Meeker & Bergen.

Marine Camel.

No. 749.

Patented May 26, 1838.

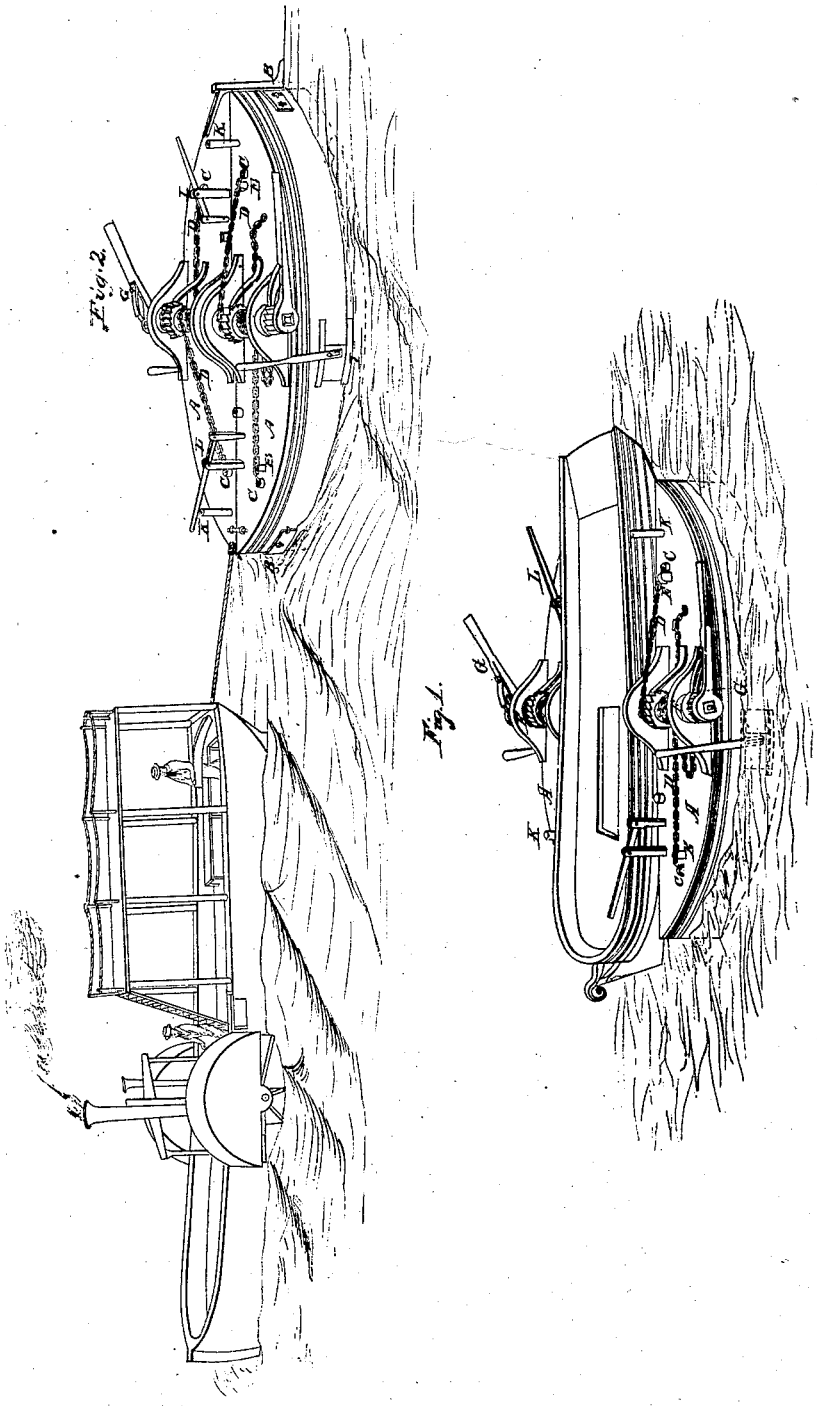

Fig. 2.



Fig. 1.

