(No Model.)

N. C. BING.

OIL DISTRIBUTER FOR VESSELS.

No. 412,590. Patented Oct. 8, 1889.

Fig. 1.

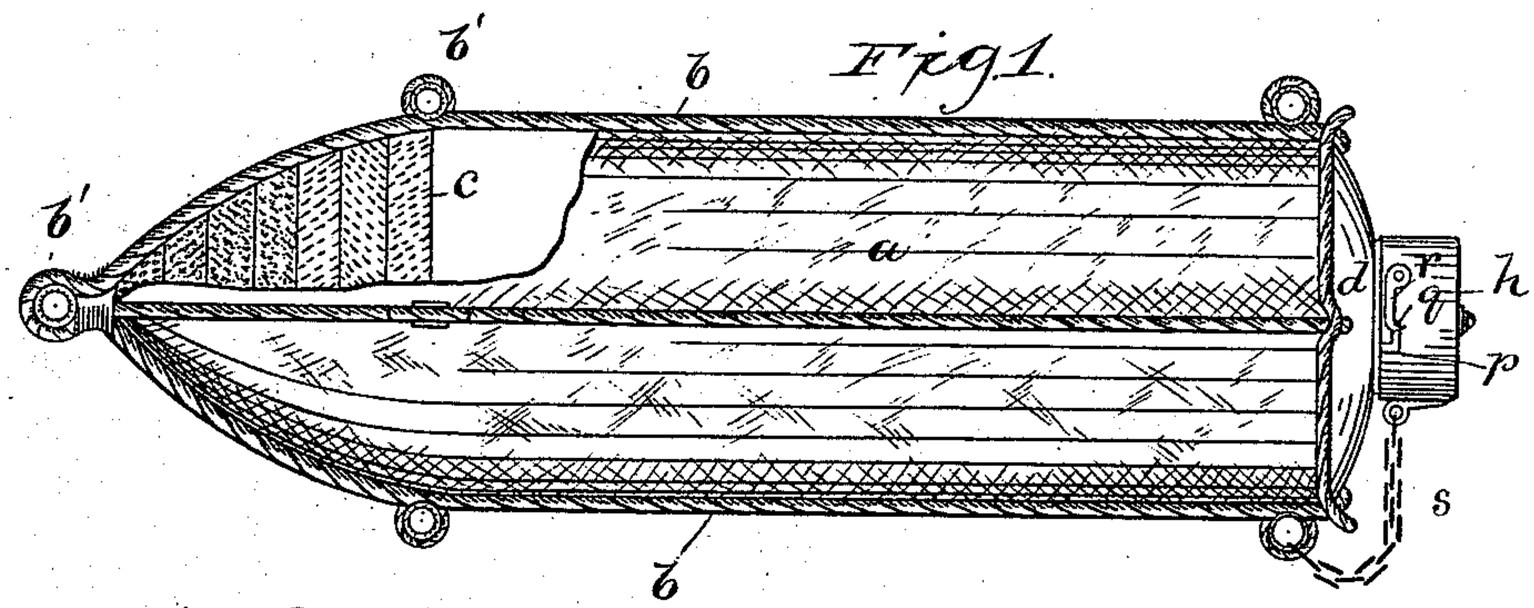


Fig. 2.

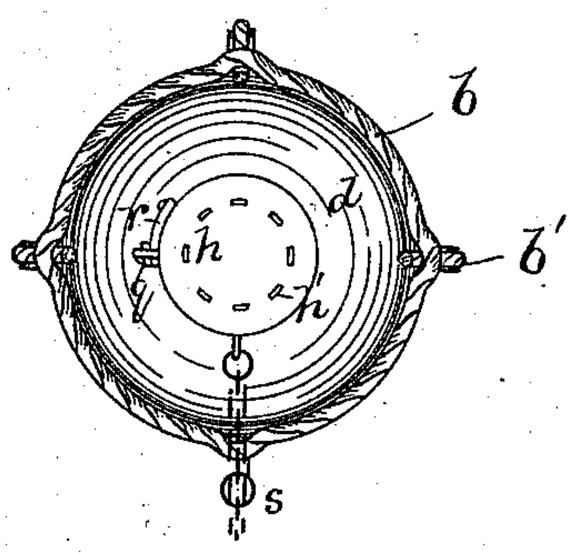


Fig. 3.

