No. 652,012. Patented June 19, 1900.

G. A. BAKER.

BINNACLE LAMP.

(Application filed Jan. 8, 1900.)

(No Model.)

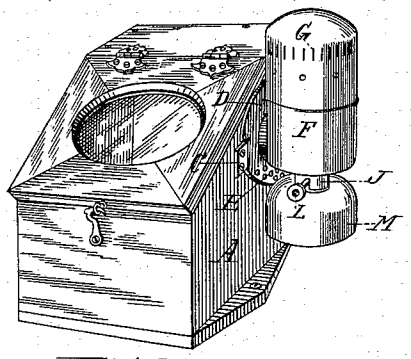

Fig. 1.

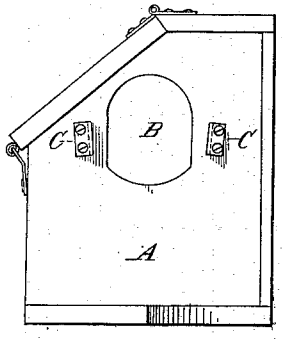

Fig. 2.

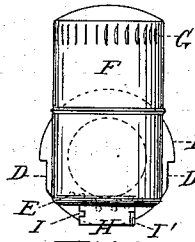

Fig. 4.

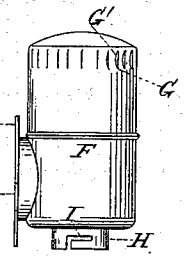

Fig. 5.

Fig. 6.

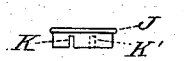

Fig. 7.

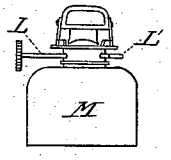

Fig. 8.

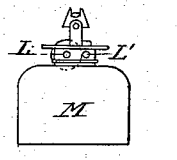

Fig. 9.

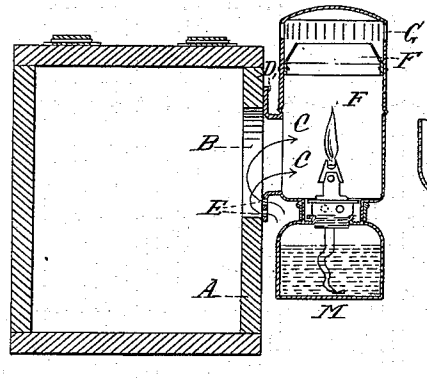

Fig. 3.

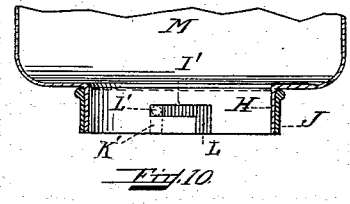

Fig. 10.

Witnesses:
H. E. Renick Jr.
T. H. Eaton.

Inventor:
George A. Baker
per H. E. Renick
his Atty.

UNITED STATES PATENT OFFICE.

GEORGE A. BAKER, OF MELROSE, MASSACHUSETTS.

BINNACLE-LAMP.

SPECIFICATION forming part of Letters Patent No. 652,012, dated June 19, 1900.

Application filed January 8, 1900. Serial No. 793. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. BAKER, a citizen of the United States of America, and a resident of Melrose, county of Middlesex, in the State of Massachusetts, have invented certain new and useful Improvements in Binnacles and Binnacle-Lamps, of which the following is a specification.

My invention relates to improvements in binnacles and binnacle-lamps wherein the air is indirectly admitted to the hood of the lamp, passing upwardly, feeding the flame, and finding egress at the top of said hood, while the latter is constructed in a manner to exclude direct air-draft to the flame, receiving only the indirect currents of air from the binnacle interior.

The objects of my improved invention are to secure a steady flame, the non-liability of extinguishing the lamp from direct draft, insuring better illumination of the compass within the binnacle, the introduction indirectly of oxygen through the binnacle to the burner, thorough ventilation of the lamp-hood, durability and efficiency in operation, and in other improvements hereinafter specified, and more fully set forth in the appended claims.

