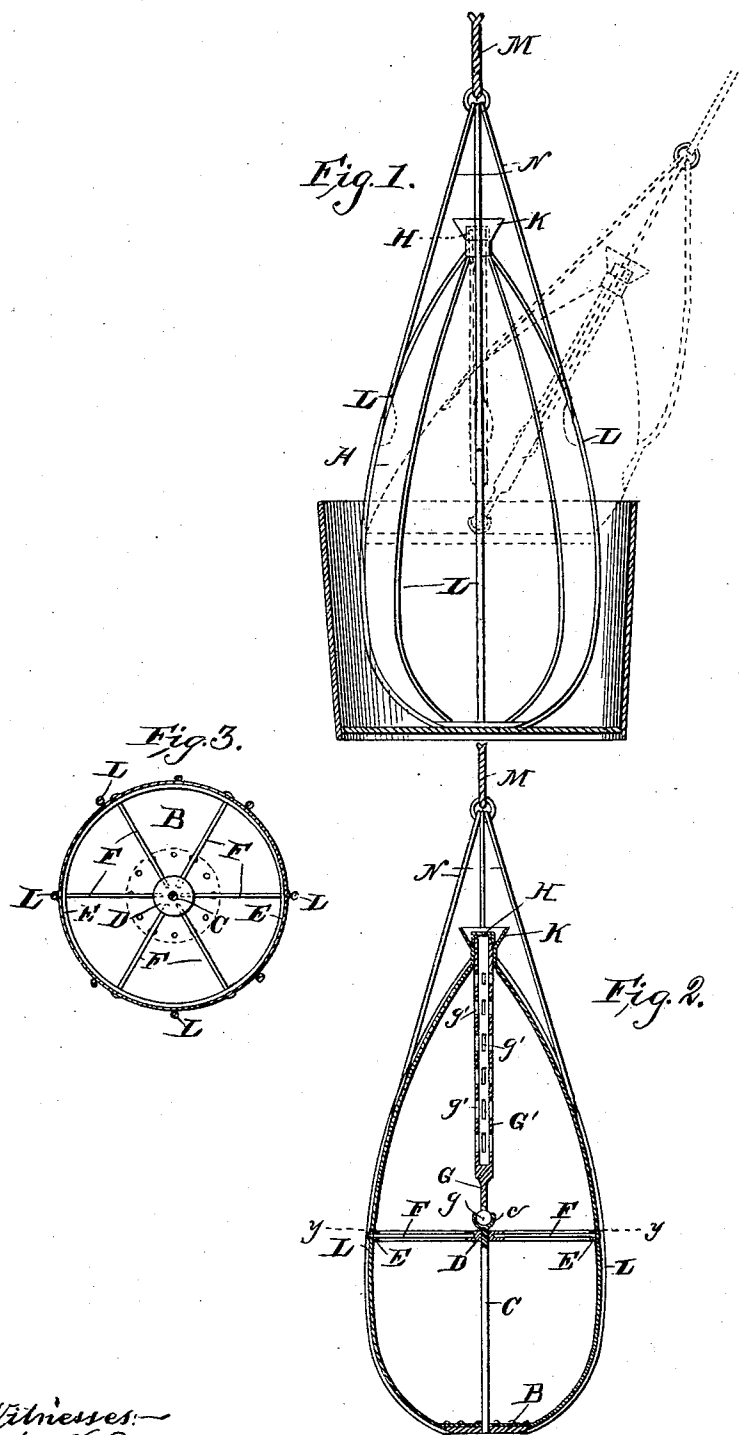


(No Model.)

D. KNOWLES.  
OIL DISTRIBUTER FOR CALMING WAVES.

No. 578,568.

Patented Mar. 9, 1897.



Witnesses:—  
Wm H Edwards.  
Arthur L Buzant

Inventor  
Daniel Knowles  
By N. H. Bliss  
attly.

# UNITED STATES PATENT OFFICE.

DANIEL KNOWLES, OF NORFOLK, VIRGINIA.

## OIL-DISTRIBUTER FOR CALMING WAVES.

SPECIFICATION forming part of Letters Patent No. 578,568, dated March 9, 1897.

Application filed July 3, 1896. Serial No. 598,022. (No model.)

*To all whom it may concern:*

Be it known that I, DANIEL KNOWLES, a citizen of the United States, residing at Norfolk, in the county of Norfolk and State of Virginia, have invented certain new and useful Improvements in Oil-Distributers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Figure 1 is a side elevation of an oil-distributer constructed in accordance with my invention, showing the same in the receptacle provided for retaining it when being filled. Fig. 2 is a central longitudinal sectional view of the distributer. Fig. 3 is a sectional view on the line *yy* of Fig. 2.

