T. JOHNSON & C. JACOBSON.
APPARATUS FOR USE IN RAISING WRECKS.
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INVENTORS

IN THE NAMES OF
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APPARATUS FOR USE IN RAISING WRECKS.

To all whom it may concern:

Be it known that we, THEODOR JOHNSON and CORNELIUS JACOBSON, citizens of the United States, residing at Chinook, in the county of Pacific and State of Washington, have invented certain new and useful Improvements in Apparatus for Use in Raising Wrecks, of which the following is a specification.

Our invention is an improvement in that class of apparatus employed for raising wrecks in which hoisting devices are applied to some form of float and chains are connected with such devices and adapted to be passed around the submerged wreck.

Our invention is embodied in a simple and inexpensive form of apparatus which may be easily manipulated, which is adapted to maintain its position upon the float, and which is provided with two screws at each end, the same being adapted for attachment of chains and operating in the manner hereinafter described.

In the drawings, Figure 1 shows our invention as in use with a single float. Fig. 2 is a top plan view of the float. Fig. 3 is a detail end view showing the cross-beams and the screw-supporting beam thereon and illustrating how the screws may be alternately connected to the lifting-chain, as will be more fully described hereinafter. Fig. 4 is a detail view of a section of the chain, and Fig. 5 shows a double arrangement of floats.

In carrying out our invention we employ floats designed to be arranged adjacent to the wreck to be raised and having supports for screws which may be operated to exert a lifting force on chains passed beneath or suitably connected with the submerged wreck.

In the construction shown the floats A are in the form of boat-hulls and are provided with the transversely-extended beams B and C, arranged in pairs and spaced apart and suitably secured and extended at their ends beyond the sides of the float and supporting on such extensions the beams C, which extend between and rigidly connect the extended ends of the beams B and are provided between the said beams B with openings C for the passage of the screws D. Upon the beams C are provided steel plates E, having openings E' in alignment with the openings and adapted to permit the passage of the screws D, which receive the nuts F', threaded on the screws and bearing above the steel plates E, as shown. These nuts are turned by wrenches of steel provided with ratchets, as shown, so the wrench can be operated from the deck of the float, as desired. The screws are provided at their lower ends with eyes, as shown. It will be noticed that each of the beams C supports two of the screws D, which extend side by side, one of the screws operating to hold the chain when the other screw has been run out until such screw has been readjusted to position for use, or manifestly the screws may be used alternately, as desired. In practice we make the screws six feet long, three inches in diameter, and with one-half-inch flat thread.

The chains G are preferably truss-chains, as shown, suitably proportioned to the screws, and in practice may be passed from the screws on one side of the float down under the wreck and then up and secured to the screws on the opposite side of the float, or the floats may be arranged on opposite sides of the wreck and be used jointly for raising the same. The screws are shown as provided at their lower ends with openings d for the connection of the couplings or clevises H, to which the chains may be secured in any suitable manner.

By extending the transverse beams B from side to side of the hull and beyond its opposite sides the lifting strain may be so distributed as to keep the hull or float on an even keel, and thus facilitate the operation of the invention in rough water. The transverse beams also distribute the strain upon the hull or float, and thus avoid injury thereto.

In the double arrangement of floats shown in Fig. 5 the chains run from the outside of one float to the inside of the other float, and thus support the wreck between the two floats, so the latter can be kept on an even keel, as will be understood from Fig. 5.

In the operation of the invention and in the shifting of the lifting-chains from one screw to the other while supporting the weight of a wreck it will be understood, as best shown.
in Fig. 3, that when one of the screws has been connected with the lifting-chain and adjusted upwardly to its full extent the adjacent screw having meanwhile been run down can be connected at its lower end with the lifting-chain under tension and then operated until its lifting action on the chain will relieve the other screw of the stress of the chain, when the first screw can be detached from the chain and the stress of the latter be borne by the second screw, after which the first screw can be adjusted downward to position for connection with the lifting-chain when the second chain has been operated to its full extent to raise the wreck, as will be understood from the preceding description.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. An apparatus for use in raising wrecks, comprising a float, two pairs of beams extended transversely across the same and projecting beyond the opposite sides thereof, cross-beams supported upon the extended ends of each pair of transverse beams, and provided with two vertical openings, metallic plates upon the upper sides of said beams and having openings in alignment with those in the respective beams, screws provided with eyes and passed through the said openings, nuts applied on said screws above the metal plates, and chains adapted to be connected alternately with the lower ends of said screws, substantially as set forth.

2. An apparatus for use in raising wrecks, consisting in connection with a float, of the pair of screws arranged in close proximity whereby they may be alternately connected with the lifting-chain and one screw may be operated to support the chain while the other screw is being readjusted to operative position, and supports for said screws carried by the float, substantially as set forth.

3. The herein-described apparatus for use in raising wrecks consisting of a float, two pairs of beams extended transversely across the same, said pairs being spaced apart and the beams of each pair projecting beyond the opposite sides of the float, cross-beams supported upon the projecting ends of the pairs of beams and arranged outside the line of the sides of the float, each cross-beam being provided with a pair of vertical openings for the screws, and the pairs of screws operating in said openings, the screws of each cross-beam being arranged in close proximity whereby either screw may be connected to the chain, substantially as and for the purpose set forth.

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Witnesses:

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