

(No Model.)

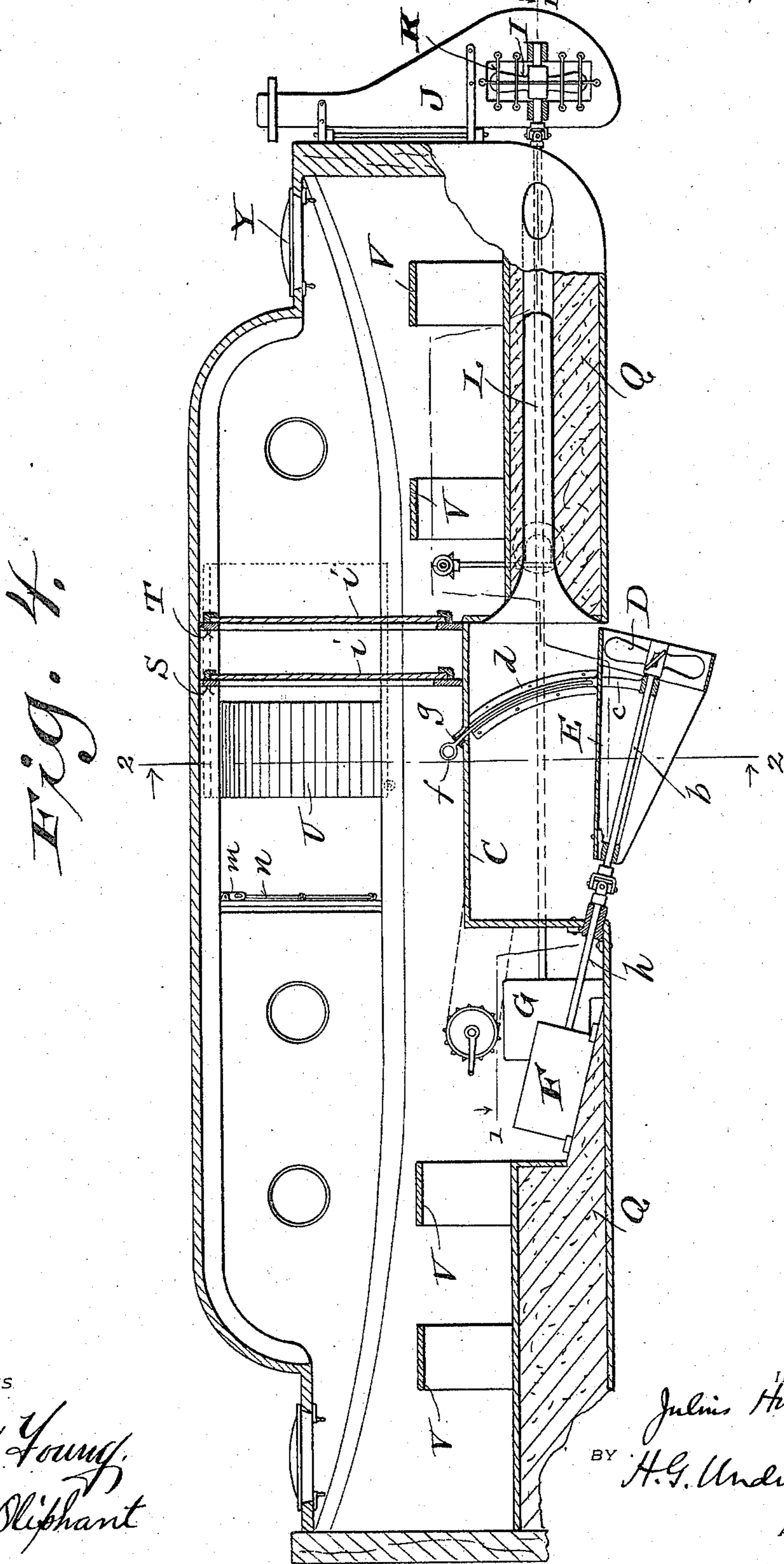
2 Sheets—Sheet 2.

J. HUEBNER.

SCREW PROPELLER FOR LIFE BOATS.

No. 575,158.

Patented Jan. 12, 1897.



WITNESSES.

Geo. W. Young.
N. E. Oliphant

INVENTOR,

Julius Huebner

BY

H. G. Underwood

ATTORNEY.

UNITED STATES PATENT OFFICE.

JULIUS HUEBNER, OF MILWAUKEE, WISCONSIN.

SCREW-PROPELLER FOR LIFE-BOATS.

SPECIFICATION forming part of Letters Patent No. 575,158, dated January 12, 1897.

Application filed December 5, 1895. Serial No. 571,099. (No model.)

