

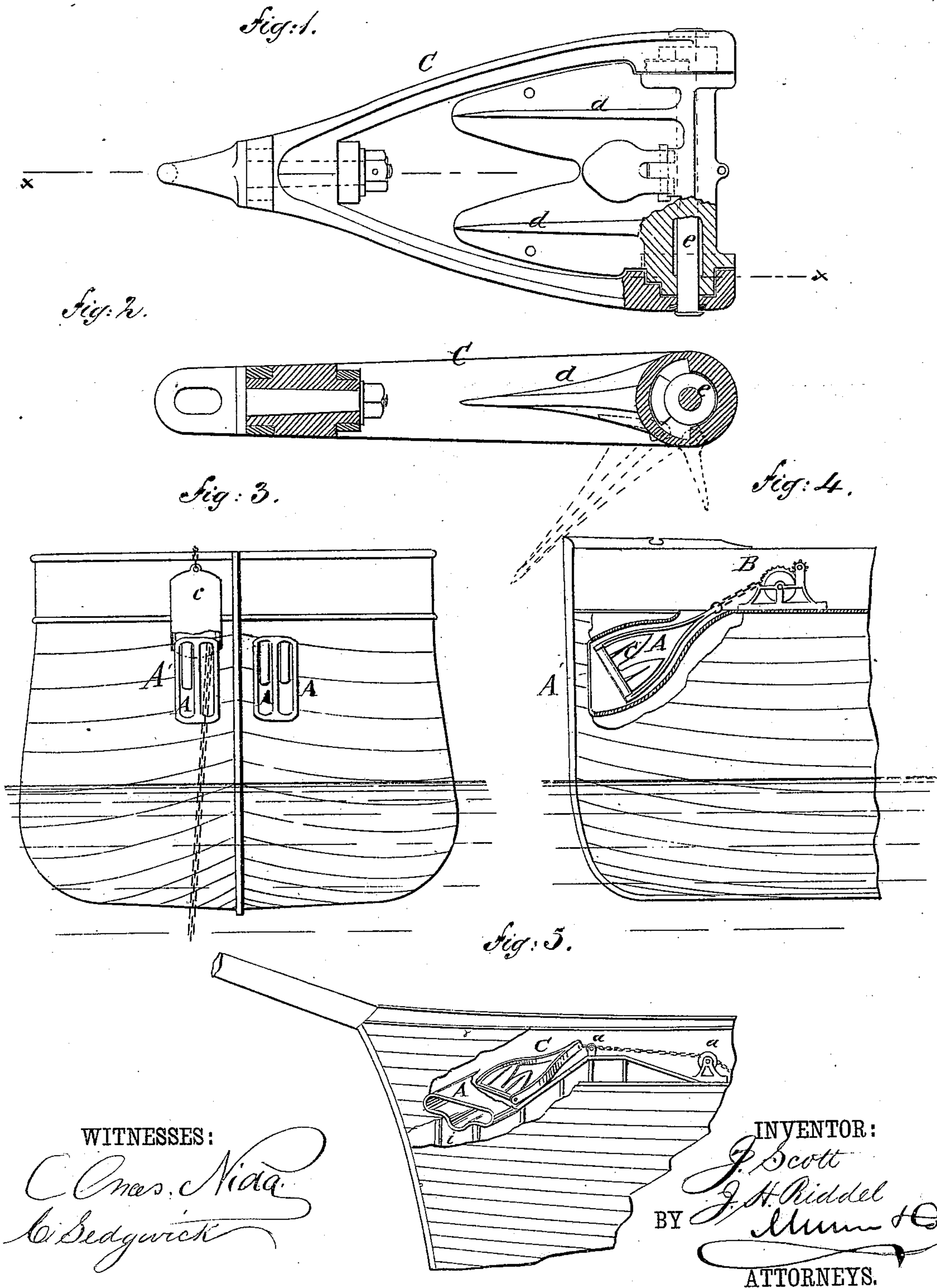
(Model.)

J. SCOTT & J. H. RIDDEL.

ANCHOR WELL FOR VESSELS.

No. 253,112.

Patented Jan. 31, 1882.





# UNITED STATES PATENT OFFICE.

JAMES SCOTT AND JOHN H. RIDDEL, OF GLASGOW, COUNTY OF LANARK,  
SCOTLAND, ASSIGNORS TO SAID SCOTT.

## ANCHOR-WELL FOR VESSELS.

SPECIFICATION forming part of Letters Patent No. 253,112, dated January 31, 1882.

