

H. H. SIEBE, W. A. GORMAN & T. CHRISTY, Jr.
Camels for Raising Sunken Vessels.

No. 141,083.

Patented July 22, 1873.

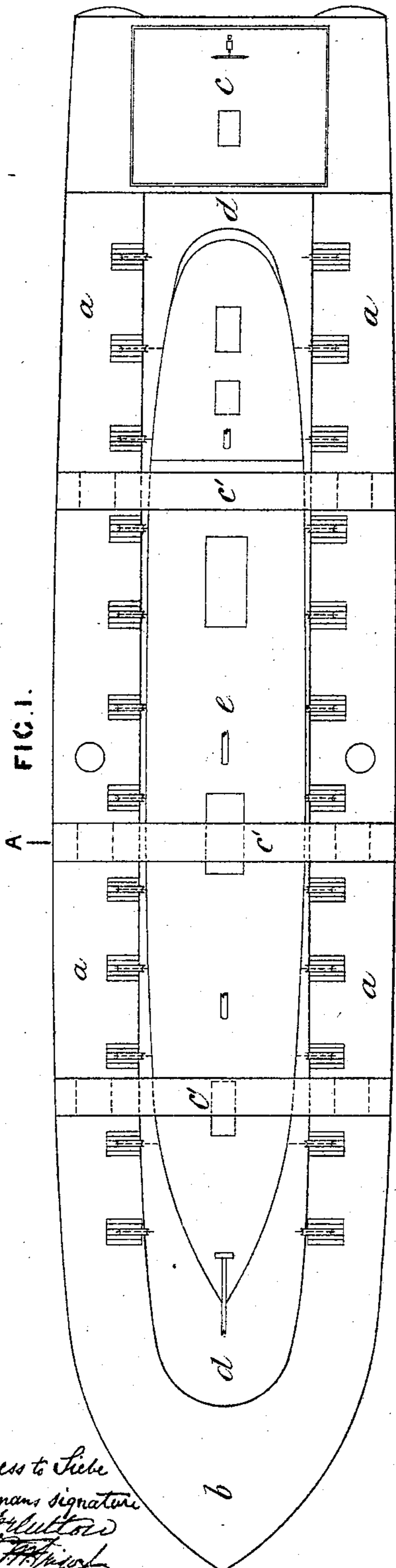


FIG. 1.