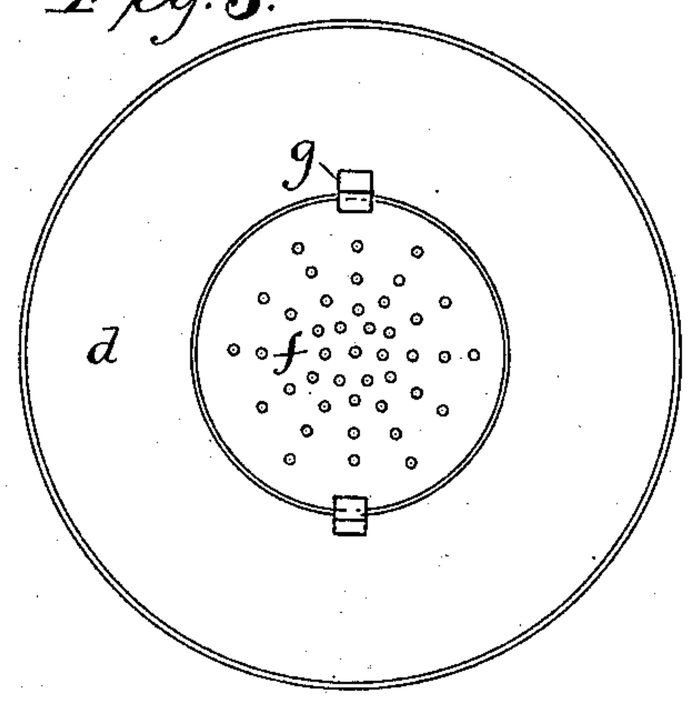


Fig. 4.

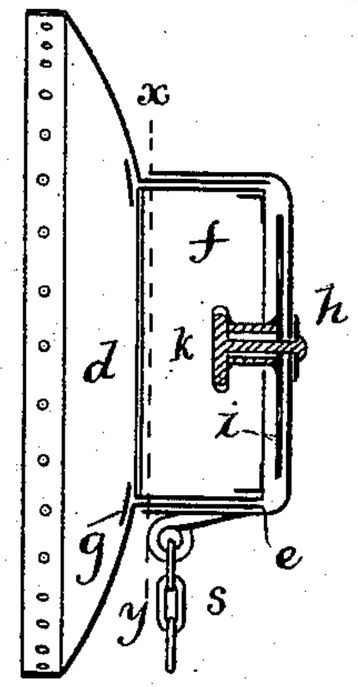


Fig. 5.

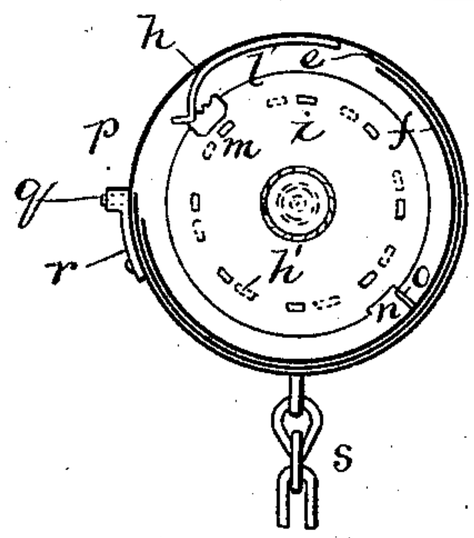
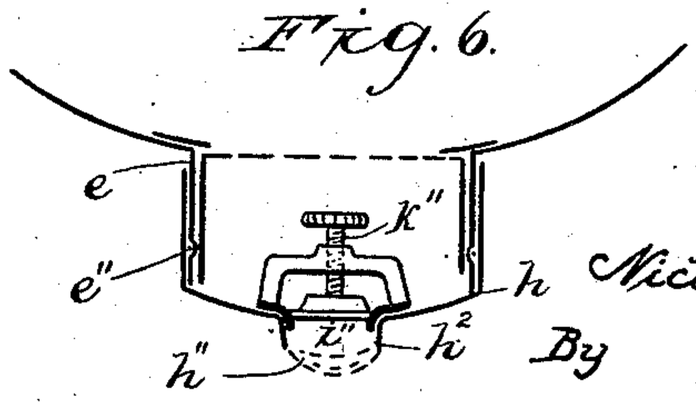


Fig. 6.



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UNITED STATES PATENT OFFICE.

NICOLAI CHRISTIAN BING, OF CHRISTIANIA, NORWAY.

OIL-DISTRIBUTER FOR VESSELS.

SPECIFICATION forming part of Letters Patent No. 412,590, dated October 8, 1889.

Application filed April 19, 1889. Serial No. 307,848. (No model.)

To all whom it may concern:

Be it known that I, NICOLAI CHRISTIAN BING, a subject of the King of Norway, residing at Christiania, in the Kingdom of Norway, have invented certain new and useful Improvements in Oil Distributers for Vessels, of which the following is a full, clear, and exact description.

My invention relates to that class of devices for distributing oil on water for sea-going vessels, where a buoyant bag or other container of suitable shape and material is charged with oil and kept floating on the water, so that the oil may successively be discharged and spread on the water, having the well-known quieting effect on the sea.

The object of my invention is to so construct the oil-containing bag that the oil may be discharged automatically without any mechanical means, and so that the discharge of the oil may be regulated at will.

