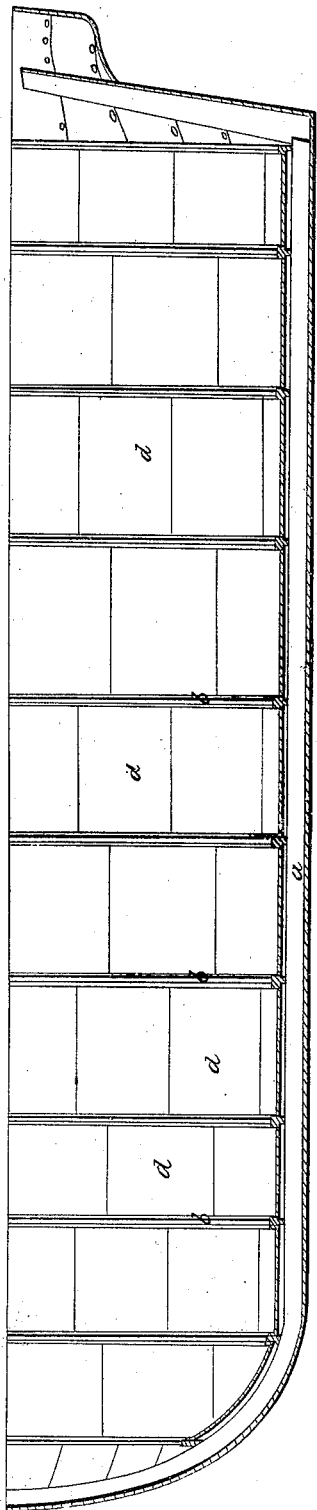


*Kerr, Grant & Potter.*  
*Iron Ship.*

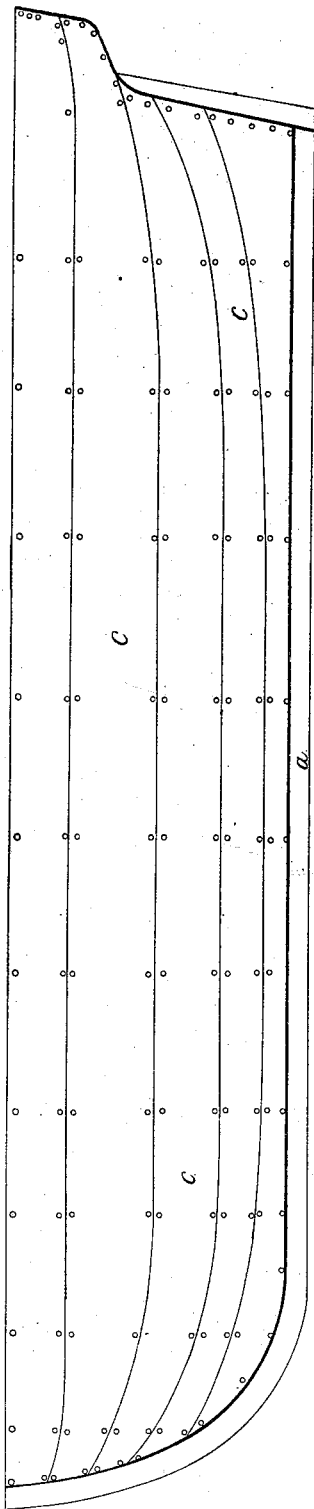
*Nº 2,612.*

*Patented May 7, 1842.*

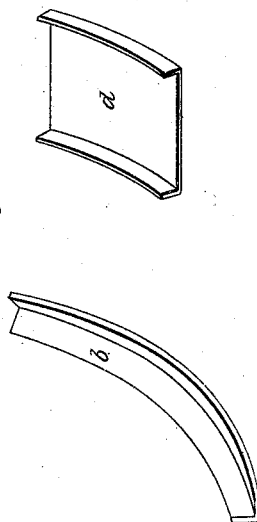
*Fig. 2.*



*Fig. 1.*



*Fig. 3.*



# UNITED STATES PATENT OFFICE.

JAMES KERR, WM. GRANT, AND JNO. POTTER, OF PITTSBURGH, PENNSYLVANIA.

## MANNER OF LINING VESSELS CONSTRUCTED OF SHEET-IRON.

Specification forming part of Letters Patent No. 2,612, dated May 7, 1842; Reissued October 14, 1842, No. 47.

*To all whom it may concern:*

Be it known that we, JAMES KERR, WM. GRANT, and JOHN POTTER, of Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented a new and Improved Mode of Constructing Iron Vessels, and that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is an outside view; Fig. 2, an inside view; Fig. 3, parts detached.

The letters of reference on the different parts are the same in all the figures.

15 In constructing any kind of iron vessel, used in navigation, we form the keel (*a*) in the usual way, and cover the ribs (*b*), which are formed of "angle iron," with sheets or plates of iron (*c*), as is now generally done in similar structures; but in order to protect the vessel more effectually from leaking by the springing of the rivets, from ice, shot, &c., we line the inside of the vessel throughout with sheet metal (*d*) between the ribs, the edges being turned out at right angles to form flanches, which are firmly riveted to the ribs, and the joints calked water tight, thus forming chambers between the ribs, and

rendering the vessel more buoyant should she spring a leak, as each chamber is entirely insulated from the others and constitutes a separate buoy. It will thus be evident that should the outer sheathing of the vessel be injured between any two or more of the ribs that chamber only will fill with water, the rest of the vessel continuing to retain its buoyancy. It is also more stiff, and the necessity for bulkheads is entirely superceded.

What we claim as our invention, and desire to secure by Letters Patent is—

The lining iron vessels, used in navigation, between the ribs with metal, so as to form water tight chambers all around the sides, in the manner and for the purpose above described.

JAMES KERR.

WM. GRANT.

JOHN POTTER.

Witnesses of the signature of James Kerr:

J. J. GREENOUGH,

J. H. GODDARD.

Witnesses to the signatures of Wm. Grant and John Potter:

WM. J. MILLER,

MICHL. TRACY.