A more specific description of my improved invention will be observed in the annexed drawings, forming a part of this specification, in which—

Figure 1 is a view in perspective of my improved lamp attached to the binnacle in its operative assemblage, Fig. 2 being an elevation of the side of the binnacle supporting the hood and lamp. Fig. 3 is a vertical longitudinal section through lamp and binnacle as appears when organized. Fig. 4 exhibits an elevation of the side of the hood, Fig. 5 being a similar view of the front of the same. Fig. 6 illustrates the air-excluding shield in elevation, Fig. 7 showing a similar elevation of the reverse side. Fig. 8 denotes the lamp in elevation removed from the hood. Fig. 9 is a similar view of the reverse side, and Fig. 10 an enlarged view in section of the base of the lamp with the air-excluding shield in position to shut off air to the interior of the hood.

Corresponding letters designate similar features throughout the several views.

Referring to the drawings, A denotes that portion of the binnacle supporting the hood, and B the aperture therein admitting air to the lamp-flame and light to the compass within the binnacle. Right and left grooved plates C C, secured to the side of A of the binnacle, receive the shoulders D D of the flange D′, forming an integral part of the hood F. The lower perimeter of said flange is perforated with a series of air-ports E, communicating to the binnacle through the aperture B and which permits the air to be drawn from thence into the hood F, where it furnishes oxygen to the lamp-flame, following the direction of arrows C C, Fig. 3, the heated air escaping from the annular series of ventilating-slits G above the cone F, which protects the flame from incoming currents of air (if such there should be) entering through said slits. These are vertically placed near the top of the cylindrical hood F, one of the sides of each being curved slightly inward, as at G′, to form openings for the egress of heated air. The base of said hood F is further integrally provided at the bottom with the lamp-retaining ring H, which is furnished with the ordinary bayonet-slots I I′, one upon each side, to support the lamp when in operative position.

J designates the air-excluding shield or ring, this being an essential feature of my improvement, which is fitted closely over the base H, the vertical slots K K′ before the final adjustment of the lamp being each in alinement with the bayonet-slots I I′. When the lamp is fully adjusted and secured to the base H of the hood F, by turning to the right the wick-adjusting stem L and stem L′ to the left, each being within the alined slots I and K, obviously carries said shield J around the stationary ring H to the limit of the bayonet-slots I I′, when it would appear as in Fig. 10, effectually preventing the air from admission to the flame, as would occur if said slots I I′ were left open. I thus secure a steady light which is sufficiently nourished by the indirect admission of air to the hood, as previously described, the greater or less volume of which is governed by the size and number of said air-ports E.

Having described the nature and construction of my improved invention, I desire not to be confined to a close interpretation thereof, but may employ such fair equivalents there-

for as will embody the true spirit of my invention.

Having described my invention, I desire to secure by Letters Patent of the United States and claim—

1. A binnacle having an aperture for the admission of air, provided with means for the support of the assembled hood and lamp, in combination therewith the hood provided with a supporting-flange having air-ports near its perimeter admitting air to the binnacle, the series of ventilating-slits at the top of the hood and the interior cone to protect the flame from the outer air, substantially as specified.

2. A binnacle-lamp hood having a retaining-ring at its base provided with means adapted to receive the wick-adjusting stem L and the stem L′ to support the lamp, the air-excluding shield provided with vertical slots to receive said stems L and L′ arranged to fit closely over said retaining-ring and to revolve thereupon when the lamp is turned, in a manner to close the bayonet-slots in said retaining-ring to prevent access of air through said slots to the flame of the lamp substantially in the manner and for the purpose specified.

3. A binnacle lamp and hood provided with a rotative vertically-slotted shield to exclude air-draft to the lamp-flame, in combination, the binnacle provided with means for the introduction indirectly of oxygen through said binnacle to the burner as and for the purpose specified.

4. A binnacle having an aperture for the egress of air from the interior of said binnacle to the lamp-hood in combination therewith, the hood-supporting flange integrally provided with means for admission of external air to the interior of the binnacle to supply oxygen to the lamp-flame without a direct draft thereto substantially as described.

Signed by me this 28th day of December, 1899.

GEORGE A. BAKER.

Witnesses:
GEO. W. BURKE,
WILLIAM HURD.