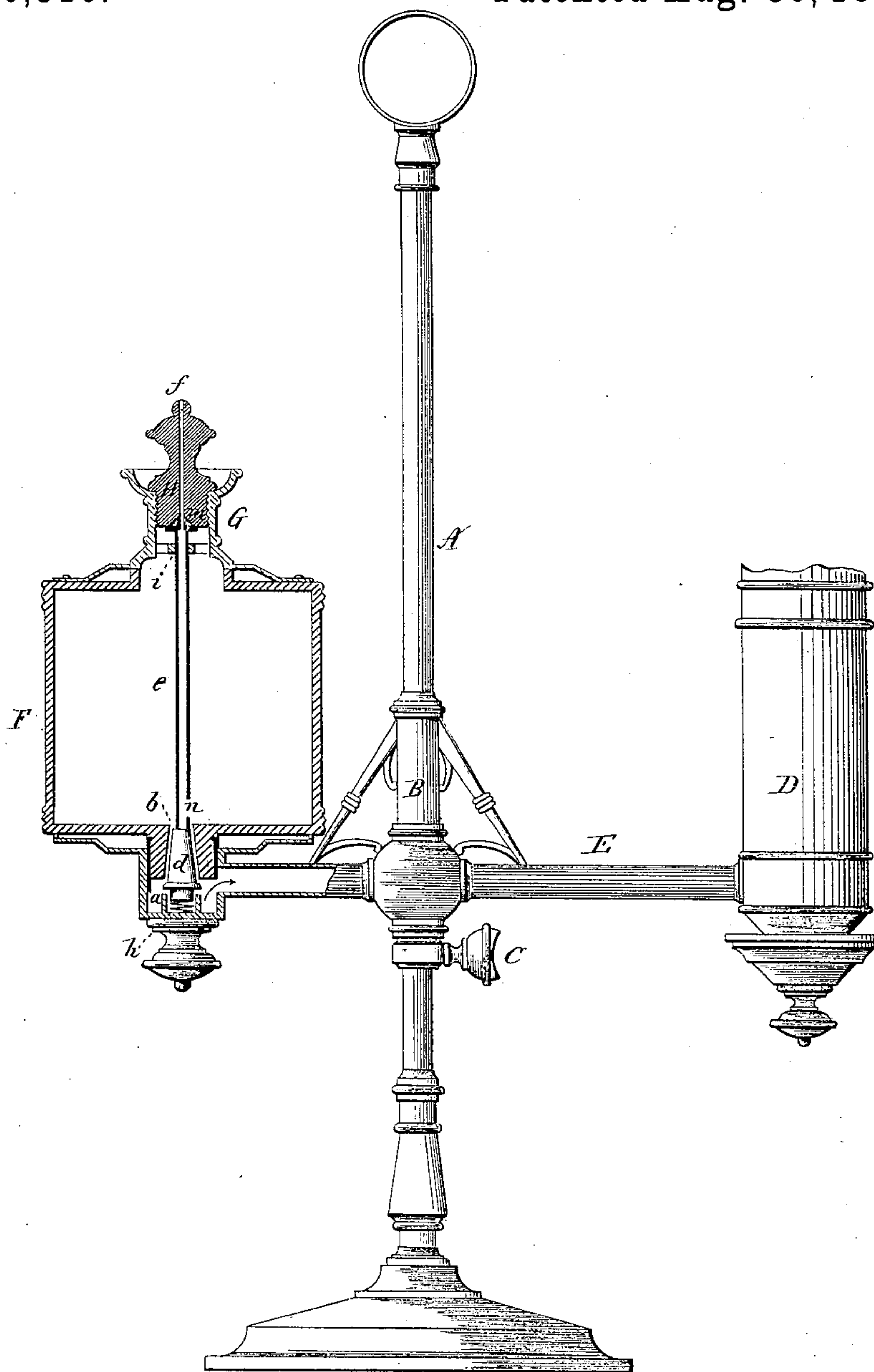


(No Model.)

A. H. JONES.
LAMP.

No. 246,316.

Patented Aug. 30, 1881.



Witnesses.

J. H. Murray.
W. D. Rogers.

Augustus H. Jones.
By Atty. *Inventor.*

John F. Earle

UNITED STATES PATENT OFFICE.

AUGUSTUS H. JONES, OF MERIDEN, CONNECTICUT, ASSIGNOR TO THE BRADLEY & HUBBARD MANUFACTURING COMPANY, OF SAME PLACE.

LAMP.

SPECIFICATION forming part of Letters Patent No. 246,316, dated August 30, 1881.

Application filed May 12, 1881. (No model.)

