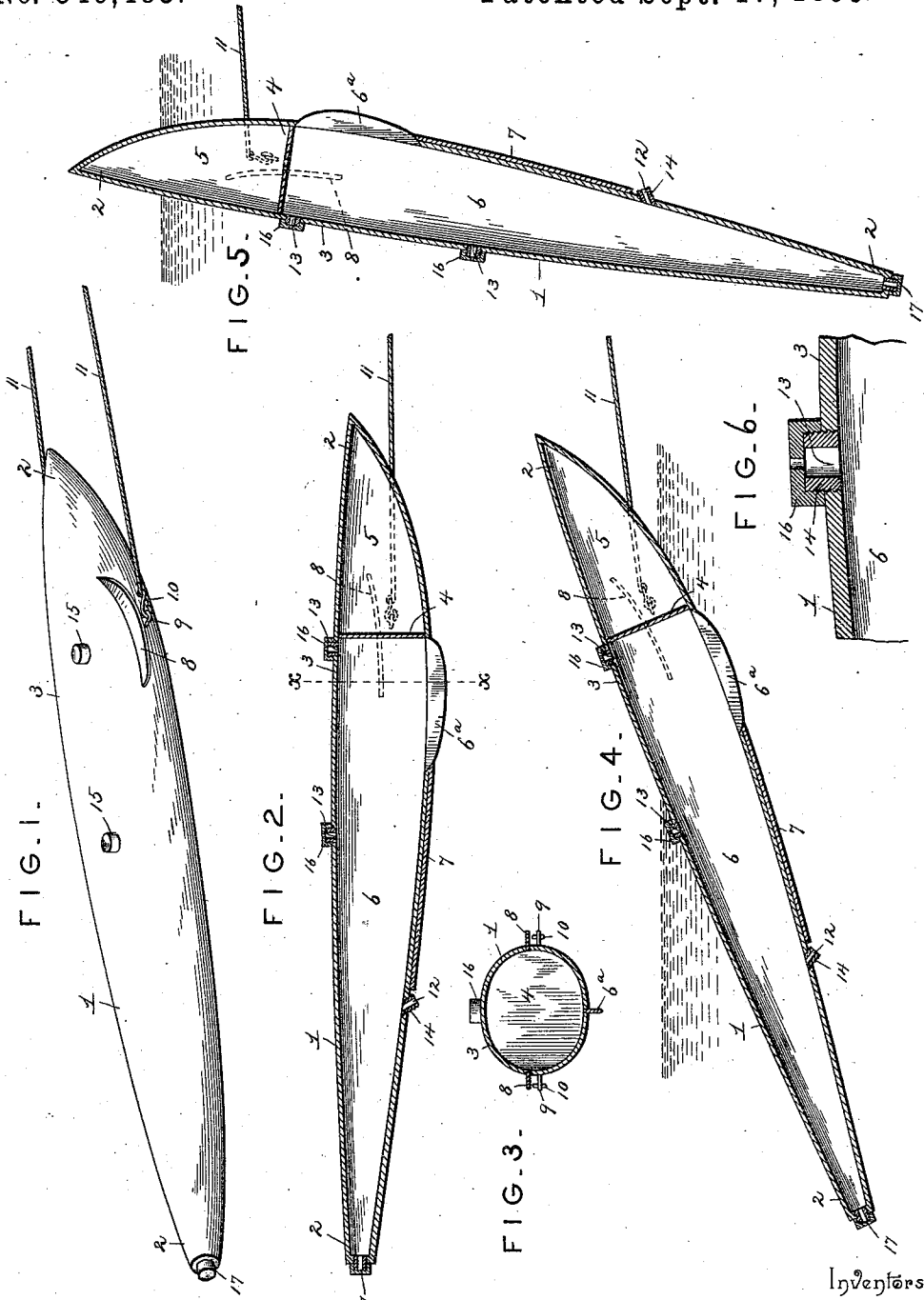


(No Model.)

