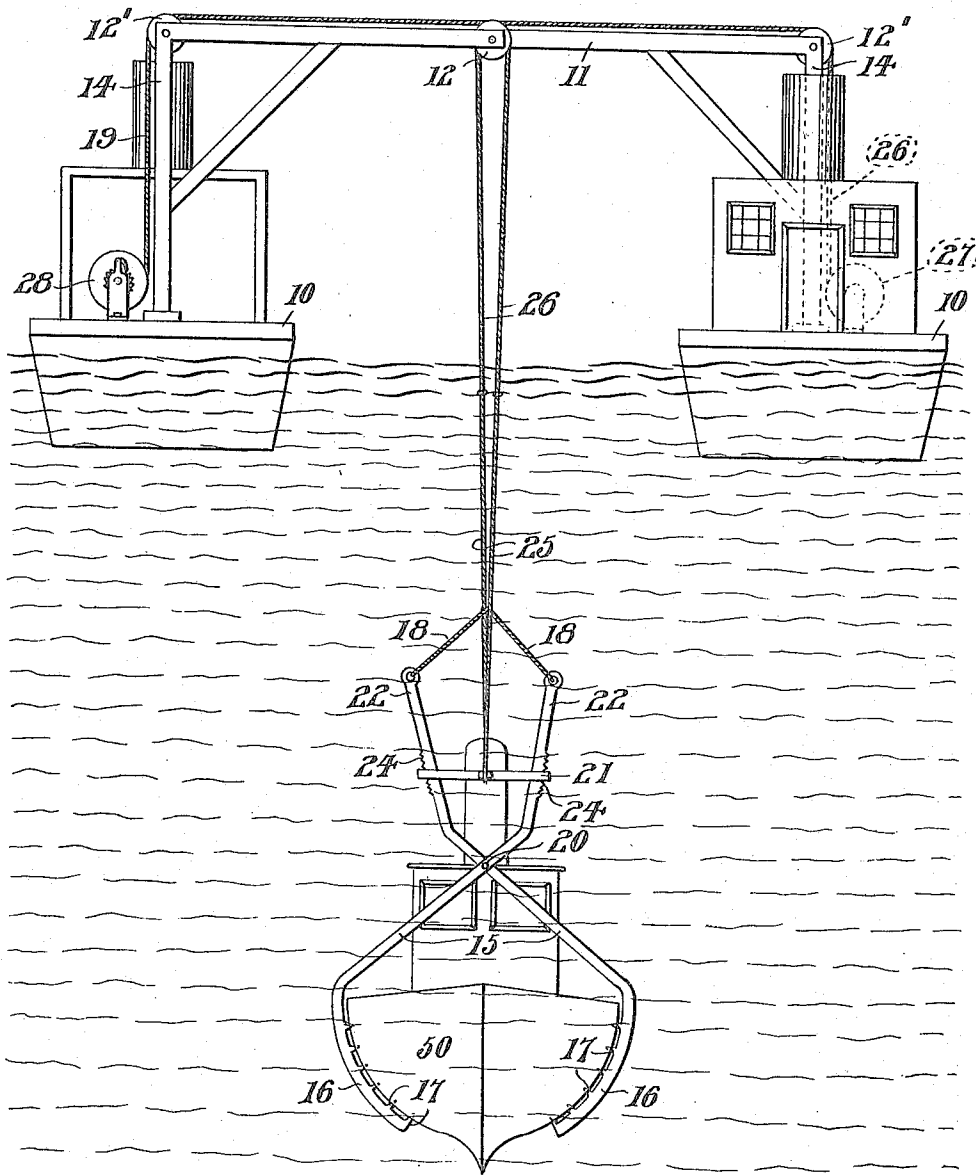


M. VECSEY.
SHIP RAISING APPARATUS.
APPLICATION FILED SEPT. 9, 1914.

1,135,338.

Patented Apr. 13, 1915.
2 SHEETS—SHEET 1.

Fig. 1.



