

United States Patent Office.

DARWIN T. BRIGGS, OF ALBANY, NEW YORK.

Letters Patent No. 87,024, dated February 16, 1869.

IMPROVEMENT IN LAMP-BURNERS FOR LOCOMOTIVE HEAD-LIGHTS.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, DARWIN T. BRIGGS, of the city and county of Albany, State of New York, have invented a new and improved Burner, for burning the petroline-fluid, and other fluids and light oils, in locomotive head-lights, and for other purposes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective view.

Figure 2 is the upper view.

Figure 3 is a central vertical section.

This invention relates to an improvement in lamp-burners designed for locomotive head-lights, and for other purposes; and

It consists in the arrangement of air-deflectors, with reference to the tube which conducts the gas from the oil-reservoir to the wick-tube.

Letter A, in fig. 1, represents the cone of main burner.

Letter B, in figs. 2 and 3, represents a perforated metallic top to the burner, encircling tube C, and surrounding gas-tubes D D, which is placed there to help in regulating the draught of air necessary to give a steady light.

Letter C, in same figure, represents the main tube, through which the wick passes.

Letters D D, in same figure, represent gas-tubes connected with main tube.

Letters O D, fig. 3, represent both the wick-tube and gas-tubes.

Letter E, in fig. 3, represents a disconnection of the wick-tube, forming a perfect gas-chamber, the combination of which, with main tube and the gas-tubes, insures a steady and safe escape of all surplus gas to the flame at top of the main tube, where it is consumed, adding much to the strength and brilliancy of the light.

Letter F, in fig. 3, represents a ratchet for raising and lowering the wick.

Letters H I J, in same figure, represent three deflectors, connected with at each edge of the tube, leaving a space on either side of the tube for the circulation of air, and are placed there to regulate the current of air necessary to make the flame, at the top of main tube, steady and reliable when the burner is in use on railroad-locomotives, or in other position or use, where it is exposed to rapid motion, or violent jolts and jars.

Letters K K K represent apertures, regulating the amount of all the air passing through the burner, for the regulation of the flame at the top of main tube.

Letter L represents the base of the said burner.

Letter M represents ornamental work around the top of the burner.

Letter N represents the set-screw for steadying the chimney.

The whole, as represented in fig. 1, making a burner that will burn the patent petroline-fluid, or any other good non-explosive fluid, or light oil, successfully, on locomotive head-lights, or in any other place where great and unsteady motion renders any burner now in use entirely worthless, and, with the use of the petroline-fluid, will make, on the locomotive head-light, a much stronger, and, in every respect, a much better light than the kerosene-oil, as now used, and for one-half the expense.

What I claim as my invention, and desire to secure by Letters Patent, is—

The deflector H I J, arranged with reference to the gas-tube and to the wick-tube of a lamp, substantially as and for the purpose set forth.

DARWIN T. BRIGGS.

Witnesses:

H. G. RADCLIFFE,
J. H. FOX.