To all whom it may concern:

Be it known that I, JULIUS HUEBNER, a citizen of the United States, and a resident of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Life-Boats; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention consists in various structural peculiarities of a life-boat, as hereinafter specified with reference to the accompanying drawings and subsequently claimed.

In the drawings, Figure 1 represents a horizontal section of a portion of my improved life-boat as viewed on the plane indicated by line 1 1 in Fig. 4; Fig. 2, a transverse section on line 2 2 in Fig. 4, the propellers being elevated; Fig. 3, a detail sectional view on line 3 3 in Fig. 2; and Fig. 4, a longitudinal vertical section of said life-boat, the section being taken on line 4 4 of Fig. 1.

Referring by letter to the drawings, A represents the hull of my life-boat, made from any suitable material and provided with a central, preferably two-compartment, water-box C, that extends upward from its bottom. This water-box stiffens the boat and permits the employment of twin propellers D, adjustable to various elevations in proportion to the depth of water under the boat, it being desirable at times to raise said propellers high enough to clear shoals or other obstructions. Each propeller D has its shaft *b* arranged in bearings under a shield E, and the bearing next adjacent to the propeller has wings *c*, that work in curved guides *d* in the water-box. The shields E are provided with eyes *e*, and curved rods *f* for lifting said shields and propellers work in guides *g* on the top of the water-box.

Each propeller-shaft *b* is in universal-joint connection with another shaft *h*, driven by a motor F of such character as may be found most desirable, no attempt having been made to show the motors except by diagram. Another motor G, central of the ones F, drives a shaft H, that runs aft, between the propeller-compartments of the water-box, through the stern of the boat, where it is connected by a universal joint with a journal of a propeller I, having its bearings in the rudder J of the boat, and a cage K is employed as a shield

and fender for the latter propeller. By the employment of propeller I in connection with the rudder of the boat the operation of steering is facilitated, while at the same time this propeller supplements the others in propulsion of the boat.

Extending aft from each compartment of the water-box through the stern of the boat are channels L for the discharge of water from the propellers D when the latter are working above the boat-keel, and lateral channels M, connected to those aforesaid, extend through the sides of said boat, the junction of each longitudinal and lateral channel being controlled by a gate N, operated by suitable gearing. The outer ends of the lateral channels M are provided with rotarily-adjustable bends P, actuated by link-belt and sprocket-wheel gear or such other means as may be found most desirable. By adjusting the gates N to cut off the channels L and open the ones M the operation of backing in shallow water is facilitated, the bends P being placed in the proper position with respect to this operation, and it also follows that the boat may be steered by the discharge of the water through the latter channels should the steering-gear become disabled. When the transverse channels are not needed for the purposes described, they are cut off by the proper adjustment of the aforesaid gates.

The lower portion of the boat is made up of air-compartments filled with cork or other water-light stuff Q that will buoy said boat should the compartments spring leaks. The boat is also provided with exterior longitudinal decks R, that fend waves, and thus prevent rolling or tipping of said boat.

The boat is housed over and divided into crew and passenger compartments by bulkheads S T, parallel to each other a short distance apart. Each bulkhead is provided with a sliding door *i* in order that one may be closed prior to the opening of the other when a person goes from one compartment to another, thus preventing any water in the forward compartment from washing into the one abaft said bulkheads.

The sides of the housing are shown provided with sliding doors U forward of the aforesaid bulkheads, and these doors being closed they are bound tight against their

outer stops by means of antifriction-rollers *k*, journaled in a series of pivotal arms *m*, united by hand-rods *n*, as is best illustrated in Figs. 2 and 3, these pivotal arms being on dead-center when adjusted to hold the door in closed position.

Steam-pipes *p* may be laid along the edges of the openings for the doors to prevent the latter from freezing in closed position.

10 The passenger-compartments of the boat are provided with seats *V* and ventilating-ports *W*, the latter being provided with float-valves *X* for the exclusion of water. The boat is also provided with glazed ports *Y*, the latter being shown in bow and stern portions of the housing.

Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

20 1. A life-boat having a water-box extending upward from its bottom, a channel leading from the water-box through the stern of the boat, and a propeller adjustable in the matter of elevation to come wholly within the water-box.

2. A life-boat having a two-compartment

water-box extending upward from its bottom, a channel leading from each compartment of the water-box through the stern of the boat, and twin propellers adjustable in the matter of elevation to come wholly within said water-box.

3. A life-boat having a two-compartment water-box extending upward from its bottom, a channel leading from each water-box compartment through the stern of the boat, a lateral channel leading from each of those aforesaid through a side of said boat, gates arranged at the junction of the channels, rotarily-adjustable bends on the outer ends of the lateral channels, and twin propellers adjustable in the matter of elevation to come wholly in said water-box.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

JULIUS HUEBNER.

Witnesses:

N. E. OLIPHANT,
B. C. ROLOFF.