Witnesses

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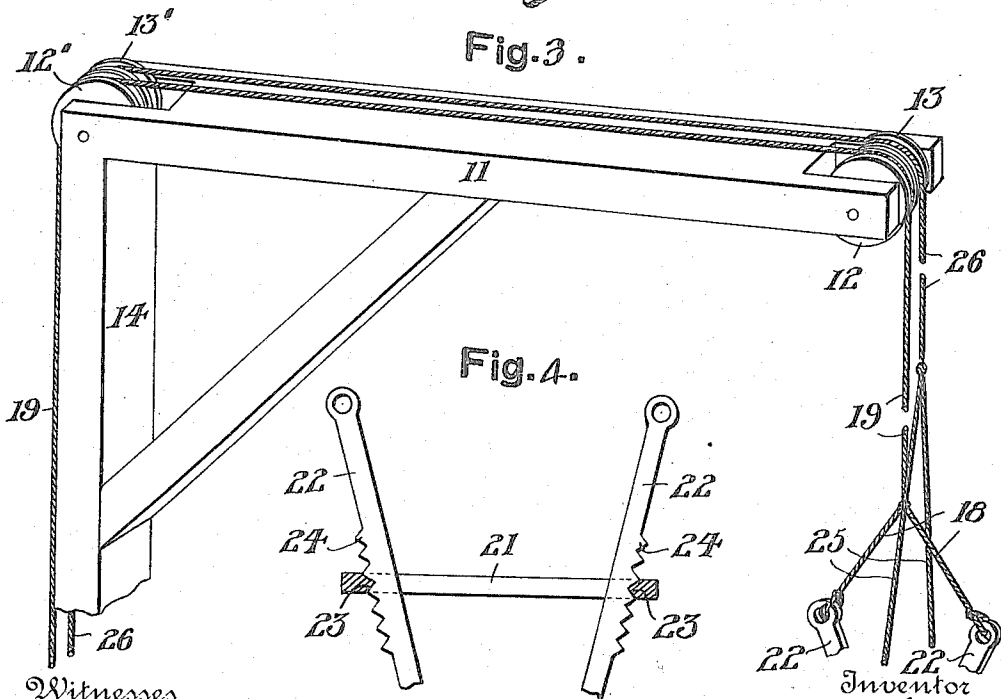
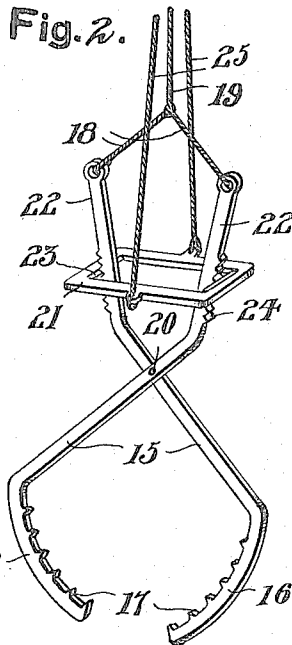
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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

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SHIP-RAISING APPARATUS.

1,135,338.

Specification of Letters Patent.

Patented Apr. 13, 1915.

Application filed September 9, 1914. Serial No. 860,928.

To all whom it may concern:

Be it known that I, MIKE VÉCSEY, subject of the King of Hungary, residing at Allouez, in the county of Keweenaw and State of Michigan, have invented certain new and useful improvements in Ship-Raising Apparatus, of which the following is a specification.

This invention relates to certain new and useful improvements in ship raising apparatus.

The primary object of this invention is to provide a ready means for raising a sunken vessel from its position at the bottom of the water, and the invention contemplates an improved form of grappling tongs adapted for engaging the vessel in the raising operation.

A further object of the invention is to provide a system of raising submerged vessels by positioning derrick barges above the sunken vessel, and then attaching an improved form of grapple tongs thereto and raising the vessel to a floating position upon the surface of the water between the barges.

With the above objects in view and others that will appear as the nature of the invention is better understood, the same consists in the novel combination and arrangement of parts to be hereinafter more fully described, illustrated in the accompanying drawings, and set forth in the appended claims.

