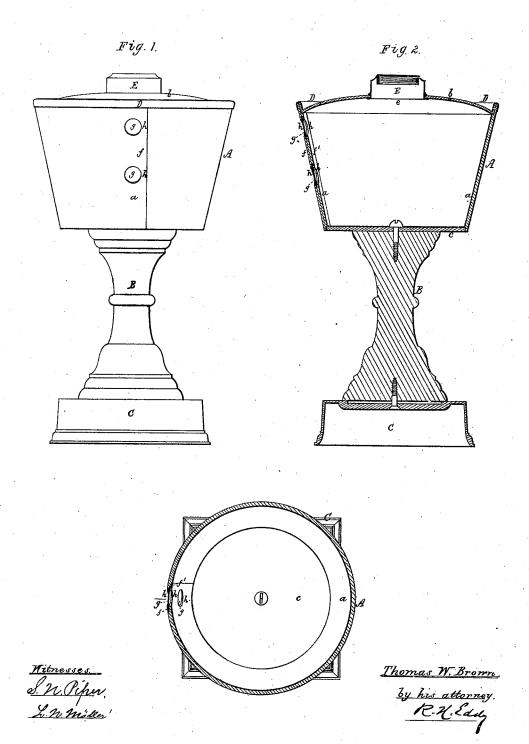
T. W. BROWN.

No. 183,249.

Patented Oct. 17, 1876.



UNITED STATES PATENT OFFICE.

THOMAS W. BROWN, OF BELMONT, MASSACHUSETTS.

IMPROVEMENT IN LAMPS.

Specification forming part of Letters Patent No. 183,249, dated October 17, 1876; application filed August 28, 1876.

To all whom it may concern:

Be it known that I, THOMAS W. BROWN, of Belmont, of the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Lamps; and do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a front elevation, Fig. 2 a verti-

Figure 1 is a front elevation, Fig. 2 a vertical and transverse section, and Fig. 3 a horizontal section, of one of my improved lamps.

This lamp is intended for the burning of kerosene or other hydrocarbon liquid rich in carbon, and more or less dangerous, in consequence of its being easily vaporized, and thereby liable to explode. The lamp is designed as a "safety-lamp," or one not liable to be broken in case of its accidentally being brought into contact with or falling upon a floor or other object.

In carrying out my invention I construct of "leather-board" the oil-receiver A of the lamp, and line it or saturate it with glue or other suitable material or cement capable of resisting, or indestructible by, a hydrocarbon fluid—such as kerosene, for instance—I preferring gelatine or glue, as both are cheap and thoroughly effective for the purpose. Furthermore, I provide such oil-reservoir with a metallic guard applied to its upper edge, and arranged to project above the upper head of the reservoir, all being substantially as hereinafter set forth.

The reservoir, as represented, is supported by a wooden column or standard, B, which, in turn, rests on, and is fixed to, a mineral or cast-iron base, C, the object of the latter being to prevent or aid in preventing the lamp from being readily or accidentally overset, especially when charged with the oil.

The said lamp-reservoir is composed of an inverted tubular conic frustum, a, and two circular heads, b c, all of leather-board, and a metallic guard, D, the latter being made to clasp the upper edge of the frustum, or such and a lip turned up from and around the up-

per head at or about its circumference, all

being arranged as shown. The guard extends above and around the upper head, and with such constitutes a receptacle for intercepting waste oil or carbonaceous matter that may accidentally escape from the wick or the screwneck E. The said neck is of metal fixed to the said head and over a suitable opening, e, therein. The conic frustum a is made of a sheet of leather-board of suitable form, bent around circularly and lapped together at and near its edges, there being placed between the laps f f' one or more thin sheets, g, of mica or glass. There are also one or more holes, h, made in each of the laps, those of one lap being directly opposite those of the other, in order that by means of such holes and the sheet or sheets of mica or glass between them a person may be able to see directly into the reservoir through its side, for the purpose of determining the height of any oil therein, or whether such reservoir is properly supplied with oil. The laps are to be glued or cemented together, and to or upon the transparent sheet or sheets.

I claim as my invention-

1. The oil-reservoir A, constructed of leatherboard, and provided with a metallic guard, D, applied to its upper edge, and arranged to project above the upper head, all being substantially as set forth.

2. The lamp as composed of the mineral base, the wooden standard, and the leather-board oil-reservoir, with its lining or covering of glue, all arranged as specified and represented.

3. The oil-reservoir, having its sides composed of a sheet of leather-board perforated in the laps, and provided with one or more sheets of mica or transparent material, arranged with the perforations and between the laps, as set forth.

THOMAS W. BROWN.

Witnesses:

R. H. Eddy,

J. R. Snow.