORK.

Letters Patent No. 96,622, dated November 9, 1869.

IMPROVEMENT IN STEERING-APPARATUS.

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, A. A. SCANK, of Nyack, in the county of Rockland, and State of New York, have invented a new and useful Improvement in Attaching Rudders to Propellers; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

This invention relates to improvements in attaching rudders to propellers; and consists in attaching two rudders in advance of the propellers, one under each quarter; for the better protection of the same against striking upon bars and rocks, and for insuring a better action of the water on the rudders before it has been disturbed and set into cross-currents by the propeller, as hereinafter more fully specified.

Figure 1 represents a side view of a vessel with my improved arrangement of rudders, and

Figure 2 represents a stern view of the same.

Similar letters of reference indicate corresponding parts.

Instead of arranging the rudder at the centre, in rear of the propeller, on a shoe running back from the heel, and on a line therewith, whereby it is greatly exposed, in passing over bars or rocks, to strike thereon, especially when the vessel is pitching fore and aft, whereby the said shoes are depressed more than any other part of the vessel, I propose to place two rudders, A A, in advance of the propeller, one under each quarter, as clearly represented in the drawings, on posts B, projecting vertically downward from the said quarters, and braced fore and aft by the braces C, and the other way by the braces D. These posts and braces may be of thin iron bars, thinner at the front edges than

at the rear, whereby the friction, in passing through the water, will be reduced.

The tillers E may be connected by cords or chains, so that the arrangement of chains commonly used for connecting the tiller and wheel may be used for steering.

These rudders may, in consequence of two being used, be made smaller than when one is used; consequently they are not required to set so deep in the water, and may terminate considerably above the keel, so that when the latter strikes, the rudder will be uninjured.

By reason of this arrangement, they have more perfect control of the ship, for the water is not chopped and disturbed by the propeller, as in the old arrangement.

They are equally as well or better protected in this way against floating objects by the quarters of the ship.

Having thus described my invention,

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

1. The herein-described arrangement, with the hulls of vessels driven by single-screw propellers, of two rudders in advance of the propellers, one under each quarter, substantially as specified.

2. The arrangement of the rudder-posts B and braces C D with the hull, substantially as specified.

The above specification of my invention signed by me, this 20th day of September, 1869.

A. A. SCANK.

Witnesses:

GEO. W. MABEE,

ALEX. F. ROBERTS.