The object of my present invention is to provide an oil-distributer for use in calming high waves which can be easily filled with oil and which, when not desired for use, will occupy but a minimum amount of space.

As shown in the drawings, it consists, essentially, of a bag-like receptacle A, made of canvas or other similar material, which will hold a quantity of oil and allow the same to escape slowly and gradually as it is drawn over the surface of the water.

Within the bag A, I arrange a bottom piece B, of wood or other suitable material, and to this bottom is connected one end of a rod C. Near its other end the rod C is provided with a plate or disk D, and this disk is connected with a hoop or ring E by a series of connecting-rods F.

The ring or hoop E is of such size as to fit snugly within the bag A and by means of the parts described above I insure that the said bag will maintain itself in proper position while being filled with oil and at the same time allow the mouth thereof to be inclined to either side, as may be desired.

The upper end of the central rod C terminates in a cup-like socket *c*, within which is fitted a ball *g*, formed on the inner end of a rod G. This rod G is rigidly connected with or formed integral with a tube G', which extends to the mouth of the bag. The rod C, rod G, and tube G' thus form a brace extend-

ing continuously from the bottom to the mouth of the bag, the tubular portion G' serving both as a part of the brace and as the filling-tube for introducing oil to the bag. The outer end of the tube G' is threaded and an internally-threaded cap H is provided for closing the outer open end thereof. At intervals throughout its length the tube G' is provided with a series of apertures or slots *g'*, through which oil poured into the outer end of the tube can pass into the bag A.

At its mouth or open end the bag A is provided with a funnel-like projecting portion K, which is preferably formed integral with the body of the bag.

L designates ropes or heavy cords, which are secured by sewing or otherwise to the outer surface of the bag and extend longitudinally thereof from end to end. To these protecting-ropes L are attached the ropes N, by which the bag is connected to the cable M, by which its movements are controlled when in use.

Owing to the flexible ball-and-socket joint between the rods C G it will be seen that the upper portion of the bag can be easily inclined in any direction, as indicated in dotted lines, to bring the funnel K at the mouth thereof into position to readily receive oil from any vessel.

When not in use and when being filled, the bag may be retained in the tub or receptacle O.

After the bag has been filled the cap H is screwed into position, and it is ready for use. The friction produced by the waves on the bag will act to force the oil slowly out through the body of the bag.

What I claim is—

1. In an oil-distributer, the combination of a bag having an internal spreader or brace near its lower end, and a filling-tube having one end communicating with the mouth of the bag and its other end loosely connected with the said brace, substantially as and for the purpose set forth.

2. In an oil-distributer, the combination of a bag, and means for holding the end portion of the bag opposite to the mouth thereof vertical while said mouth and portion of the bag adjacent thereto may be inclined to the vertical, substantially as set forth.

3. In an oil-distributer, the combination of

a bag, a stationary rod arranged within and connected to the bottom of the bag, a perforated filling-tube having one end in line with the mouth of the bag and its other end loosely connected with said stationary rod, and a cap for closing the outer end of the filling-tube, substantially as set forth.

4. In an oil-distributor, the combination of a bag, a bottom plate for the bag, a rod extending upward from said plate, a ring or hoop arranged above the bottom plate and connected with the rod, a filling-tube loosely connected with said rod and extending to the mouth of the bag, and a cap for closing the outer end of said tube, substantially as set forth.

5. In an oil-distributor, the combination of a bag, a stationary rod arranged within the lower portion of the bag and having a socket formed in its upper end, a filling-tube extending inward from the mouth of the bag and having at its inner end a ball fitting in the socket in the said rod, and a cap for closing the outer end of the filling-tube, substantially as set forth.

6. In an oil-distributor, the combination of a bag, a filling-tube connected with and extending inwardly from the mouth of the bag, and means connecting the tube with the bottom of the bag, substantially as set forth.

7. In an oil-distributor, the combination of a bag, a filling-tube connected with both the top and bottom of the bag, and a cap for closing the outer end of said tube, substantially as set forth.

8. In an oil-distributor, the combination of a bag, a bottom plate arranged within the bag, a brace extending continuously from such bottom plate to the mouth of the bag, the portion of such brace adjacent to the mouth of the bag being tubular to serve as a filling-tube, and a cap for closing the outer end of such tube, substantially as set forth.

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

DANIEL KNOWLES.

Witnesses:

LAWRENCE WARING,  
THOMAS KIRBY.