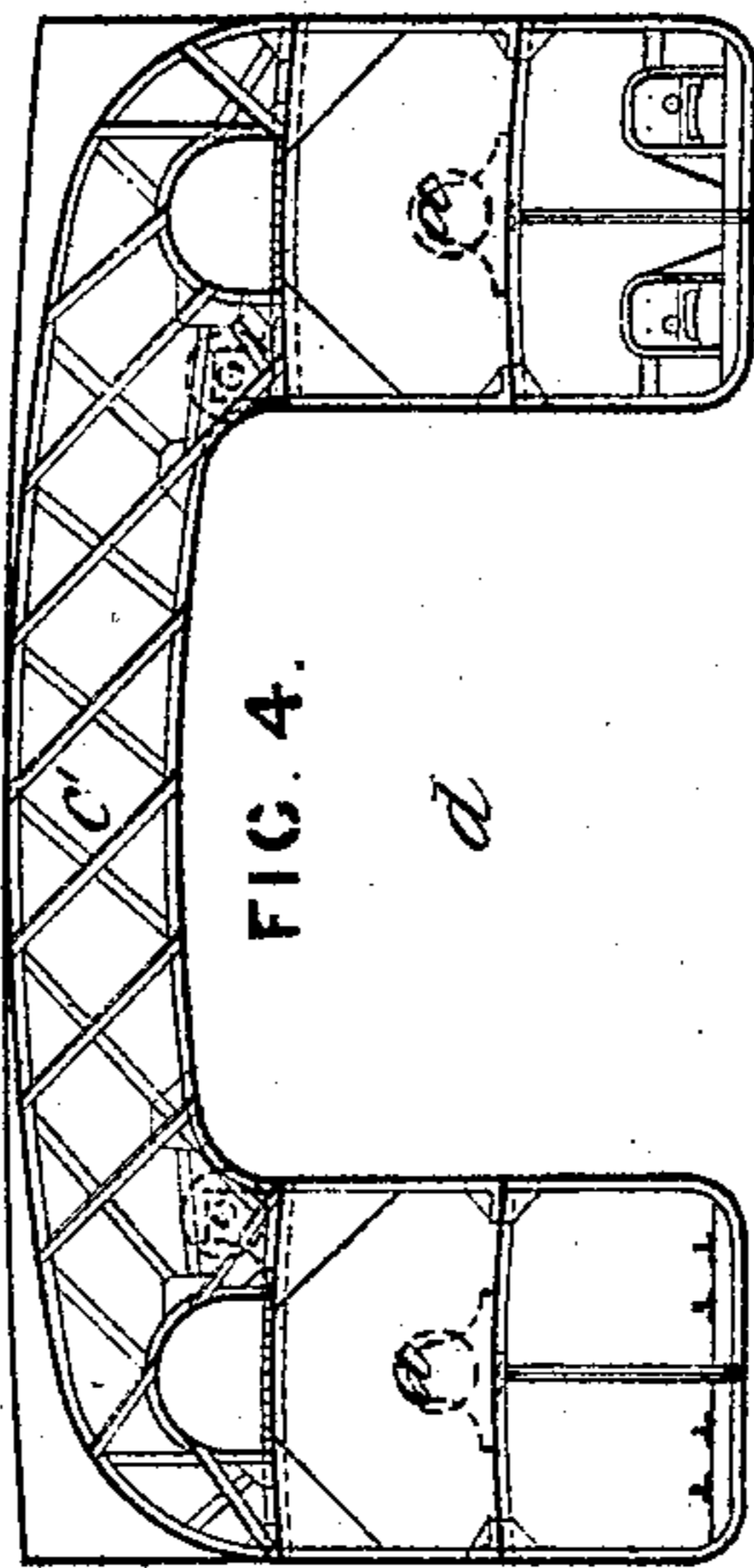


FIG. 4.

FIG. 3.

