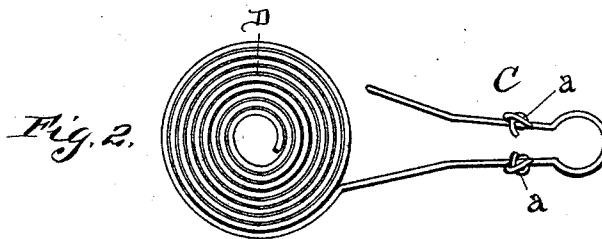
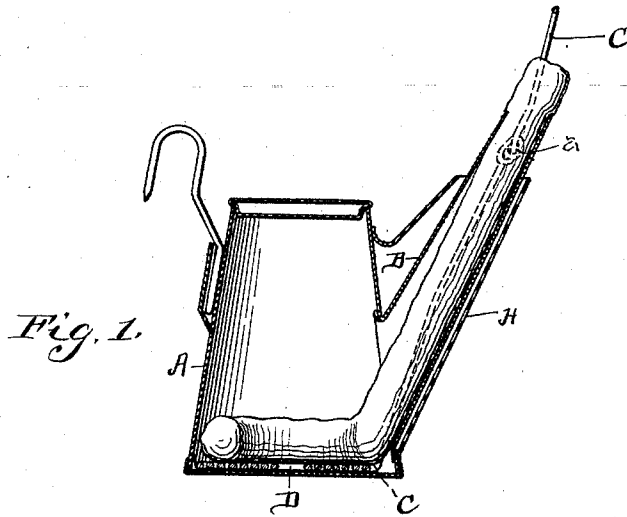


(No Model.)

J. A. HADLEY.  
LAMP.

No. 526,665.

Patented Sept. 25, 1894.



WITNESSES

*Geo. M. Anderson*  
*Phillip Masi.*

INVENTOR

*J. A. Hadley.*  
by *Geo. M. Anderson.*  
*his* Attorney

# UNITED STATES PATENT OFFICE.

JOSHUA A. HADLEY, OF BRAZIL, ASSIGNOR OF ONE-HALF TO WILLIAM F. MAURER, OF HARMONY, INDIANA.

## LAMP.

SPECIFICATION forming part of Letters Patent No. 526,665, dated September 25, 1894.

Application filed March 15, 1894. Serial No. 503,753. (No model.)

### *To all whom it may concern:*

Be it known that I, JOSHUA A. HADLEY, a citizen of the United States, and a resident of Brazil, in the county of Clay and State of Indiana, have invented certain new and useful Improvements in Lamps; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of a longitudinal section of the invention, and Fig. 2 is a detail of the wire.

This invention has relation to certain new and useful improvements in lamps, and it consists in the novel construction and combination of parts, all as hereinafter described and pointed out in the appended claims.

The object of the invention is to provide a lamp designed to burn tallow, lard, and other oils which when subjected to cold, congeal to such an extent that they require to be melted as they burn, and the invention is more particularly designed to provide improved means whereby the oil is kept sufficiently melted for combustion by the heat of the flame of the lamp.

The invention is applicable to miners' lamps, carriage lamps, torches, and various other kinds of lamps.

Referring to the accompanying drawings wherein I have shown the invention applied to a miner's lamp, the letter A designates the body of the lamp, and B the wick tube thereof. Soldered or otherwise firmly secured to the wick tube is a wire C, which extends down into the bottom portion of the body of the lamp where it is formed into a coil D. That portion of the wire which is secured to the wick tube forms a loop which extends beyond the said tube into position to be exposed to the flame. While the projecting portion of the loop may be integral with the rest of the wire, I prefer to make it in a separate piece as shown in the drawings, and hinge or pivot it to the main portion of the wire at *a*, *a*, so that it may be turned back out of the flame when desired.

The wire C being secured externally to the wick tube I usually inclose said tube and wire in an outer tube H, as shown. The said wire should be made of copper, or of some other material which is a good conductor of heat. The wick tube may be of copper, tin or other material. The lamp being lighted, the loop of the wire becomes heated by the flame, and the heat is conducted to the coil D, thereby melting or warming the oil sufficiently for the combustion. The said coil is sufficiently large to cover nearly the entire bottom of the lamp. The wick resting upon this coil is, therefore, kept surrounded by a portion of the oil sufficiently fluid for capillary action. During warm weather, or after the oil has become sufficiently melted, the loop may be turned back out of contact with the flame. Said loop may also be turned back to facilitate the insertion of the wick.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a lamp body and its wick tube or spout, of a wire of good heat-conducting qualities secured externally to said tube or spout, and extending into said body, the inner end of said wire being formed into a broad, flat coil resting upon the bottom of the lamp body and supporting the wick, a loop in the outer portion of said body over the mouth of the tube or spout and an outer tube H secured to the said body and partially covering in said wire, substantially as specified.

2. A heating wire for miners' lamps &c., formed of good heat conducting material, one end of said wire being formed into a broad flat coil adapted to substantially cover the bottom of a lamp body, and a loop hinged to the opposite end portion of said wire, substantially as and for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

JOSHUA A. HADLEY.

Witnesses:

JOHN W. STEWART,  
THOMAS M. ROBERTSON.