# UNITED STATES PATENT OFFICE.

HIRAM L. MEEKER AND JAMES BERGEN, OF JERSEY CITY, NEW JERSEY.

## MACHINERY FOR RAISING AND CARRYING SHIPS.

Specification of Letters Patent No. 749, dated May 25, 1838.

*To all whom it may concern:*

Be it known that we, HIRAM L. MEEKER, of Jersey City, county of Bergen, State of New Jersey, and JAMES BERGEN, of the city, county, and State of New York, have invented a new and useful machine for raising and floating vessels when sunken, stranded, bilged, grounded, or otherwise situated, laden, or unladen, with or without masts, or otherwise, or to be used for any purpose to which it can be applied, called "The Ship-Carrier", which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

The nature of our invention consists in the construction of two vessels A, A Figures 1 and 2, which we will call "carriers," built of strong and suitable materials, and very heavily fastened and secured with timber diagonally braced and with knees and clamps, said carriers being built of such shape that they will adapt themselves to the sides of a ship—that is, concave on the sides applied to the ship to be lifted and convex on the opposite sides. Each carrier is built sharp at its two ends and partly in the form of a crescent so that when not in use at a ship's sides or when about to be towed to the place where they are to be used they may be joined together and be secured with heavy iron clasps in the manner represented at Fig. 2 in which B are the clasps so that when thus united they bear a strong resemblance to a common sailing boat, as may be seen by reference to said Fig. 2 and the carriers thus united may be towed from place to place. Through each of these carriers two cast iron vertical tubes C, C, are inserted for the purpose of receiving the heavy iron chains or cables D, D, which extend under the ship's bottom and around her bows and stern when to be lifted.

At the end of each tube there is provided an iron anti-friction conducting roller E for the chains to ride on, the gudgeons of which turn in ears of castings bolted to the deck.

The chains D′ are hove taut by means of a windlass F placed in or near the center of the deck of the carrier, the windlass of each carrier being capable of receiving both chains and heaving both taut at the same time one chain going under and the other over each windlass.

The power by which the chains are hove taut is gained by an extensive lever such as is represented at G which may be shortened or lengthened at pleasure and which does not require to be unshipped until the chains are hove taut. The chains used D are so secured under the ship as not to injure her copper or sheathing.

The carriers have in each side near the bottom a square valve I and on the deck of each an air pipe K is inserted of indefinite length which may be opened at pleasure. The carriers can thus be instantly sunk or hove down to the bottom or as deep as occasion may require. When the carriers are hove down and sunk and the chains placed under the vessel and made taut the valve I is closed and the water is then pumped out by means of pumps L of the most approved construction for the purpose, which may be lengthened or shortened at pleasure.

When a ship or vessel is not sunk and is merely to be lifted and transported over a bar a short pump is used by which two men can pump the carrier dry. As the water is pumped out the buoyancy of the carriers is increased and they rise and gradually lift the vessel suspended to them by the chains.

Among the important results to be produced by the before described invention and improvement are, that this carrier will not only lift immense weights out of rivers, lakes, and still waters, but will lift them and carry them off a rough sea coast when stranded and exposed to a heavy surf and raise them out of any depth of water at sea, less fifteen fathoms. Besides this it will lift a ship over any bar without the delay and danger of unloading and that it will accomplish this in less than three hours without injuring the ship, while vessels now have occasionally to lie many days on the bars of our principal rivers in very exposed and dangerous situations.

The invention claimed and desired to be secured by Letters Patent consists in—

The before described construction of the ship carriers in sections of the above form so that they can be united by clasps in such a manner as to present the appearance

of a double pointed boat which can be towed, floated, or propelled with the machinery required to the place where said carriers are to be used and then separated and arranged on the sides of the ship or body to be raised, the chains passing under the same and made fast to the windlasses on the carriers. Also the combination and arrangement of the pumps, valves, air tubes, windlasses, chains and rollers in the manner and for the purposes herein set forth.

HIRAM L. MEEKER.
JAMES BERGEN.

Witnesses:
CLEMENT T. COOTE,
CLAUDIA ARGUELLES.