(No Model.)

R. A. WILLIAMS & J. BRAGG.

APPARATUS FOR COLORING OIL.

No. 304,390. Patented Sept. 2, 1884.

Fig. 1.

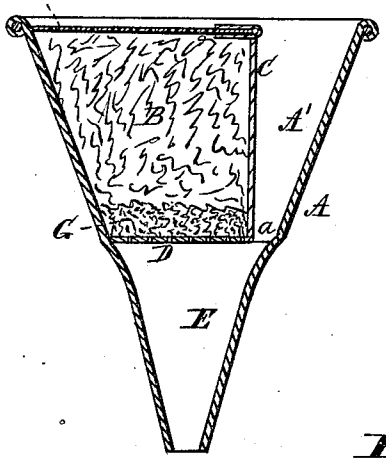


Fig. 2.

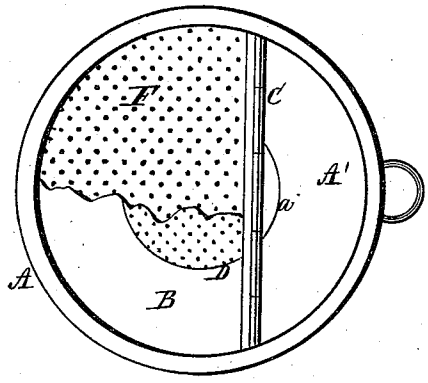
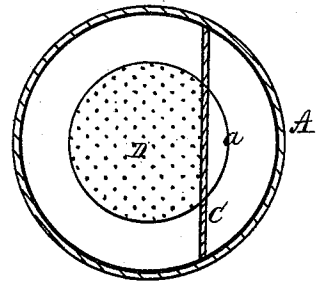


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

ROBERT A. WILLIAMS AND JOHN BRAGG, OF CLEVELAND, OHIO.

APPARATUS FOR COLORING OIL.

SPECIFICATION forming part of Letters Patent No. 304,390, dated September 2, 1884.

Application filed February 20, 1884. (No model.)

To all whom it may concern:

Be it known that we, ROBERT A. WILLIAMS and JOHN BRAGG, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and Improved Device or Apparatus for Coloring Oil; and we do hereby declare that the following is a full and complete description thereof.

The invention for the above-specified purpose consists of a funnel having in the upper part thereof a chamber provided with a foraminous bottom and a close side, between which and the side of the funnel is left a passage-way for the oil to flow down the funnel into the lamp or other vessel in which the pipe of the funnel may be inserted.

The said invention is more fully set forth in the following specification, and illustrated in the accompanying drawings, making a part of the same.

In said drawings, Figure 1 shows a transverse vertical section of the device above alluded to. Fig. 2 is a plan view. Fig. 3 is a horizontal section.

Like letters of reference denote like parts in the drawings.

A is a funnel, which is or may be in shape and size like such articles in ordinary use, or a modification thereof, as may be desired.

B is a chamber formed in the body of the funnel by means of the partition or wall C and the foraminous bottom D. It will be observed that the said bottom does not cover the entire area inclosed by the circumference of the body of the funnel, there being a space, *a*, between the wall C and the side of the body for the passage of oil to the pipe E. The top of the chamber B is covered with a foraminous lid, F, hinged to the partition C, that it may be opened to obtain access to the interior thereof. On the bottom or floor of the chamber B is placed a layer of cotton or other fibrous or flocculent material, as seen at G in Fig. 1. The space above the said layer of cotton is then filled with chips of alkanet-root, saffron, logwood, or other coloring substances, from which the color may be extracted by being saturated with oil. The chamber thus filled with the dye-stuff is then covered with the perforated lid F, as seen in Fig. 2, to which further attention will hereinafter be called. Colored oils for various uses, and especially for illuminating purposes, have become an article of trade. For illumination the oil is colored for the pleasing effect it presents in the glass bowl of the lamp in which it is burned. For that purpose oil is colored in bulk and sold at an advance over the price of uncolored oils.

To save the consumer the extra expense of the colored oil is the purpose of the device above described, the practical use of which is as follows: Red-colored oil is preferred, and to give the oil that particular color the chamber B is filled with chips of alkanet-root resting upon the filtering material D, above alluded to. The coloring-matter in the chamber is fully saturated with the fluid to be burned, so that a very little addition thereto will cause the oil saturating the dye in the chamber and colored thereby to percolate through the foraminous bottom of the chamber and flow therefrom down the pipe F into the bowl of the lamp which had previously been filled by pouring uncolored oil into the funnel at A', which flows therefrom through the space *a* into the lamp. Each time the lamp is filled a small quantity of oil is poured upon the perforated cover F, through which it passes to the coloring-matter beneath, causing it to discharge a few drops of colored oil through the foraminous bottom, which falls at once into the uncolored oil in the lamp, imparting to it a red color, more or less deep and brilliant as the amount of colored oil from the chamber may have been mingled with it, which will be in proportion to the quantity of uncolored oil dropped upon the perforated cover above.

By the above-described device each person is enabled to color their own oil, and of such shade of red as may be desirable to them, or of any other color, by simply changing the red-coloring material for such other as they may desire, to give to the oil the tint or color required.

What we claim as our invention, and desire to secure by Letters Patent, is—

In a device or apparatus for coloring oil, a funnel having therein a compartment or chamber, B, provided with a foraminous bottom and perforated cover, and oil-space A′, formed between the sides of the funnel and the partition of the chamber containing the coloring material, substantially as herein set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

ROBERT A. WILLIAMS.
JOHN BRAGG.

Witnesses:
J. H. BURRIDGE,
ELMER GOUSSTEL.