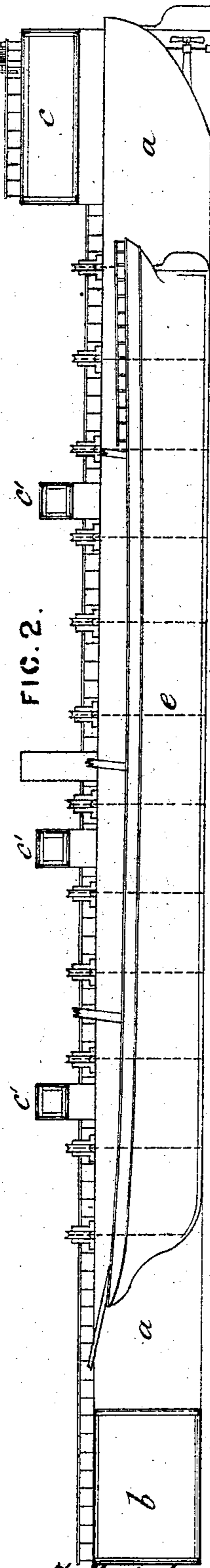
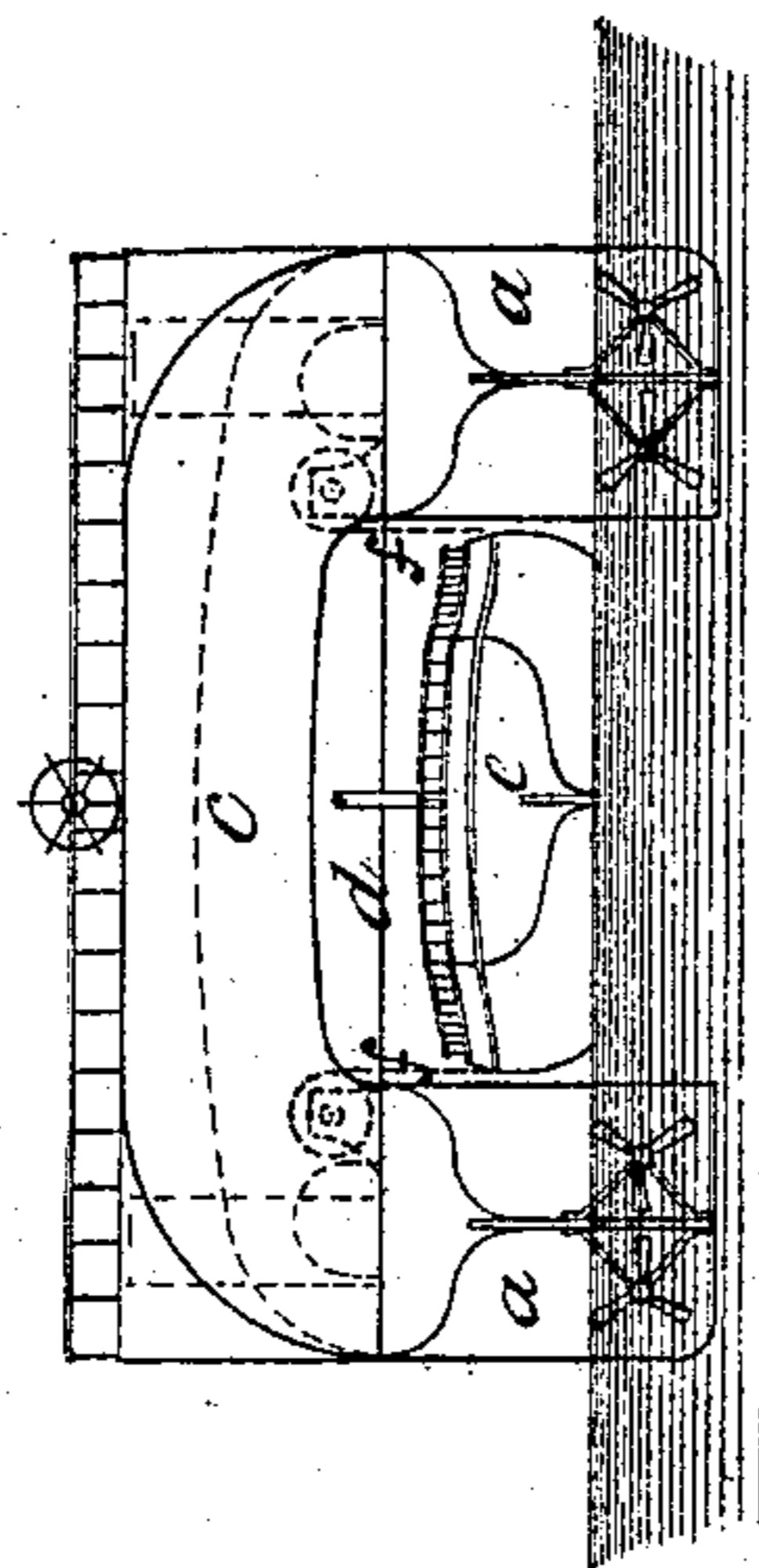


FIG. 2.

Witness to Siebe
Gorman's signature
H. H. Siebe
Witness to Mr. Christy's signature
W. A. Gorman — T. Christy, Jr.

H. H. Siebe
W. A. Gorman
T. Christy, Jr.

UNITED STATES PATENT OFFICE.

HENRY H. SIEBE, WILLIAM A. GORMAN, AND THOMAS CHRISTY, JR., OF
LONDON, ENGLAND.

IMPROVEMENT IN CAMELS FOR RAISING SUNKEN VESSELS.

Specification forming part of Letters Patent No. **141,083**, dated July 22, 1873; application filed
July 1, 1873.

To all whom it may concern:

Be it known that we, HENRY HEREPATH SIEBE, WILLIAM AUGUSTUS GORMAN, and THOMAS CHRISTY, Jr., of London, Kingdom of Great Britain and Ireland, have invented an Improved Vessel for Raising Sunken Ships or other bodies, of which the following is a specification:

This invention has for its object an improved construction of vessel for the purpose of raising sunken ships or other bodies; and we construct a vessel wherein two lateral parts with a free open space or water-way between them are at one end united in the form of a bow or prow, more or less resembling an ordinary ship's bow, and at the other end (as well as at suitable intervals, when necessary) are connected by a bracing structure or bridge above the water-line, the vessel so constructed being provided with lifting apparatus arranged for lifting sunken ships or other bodies, as hereinafter explained.

