

H. A. NOURSE.
LAMP ADAPTED FOR USE IN BROODERS, INCUBATORS, AND SIMILAR STRUCTURES.
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988,958.

Patented Apr. 4, 1911.

Fig. 1.

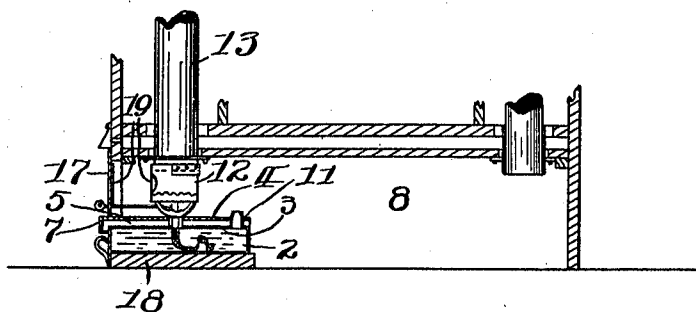
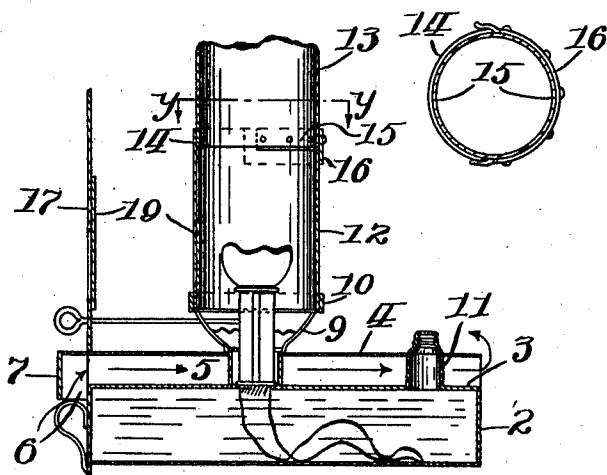


Fig. 2.

Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

HAROLD A. NOURSE, OF ST. PAUL, MINNESOTA.

LAMP ADAPTED FOR USE IN BROODERS, INCUBATORS, AND SIMILAR STRUCTURES.

988,958.

Specification of Letters Patent.

Patented Apr. 4, 1911.

Original application filed October 12, 1908, Serial No. 457,263. Divided and this application filed February 28, 1910. Serial No. 546,470.

To all whom it may concern:

Be it known that I, HAROLD A. NOURSE, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented new and useful Improvements in Lamps Adapted for Use in Brooders, Incubators, and Similar Structures, of which the following is a specification.

My invention relates to improvements in lamps adapted for use in brooders, incubators and similar structures.

It has for its object a lamp which shall be safe, simple in construction, and readily adjusted to the brooder or incubator heating drum.

In the accompanying drawings forming part of this specification, Figure 1 is an elevation, partly in section, showing the lamp in place under a brooder. Fig. 2 is a vertical, central section of the lamp and its connection with the heating drum of the brooder, and Fig. 3 is a cross section of Fig. 2 taken on the line *y y*.

The oil reservoir 2, the base of which is of ordinary construction, is provided with a double walled top. The walls 3 and 4 inclose an air chamber 5, through which the draft for the lamp is secured by means of the opening 6. A wind shield 7 is attached to the top wall 4, for the purpose of preventing a direct current of wind into the air chamber. This air chamber opens at a point opposite the opening 6, into the inclosed air space 8, beneath the lower floor of the incubator or brooder. The air chamber 5 serves a double purpose, viz: to keep the oil in the reservoir of the lamp cool and by warming the air circulating through it, aids in keeping the floor of the brooder or incubator at a proper temperature. Air to support combustion is fed to the flame from the air space 8, between the brackets 9, supporting the chimney ring 10. Oil is introduced into the reservoir of the lamp through the screw capped tube 11, which extends into the reservoir through the walls 3 and 4. The chimney 12 may be attached to the lamp in the usual way. To secure a safe and convenient connection between the lamp chimney and the heating drum 13, the chimney 12 is formed with an extension 14 for about one-half of its circumference. This extension fits snugly about the lower end of the heating drum 13. Said end of the drum is furnished with a depend-

ing flange 16, adapted to make a close connection between the flue and the inner and shorter portion of the lamp chimney, and to receive the inner edge of the latter. This arrangement, while making it easy to place and remove the lamp, furnishes a substantially tight joint between the lamp chimney and the heating drum. A vertical extension 17 is provided on one side of the reservoir to close the opening through which the lamp and its chimney are inserted under the brooder. A support 18 is provided for the lamp upon which the lamp rests when in the brooder, and by sliding the lamp in upon this support, the coupling between the lamp chimney and heating drum is made, while the opening for the insertion of the lamp is closed by the vertical extension 17. Both this extension and the lamp chimney are provided with glass or mica covered openings 19, adapted to permit the inspection of the flame from outside the brooder.

My present application is a division of my application Serial Number 457,263, filed October 12th, 1908, and the lamp herein illustrated, described and claimed is particularly, though not exclusively, adapted for use in connection with brooders of the class described in my said original application.

Having described my invention, what I claim as new and desire to protect by Letters Patent is:

1. The combination with a lamp having a chimney, and a lamp compartment having a lateral opening in its wall for the insertion of the lamp, of a heating drum having its lower portion terminating in said compartment and provided with a depending flange adapted to partly embrace the chimney of the lamp, the said chimney also having an upwardly extending flange adapted to partly embrace the lower portion of the drum.

2. The combination of a lamp having an oil reservoir provided with an air chamber in the upper part thereof, a lamp compartment having a lateral opening in its wall for the insertion of the lamp, said chamber communicating with the outer air and with the lamp compartment, a closure for said lateral opening, a heating drum extending downwardly into the lamp compartment, and a chimney connecting said lamp and drum.

3. A lamp in combination with a heating

drum having a depending flange at its base, a lamp chimney having an upward extension adapted to partly embrace the lower end of said drum, while its shorter portion is embraced by said depending flange, a lamp compartment, below and inclosing the lower end of the heating drum, having a lateral opening in its wall for the insertion of the lamp, and a closure for said opening carried by the lamp.

4. In combination with a lamp having an air chamber in the upper part thereof, a chimney, a lamp compartment having a lateral opening in its wall for the insertion of the lamp, said air chamber in the lamp communicating with the outer air and with the lamp compartment, a closure for said lateral opening, a heating drum extending downwardly into said compartment and provided with a depending flange adapted to partly embrace the lamp chimney.

5. A lamp provided with an oil reservoir having an air chamber in the upper part thereof, in combination with a vertically extended heating drum having a flange depending from its base, a lamp chimney having an upper extension adapted to partly embrace the lower end of the drum, while its shorter portion is embraced by said flange, a

lamp compartment below and inclosing the lower end of the heating drum having a lateral opening in its wall for the insertion of the lamp, said air chamber in the lamp communicating with the outer air and with the lamp compartment, and a closure for said lateral opening.

6. A lamp having an oil reservoir provided with double upper walls forming an air chamber in combination with a lamp compartment having a lateral opening in its wall for the insertion of the lamp, a heating drum extending downwardly within said lamp compartment and provided with a depending flange at its base, a lamp chimney having an upper extension adapted to partly embrace said drum while its shorter portion is embraced by said flange, and said air chamber having means of communication with the air inside and outside of said lamp compartment.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

HAROLD A. NOURSE.

Witnesses:

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J. E. STRYKER.