My invention consists in the construction and combination of the several parts, as will be specified hereinafter; and its most essential feature is a bag made of canvas or equivalent material, preferably of a cylindrical or projectile-like shape, the one end of which is filled with cork, deer's-hair, or similar light material, so that when the bag is charged with oil and floating on the water this end will turn upward, while the other end of the bag is closed by means of a metallic head provided with outlet-openings for the oil.

In the annexed drawings, Figure 1 is a side view, partly in section, of my improved oil-distributer. Fig. 2 is a bottom end view of the same. Fig. 3 is a plan view, drawn to an enlarged scale, of the metallic head. Fig. 4 is a transverse section of the same, showing the construction of the valve for regulating the flow of oil. Fig. 5 is a sectional plan of the same looking from the inside. Fig. 6 shows a modified form of the regulating-valve.

The bag *a* is preferably made of canvas and of cylindrical shape, being pointed at one end and having this end filled with cork, deer's-hair, or similar light materials, or contains air inclosed in a balloon of glass or other air-tight material, while the other end is closed by means of a head *d*, preferably of wrought-iron. The bag is strengthened by means of binding-ropes *b*, these ropes being united at the top here and on several other places, forming loops *b'*, by means of which the bag may be held in ropes when used. The head *d* has a central opening surrounded by a spout *e*, which spout is closed by means of a cover *h*, sliding tight on the outside of the spout and in the bottom provided with holes *h'*. The cover *h* is secured to the head by way of the hook *r*, mounted on the side of the cover, Figs. 1 and 2, and catching over a pin *q*, projecting from the side of the spout through the slot *p*. *s* is a safety-chain through which the cover *h* is chained to the bag. On the inside of the cover *h* is mounted a rotary valve *i*, in which are holes *i'*, corresponding with the holes *h'* in the cover. The disk or valve *i* is provided with a handle *k*, by means of which the valve may be actuated. The movement of the same is regulated by means of a pin *o*, mounted on the cover and projecting and working in a recess *n* in the valve, while the several positions of the valve are fixed by means of a spring *l*, fastened on the cover *h* and catching into a toothed piece *m*, mounted on the valve. In the spout *e* is also inserted a perforated bottom *f*. The same is held in the spout by means of the flaps *g*. If the temperature is high, the oil may be so thin that the valve will let too much through, even when it is regulated to discharge the least possible oil. In such case, or when other fluid oil is used, the space between the valve and the false bottom *f* is filled with hemp or the like, through which the oil will have to pass before it enters the valve.

Fig. 6 shows in vertical section another form or the regulating-valve, which has the advantage that it may be closed tightly. The cap *h* is provided with a pocket h^2, in which the holes *h''* are made. The pocket, and therewith the holes, may be closed and regulated by means of the valve *i''*, fixed on the screw-stem *k''*. In this figure the spout *e* is also shown to have an annular pocket *e''*, in which is laid a tightening-strip of some suitable material.

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

1. In an oil-distributer for vessels, a bag of

water-tight material, being closed at one end and having this end filled with floatage material, while its other end is provided with a metallic head having an adjustable valve with suitable means for regulating the discharge of oil when the bag is floating on the water.

2. The combination, with an oil-distributer for vessels, with a bag of canvas or similar water-tight material for containing oil, the head *d*, and the cover *h*, provided with a set of holes *h'*, of an adjustable valve *i*, with holes *i'*, corresponding with the holes in the cover *h*.

3. In an oil-distributing device for vessels, an adjustable valve for discharging the oil through the lower end of the oil-bag, consisting of the cap *h*, fitting over the spout *e* and secured to the same by the hook *r* or equivalent means, a revoluble disk *i*, mounted on the inside of the cover and provided with holes *i'* corresponding with holes *h'* in the cover, a handle *k* for turning said disk, and means for holding the said disk in its different positions, all substantially as specified and shown.

4. In an oil-distributer for vessels, the combination, with the head *d*, having an opening surrounded by a spout *e*, of a cap *h*, for closing said spout and provided with a pocket h^2, in which are holes *h''*, and valve *i''*, for closing and regulating said holes *h''*, substantially as and for the purposes hereinbefore set forth.

5. A floating oil-distributer for vessels, substantially consisting of the following parts: a water-tight bag made of canvas or similar material, having a substantially-cylindrical shape, being pointed at the upper end, and strengthened by means of binding-ropes provided on several places with loops to which the holding-ropes may be tied, the bag being in the upper pointed end filled with floatage material—such as cork—and of an adjustable valve fixed in a metallic head closing the lower end of the bag, the valve being separated from the interior of the bag by means of a perforated plate, between which and the valve hemp or similar material may be placed to lessen the outflow of the oil, substantially as shown and for purposes as specified.

In witness whereof I have hereunto set my hand in presence of two witnesses.

NICOLAI CHRISTIAN BING.

Witnesses:

FRITZ OLSEN,

F. D. OLSEN.