In the drawings forming a part of this application, and in which like-designating characters refer to corresponding parts throughout the several views, Figure 1 is an elevational view of the complete device illustrating the tongs in engagement with a ship to be elevated and submerged within the water. Fig. 2 is a perspective view of one of the grappling tongs, the supporting cables being broken away. Fig. 3 is a perspective view of the upper portion of one of the derricks, and tongs, and Fig. 4 is an enlarged view of the upper portion of one of the tongs with the locking link in its locked position, and illustrated in section.

Referring more in detail to the drawings, the two barges 10 are illustrated each being provided with a derrick consisting of an upright post 14 mounted upon the deck of the barge, and having an angularly projecting horizontal arm 11 at the top thereof, while two pulley wheels 12 and 13 are jour-

naled in the outer free ends of the said arms.

The grappling tongs employed are of the form illustrated in Fig. 3, and consist of the pivoted arms 15 having inwardly curved jaws 16 at their lower ends which are provided with teeth 17 upon their inner faces. The upper ends of the arms are connected together by a cord 18 to which is attached the hoisting cable 19, and by which construction it will be evident, that an upward impulse imparted to the cable 19 will move the tong arms upon their pivot 20 and thereby tending to close the jaws thereof. A locking link 21 herein illustrated as rectangular in form encircles the upper ends 22 of the tong arms and is provided with inner sharpened edges 23 upon each end thereof for engagement with the outer teeth 24 formed upon the arm portion 22. Two cords 25 are attached to the link 21 and have their upper ends secured to an elevating cable 26.

The link cable 26 passes over the pulley 13 of the derrick arm 11 and thence over a corresponding pulley 13' at the inner end of said arm, and passes to a point adjacent the deck of the supporting barge and is there positioned upon a winding drum 27 and by means of which the link may be elevated and lowered and thus adjusted by the agency of the said cable 26. The tong supporting cable 19 similarly passes over the pulley 12 of the derrick and thence over a similar pulley 12' at the inner end of the supporting arm and has its other end wound upon a drum 28 upon the deck of the supporting bars, and whereby as will be evident, the grappling tongs which is attached to the cable 19 may be elevated and lowered as desired by turning the said drum 28. By this arrangement it will be evident that the barges 10 may be positioned spaced apart above the sunken vessel herein illustrated at 50, the barges being arranged in such a manner that the derrick arms 11 will project toward each other and above the opposite end portions of the vessel 50 as best illustrated in Fig. 2. By unwinding the drums 27 and 28, the tongs and links are released in a manner to allow the divers to separate the jaws and position the same at the opposite sides of the sunken vessel as illustrated in Fig. 1, and with the link 21 in its lowered, unlocked position. A turning of the drums 27

will then elevate the links 21 thus forcing the same in arresting movement over the tong teeth 24, and with which teeth the links will be brought into rigid locking engagement. The ship 50 will then be raised to the surface of the water by winding up the cables 19 upon the drums 28, while simultaneously therewith the drums 27 may also be actuated, thus assisting in elevating the vessel.

While the forms of the invention herein shown and described are what are believed to be the preferred embodiments thereof, minor changes may be made in the form thereof, without departing from the spirit and scope of the invention as set forth in the claims.

What I claim as new is:—

1. A ship raising tongs comprising arms pivoted together, curved inwardly projecting jaw portions at the lower ends of said arms, inwardly positioned teeth upon said jaws, outwardly positioned teeth upon the upper portions of said arms, an elevating

cable secured to the upper ends of said arms, a link encircling the upper ends of said arms and having sharpened inner portions engaging said outwardly projecting teeth, and an elevating cable attached to said link adapted upon upward movement for locking positioning said link when the jaw teeth are in engagement with the work.

2. A ship raising tongs comprising arms pivoted together, gripping jaws at the lower ends of said arms, an elevating cable secured to the upper ends of said arms, a link encircling the upper ends of said arms, and an elevating cable attached to said link, the opposed faces of the link and upper ends of the arms adapted to co-act to be held in substantially rigid condition.

In testimony whereof I affix my signature in presence of two witnesses.

MIKE VÉCSEY.

Witnesses:

ALBERT LOUIS,
JOHN FEKETY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."