Application filed February 26, 1881. (Model.) Patented in England December 27, 1878.

*To all whom it may concern:*

Be it known that we, JAMES SCOTT and JOHN H. RIDDEL, of Glasgow, in the county of Lanark, Great Britain, have invented a new and useful Improvement in Modes and Means of Housing or Securing Anchors on Vessels, of which the following is a specification.

Our invention has reference to fittings or appliances in and connected with vessels for housing and securing anchors for their protection, and which will enable such anchor to be more quickly, perfectly, and snugly secured when not in use, while being always ready and more easily "let go" or "cast," "weighed" or "drawn in," with greater saving of labor than has been possible by the methods or fittings heretofore employed for those purposes.

Our invention consists in a housing-chamber of suitable size and shape fitted in the vessel for receiving the anchor bodily, as described and claimed hereinafter.

In the accompanying drawings, Figure 1 is a sectional plan view, and Fig. 2 a longitudinal section, of an anchor of the construction we prefer to employ. Fig. 3 is a front elevation of a vessel having our improvements applied. Fig. 4 is a side elevation of the vessel with the housing-chamber broken away; and Fig. 5 is a sectional elevation representing a modification.

Similar letters of reference indicate corresponding parts.

Referring to Figs. 3 and 4, A are the housing-chambers, the same being an elongated hawse-hole for each cable and anchor, large enough to receive and protect the anchor, and preferably formed to house the anchor vertically; but they may be placed to house the anchor horizontally, as shown in Fig. 5. These chambers A are placed at or near the bow of the vessel, and have an inclination longitudinally of the vessel, in line or nearly with the anchor-chain from capstan B, so that by use of the capstan the anchor can be at once drawn into its receiving-chamber.

C represents the anchor as housed. If necessary to place the capstan otherwise, guide-rollers *a a*, as shown in Fig. 5, can be used to guide the chain.

By using this housing-chamber we do away

with all the cumbersome and expensive fittings heretofore employed—such as cat-heads, blocks, tackle, stoppers, davits, &c.—and also save the time and labor and wear and tear of material required in performing these operations as heretofore practiced. The anchor is held free to be let go at any moment, and the whole fore-castle-deck is left free for the ordinary work in managing the vessels, and on war ships for manipulating the bow-guns.

In ordinary vessels one housing-chamber, A, will be provided at each side in place of the usual hawse-holes; but for large vessels there may be two at each side. They are preferably formed by malleable-iron plates secured to or between the main frames of the ship, so as not to cut the same, and having their outer portions fitted with frames A', of wrought or cast metal, secured to the outer planking or plating of the vessel. The lower edge or lip of the opening is made rounded for the free and easy running of the chain. There may be a door, as shown at *c*, fitted in frame A' to slide or swing for the purpose of excluding sea-water, and to prevent any obstruction fouling with the opening.

The chambers A will of course be formed to correspond with the anchors used, which may be of any ordinary construction. The anchor C, (shown in Figs. 1 and 2,) to which the chambers shown are adapted, has its main portion made in form of a triangular frame, with flukes *d* hung at the base of the triangle by a cross-bolt, *e*, so that they may turn into the frame. With this or other forms of swiveling flukes the chambers A would have the flat or narrow form shown. When placed in a vertical position the anchors must necessarily turn from a horizontal to a vertical position. This is accomplished as it is drawn in consequence of the curvilinear shape given to the anchor-frame, and by the shape of the lower edge of the opening, so that the anchor will not jam as it is drawn in. When the chamber is placed horizontal a rounded groove, *i*, is formed in its bottom, at the middle of the opening, for the purpose of guiding the cable in and out, and to prevent it from slipping when the vessel is riding at anchor.

It is to be understood that these housing-

chambers may be fitted at the stern of a vessel as well as at the bow.

A screw locking bolt or chock may be suitably fitted to hold the anchor in the chamber  
5 and prevent it from shaking.

Having thus fully described our invention, we claim as new and desire to secure by Letters Patent—

A vessel having an inclined anchor-chamber  
10 open at both ends and extending from the deck through the hull to a point above the water-line, and provided with a sliding cover, the said chamber conforming in shape to the

shape of the anchor, substantially as herein shown and described, and for the purpose set  
15 forth.

In testimony whereof we, the said JAMES SCOTT and JOHN HUTTON RIDDEL, have signed our names to this specification in the presence of two subscribing witnesses.

JAMES SCOTT.

JOHN HUTTON RIDDEL.

Witnesses:

R. C. THOMSON,

IRA FAIRWEATHER.