J. ERICSON & A. PHINNEY.
OIL DISTRIBUTER.

No. 546,485.

Patented Sept. 17, 1895.



Inventors

Witnesses
Harry L. Ames.
D. P. Walchaupt.

John Ericson and
Adelbert Phinney.
By their Attorneys.

C. Snow & Co.

UNITED STATES PATENT OFFICE.

JOHN ERICSON, OF SABINE PASS, TEXAS, AND ADELBERT PHINNEY, OF
EDGARTOWN, MASSACHUSETTS.

OIL-DISTRIBUTER.

SPECIFICATION forming part of Letters Patent No. 546,485, dated September 17, 1895.

Application filed January 9, 1895. Serial No. 534,348. (No model.)

To all whom it may concern:

Be it known that we, JOHN ERICSON, residing at Sabine Pass, in the county of Jefferson and State of Texas, and ADELBERT PHINNEY, residing at Edgartown, in the county of Dukes and State of Massachusetts, citizens of the United States, have invented a new and useful Oil-Distributor, of which the following is a specification.

10 This invention relates to oil-distributers, and it has for its object to provide a new and useful distributor of this character that shall provide simple and efficient means for positively calming the water adjacent to a ship
15 in rough weather.

To this end the main and primary object of the present invention is to construct a simple, cheap, and compact oil-distributor that occupies a comparatively small space, so that it
20 can be easily stowed away when not in use and can be easily and readily launched over the side of the vessel and so manipulated as to insure an automatic feeding of the oil to the agitated waters.

25 With these and other objects in view, which will readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination, and arrangement of parts hereinafter more fully
30 described, illustrated, and claimed.

In the drawings, Figure 1 is a perspective view of an oil-distributor constructed in accordance with this invention. Fig. 2 is a central longitudinal sectional view thereof. Fig.
35 3 is a transverse sectional view on the line x of Fig. 2. Fig. 4 is a longitudinal section of the distributor, showing the same in position as being towed at an oblique angle. Fig.
40 5 is a similar view of the distributor when in use and the vessel is "hove-to." Fig. 6 is an enlarged detail sectional view showing more clearly the construction of one of the oil-outlets of the distributor.

Referring to the accompanying drawings,
45 1 designates a tubular cigar-shaped float-body that is constructed of metal or other suitable material. By reason of its cigar shape the tubular float-body 1 is provided with the pointed extremities 2, and at one side of its
50 center and adjacent to one of the point ends thereof the said tubular float-body is pro-

vided with a widened body portion 3. Arranged within the widened body portion 3 of the float-body 1 near one end thereof is a transverse partition 4, that separates or
55 divides the interior of the float-body into separated air and oil chambers 5 and 6, respectively. The air-chamber 5 of the said float-body is confined between the partition 4 and the nearest point extremity of the said body,
60 while the oil-chamber 6 occupies the remaining longest portion of the float-body at one side of the partition 4, and owing to the specific shape of the said float-body the air-chamber 5 may be said to be located at the front
65 end of the float-body as it travels in the water while being towed from the vessel.

The tubular float-body 1 is provided on its under side with a central longitudinally-disposed keel-fin 6^a, that is located on the bottom
70 of the widened body portion of the float-body and serves to prevent the float-body from skimming sidewise on the water, and therefore serves to sheer the float-body away from the vessel when running, and suitably secured
75 centrally on the bottom of the float-body in rear of the keel-fin 6^a is the longitudinally-disposed ballast-lead 7, that assists to properly hold the float-body in the water and to submerge the same when desired. The said tubular
80 float-body is further provided on opposite sides of the widened body portion 3 thereof with opposite offstanding curved side fins 8, which prevent the float-body from turning over in the water, and thereby hold the same
85 in a proper upright position to insure an automatic feeding of the oil to the water while the float-body is being towed, and at opposite sides, directly under the side fins 8, the said float-body is further provided with the en-
90 gaging-eyes 9, that are adapted to receive the hooks 10 of the tow-line 11. The disposition of the engaging-eyes 9 provide for securing the line to the float-body at the proper angle for the towing of the distributor.