In the accompanying drawings, which represent what we consider the best means of carrying out the invention, Figure 1 is a plan of the vessel. Fig. 2 is a side elevation thereof. Fig. 3 is a back elevation, and Fig. 4 is a transverse section on the line A B of Fig. 1 to an enlarged scale.

The vessel consists of a single structure so constructed that its two lateral parts *a a* stand parallel, or nearly so, to each other for a considerable portion of the vessel's length, and are gradually curved toward each other at their fore ends, where they unite in the form of a single bow, *b*, built somewhat like the bow of an ordinary vessel, as shown. The rear ends of the two parts or portions *a a* of the vessel are rigidly connected together at a considerable distance above the vessel's water-line by means of a bridge or connecting structure, *c*, passing over the space between the two parts or portions *a a* of the hull, and firmly secured thereto and to their keelsons; and in some cases—as, for instance, for raising ships of large size—we construct our vessel with intermediate strengthening bridges or connections *c'*, as shown in the drawing. Our plan of constructing the vessel with a free open space, *d*, between the lateral parts *a a*, and

with a free opening at the stern where the two lateral parts are connected by means of the connecting-bridge *c*, placed above the water-line, as described, enables the vessel to be readily moved stern foremost into position for raising a sunken ship or other body, *e*, even when portions of such sunken ship or body extend to or above the level of the water in which it is sunk. The free space *d* provided, as above described, between the two parts or portions of the hull is made of sufficient length and width, and ample clearance is left under the connecting-bridges, to allow of a sunken ship or other body being raised, by means of any suitable raising-machinery provided with tackle *f*, into position between the two parts or portions *a a*, and to be there securely held or supported, whereupon the ship or body so raised can be towed or moved away by our improved vessel, which is provided with suitable engines and propelling and steering apparatus of the ordinary construction, as used in steam-vessels. The after connection *c* strongly unites the side parts *a a*, and allows the steering apparatus, as also the propelling apparatus of the two parts, to be there connected together, if desired.

We build this peculiarly-constructed vessel in water-tight compartments, of the usual construction, provided with strengthening-girders or bulk-heads, and furnished with cocks or sluice-valves and pumping-machinery so as to admit water when necessary into the water-tight compartments for lowering the vessel as required, and to afterward remove such water from the said compartments to obtain the necessary floating power for raising the sunken ship or body, instead of raising entirely by the machinery.

And having now described the nature of our said invention and the manner of performing the same, we would have it understood that we are aware attempts have been made to employ for the above-mentioned purpose vessels of various construction, which have been proposed to be used conjointly, and where two vessels have been proposed to be used, one on each side of the sunken ship or other body intended to be raised; but such attempts have not been successful, owing to the want

of a proper connection being established and preserved when two or more vessels have been so proposed to be used; and we furthermore declare that we do not claim as of our invention or the exclusive use of the several parts hereinbefore described or referred to, except in the combinations specified.

We claim as our invention—

The within-described single vessel for raising sunken ships or other bodies, in which two lateral parts, *a a*, uniting in the form of an ordinary bow or prow, *b*, are rigidly connected above the water-line by a structure or bridge, *c*, with or without intermediate structures or bridges *c'*, and provided with lifting apparatus and tackle, the whole being arranged and

operating as herein set forth, for the purpose specified.

HENRY HEREPATH SIEBE.
WILLIAM AUGUSTUS GORMAN.
THOS. CHRISTY, Jr.

Witnesses to the signatures of HENRY HEREPATH SIEBE and WILLIAM AUGUSTUS GORMAN:

W. HUTTON, 68 *Claverton street*.
T. W. FRIGOUT, *Consulate General, U. S. A., London*.

Witnesses to THOS. CHRISTY's signature:
W. LLOYD WISE, *Patent Agent, London*.
H. NUPPNAN, *Clerk, 155 Fenchurch street*.