To all whom it may concern:

Be it known that I, AUGUSTUS H. JONES, of Meriden, in the county of New Haven and State of Connecticut, have invented a new Improvement in Lamps; and I do hereby declare the following, when taken in connection with the accompanying drawing, and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawing constitutes part of this specification and represents a sectional side view.

This invention relates to an improvement in that class of lamps commonly called "student" or "study" lamps—that is to say, that class of lamps which have a fount with a conductor leading therefrom to a wick-holder outside the fount—the object being to prevent the overflow of oil by removing the pressure of the oil in the fount from the flow to the wick; and the invention consists in the construction as hereinafter described, and particularly recited in the claims. As represented in the drawing, the arrangement is similar to the student-lamps, but it will be understood that it may be applied to brackets and to chandeliers.

A represents the usual standard, on which a socket, B, is made adjustable, secured at any desirable elevation by a set-screw, C.

D is the wick-chamber, of the usual construction, to which oil is supplied through a horizontal tube, E.

F is the fount, preferably made from glass. Centrally at the bottom is a chamber, *a*, opening from the fount through a passage, *b*, in which is a valve, *d*, preferably of conical shape, and the passage *b* also of conical shape, so that the valve may be raised to close the passage or lowered to open the passage to the required extent. The chamber *a* communicates directly through the tube E with the wick-chamber.

At the top of the fount a neck, G, is constructed, preferably directly over the chamber *a* below—that is, centrally on the fount. This neck forms the opening through which the fount is filled, and is tightly closed by the screw-plug H. From the valve *d* a small tube, *e*, extends up to the plug H, and is fitted so as to set close and tight against the lower end of the plug, and through the plug is an air-passage, *f*, communicating directly with the tube *e*. Below

the valve is a spring, *h*, tending to force the valve upward, and so as to hold the upper end of the tube *e* close against the plug, the upper end of the tube supported in a guide, *i*, so as to retain it in its central position, the guide being an open bridge, through which the oil will pass when poured into the fount. In order to insure a close joint between the end of the tube *e* and the plug H, a packing, *m*, may be introduced. On the tube *e* near the bottom of the fount an opening, *n*, is made, so that communication is open between the tube and the fount at that point. The plug H may be adjusted so as to make the passage *b* of the required size for the supply of oil to the burner.

To fill the fount, remove the plug H. The valve *d* rises as the plug rises and closes the passage *b*, to prevent the oil from flowing through the passage *b* to the chamber below. The fount is then filled, and should be very nearly full, or so as to leave only space sufficient for the natural expansion of the oil. When so filled the plug H is replaced and screwed down to prevent the possibility of air entering the fount between the plug and neck. Screwing down the plug also forces down the valve *d* and opens the passage *b*. The oil will, of course, stand in the tube *e* on a level with that in the fount, because the tube *e* is open to the atmosphere. As the oil is consumed it will fall in the fount only to a very slight extent, because no air is admitted at the top of the fount. When the level of the oil in the fount has fallen so far as it can do without the admission of air above it, the oil will freely flow from the tube *e* until the level in the tube comes below the top of the opening *n*; then a small quantity of air will be permitted to pass down the tube *e* through the opening *n* into the body of oil, whence it passes to the space above. This slight admission of air relieves the oil. It falls, and in so doing refills the tube *e* to the extent which the admitted air will permit, and at which time the further fall of oil is arrested; then the oil again flows from the tube *e*. After the flow has commenced the only pressure upon the oil in the burner is that of the column within the tube, and never so great as to possibly cause an overflow.

The filler may be independent of the neck

within which the plug H is inserted; or the air-tube *e* may be stationary—that is, not adjustable or movable within the fount, and the valve closed by direct connection with the filling-
5 plug or otherwise. In fact, when the lamp is in operation the tube *e* is a stationary tube, it being movable only to the extent that it acts as a rod to open and close the valve *d*.

I claim—

10 1. A lamp-fount constructed with a passage through its bottom to a chamber below, which communicates with the wick-chamber, combined with a valve arranged to close said passage, a tube attached to said valve, and extending to a removable plug at the top and
15 opening to the atmosphere, and also opening to the fount near the bottom, substantially as described.

2. A lamp-fount constructed with a passage through its bottom to a chamber below, which
20 communicates with the wick-chamber, combined with a valve arranged to close said passage, a tube attached to said valve and extending to a removable plug at the top and opening to the atmosphere, and also opening to
25 the fount near the bottom, and a spring below the valve to force the valve to its seat and the upper end of the tube against the plug, substantially as described.

AUGUSTUS H. JONES.

Witnesses:

F. J. SEIDENSTICKER,
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