At a point intermediate of its ends the float-body 1 is provided on the under side thereof with the water-inlet opening 12, that communicates with the interior oil-chamber 6 and
100 is disposed at an angle toward the rear end of the body, so that when the vessel is speeding and the float-body is being towed rapidly

through the water the water will be forced through the said inlet-opening into the oil-chamber to provide for displacing the oil from said chamber and discharging the same
 5 through the oil-discharge openings 13, formed in the top of the float-body at spaced points and also communicating with the interior oil-chamber 6. The openings 12 and 13 have
 10 projected therefrom cap-necks 14, that are adapted to receive thereon water-tight screw-caps 15, that provide for closing said openings when the distributor is not in use; but when
 15 the same is in use the said caps 15 are removed and the caps for the openings 13 are replaced by perforated caps 16, which are provided with sufficiently small holes or perforations to graduate the escape of oil according to requirements.

When the float-body is placed in the water
 20 and the openings 12 and 13 uncovered in the manner referred to, it will be obvious that when the vessel is running before the wind and towing the distributor the same will be trailed through the water at substantially the
 25 angle shown in Fig. 4 of the drawings, with the air-chamber located at the prow end of the distributor. In this position the water will be forced into the oil-chamber through the water-inlet opening 12 and will displace
 30 the oil, which will flow in graduated quantities through the cap-inclosed oil-discharge openings 13, and thereby provide means for smoothing the water.

By reason of the specific shape of the distributor and the size of the oil-chamber confined therein, when the vessel is hove-to the
 35 oil-distributor will assume an upright position, such as illustrated in Fig. 5 of the drawings, and in this position the oil will escape through the oil-discharge openings 13 by reason of
 40 the light specific gravity of the oil as compared to the water that flows into the oil-chamber 6 through the water-inlet opening 12. With the oil-distributor in its upright
 45 position and the vessel hove-to the said distributor will act somewhat in the capacity of a drag and will constantly distribute the oil to the windward and away from the vessel.

The air-chamber 5 at the front end of the
 50 oil-chamber serves several important functions, which are, to buoy up the forward end of the distributor in towing, to maintain the distributor in an upright position when the

vessel is hove-to, and to keep the distributor floating and prevent it from sinking when the
 55 oil is entirely displaced by water.

In addition to the cap-inclosed openings 12 and 13 the float-body is provided at its extreme rear or after end with a cap-inclosed
 60 oil-drain opening 17, that communicates with the interior oil-chamber at one extreme end thereof and provides convenient means for draining the oil-chamber of the remaining oil therein when the distributor is suspended
 65 from the end of the jib-boom or from any other object on the outside of the vessel.

From the above it will be apparent that the herein-described oil-distributor is entirely automatic in its operations and adapted to positively
 70 operate under all conditions, whether the vessel is running before the wind or is hove-to, and it will be understood that changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any
 75 of the advantages of this invention.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

In an oil distributor, a tubular cigar-shaped
 80 float body provided near one end with a widened body portion, a transverse partition arranged within the widened body portion of the float body to form separated air and oil
 85 chambers, the former of which is smaller than the latter and is located at the forward end of the float body whereby the latter will be floated in an upright position when not being trailed, said float body being provided at the
 90 bottom with a water inlet opening disposed at an angle whereby the water will be forced into the oil chamber when the float body is being trailed, and at the top with oil discharge openings, a central longitudinally disposed keel-pin fitted on the under side of the float
 95 body, and curved side-fins projected from opposite sides of the float body, substantially as set forth.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures
 100 in the presence of two witnesses.

JOHN ERICSON.

ADELBERT PHINNEY.

Witnesses:

J. J. F. GILLILAND,

DAVID D. KING.