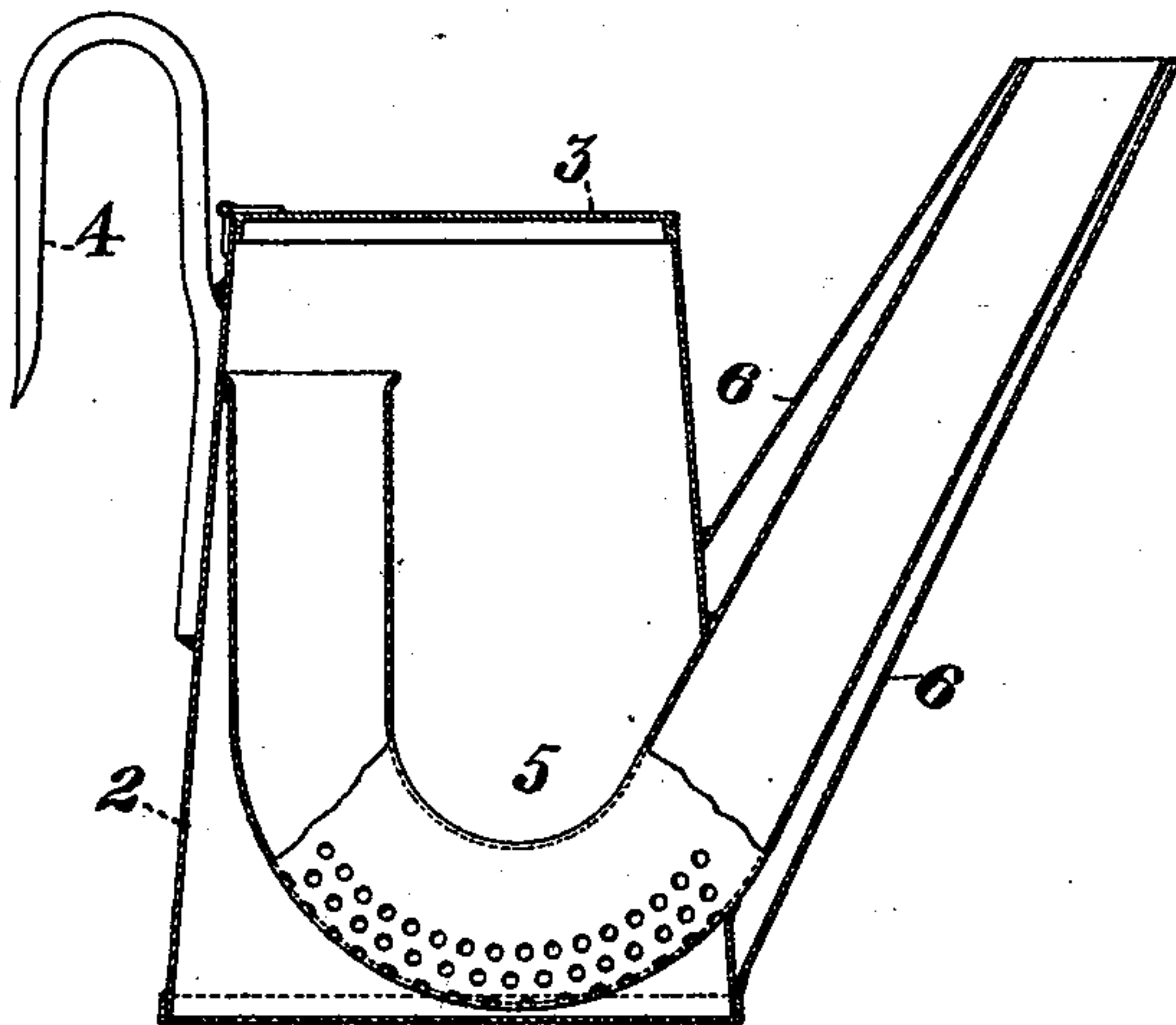


(No Model.)

W. P. McMASTERS.
MINER'S LAMP.

No. 519,616.

Patented May 8, 1894.



WITNESSES

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UNITED STATES PATENT OFFICE

WILLIAM P. McMASTERS, OF MUNHALL, PENNSYLVANIA.

MINER'S LAMP.

SPECIFICATION forming part of Letters Patent No. 519,616, dated May 8, 1894.

Application filed March 15, 1892. Serial No. 425,002. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM P. McMASTERS, of Munhall, in the county of Allegheny and State of Pennsylvania, have invented
5 a new and useful Improvement in Miners' Lamps, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming part of this specification, in which the figure illustrates a central vertical section through my
10 improved lamp.

My invention relates to lamps for miners' use, and is designed to overcome the numerous difficulties which have arisen in the use
15 of these lamps. Heretofore, the wick being loosely coiled in the body of the lamp when the same was drawn out through the wick-tube, it became tangled and knotted and could not be forced out through the tube. As
20 cotton seed oil is used in most lamps of this character and this oil contains a heavy sediment, the wick lying upon the bottom of the bowl became so gummy and filled with residue from the oil, that it prevented the oil
25 being drawn up therethrough and the wick became useless. Moreover, the oil running out into the wick tube became heated and caused great waste, as it is well known that oil when heated burns much more rapidly than
30 when cool.

My invention overcomes all these difficulties, and to that end it consists in a lamp having a hollow body or bowl and a wick-tube which is extended within the bowl a considerable distance so as to contain the wick
35 throughout the major portion of its length, this tube having perforations to allow the oil to saturate the wick.

It also consists in a wick tube extended
40 within the bowl and passing through a hole in the side of the same of the same size as the tube, whereby the oil is prevented from becoming heated by running up the tube, as well as in the construction and arrangement
45 of the parts as hereinafter more fully described and set forth in the claims.

In the drawing, the body 2 of the lamp is made of block tin as usual and is provided with the ordinary hinged lid 3 and handle 4.

A wick-tube 5 is soldered in a hole in the side
50 of the bowl and extends within the bowl to a point near the level of the lid, being curved near its middle portion as shown. The inner end of this tube is flared outwardly as shown, to allow easy insertion of the wick and soldered to the inner side of the bowl, while in
55 the bend are provided perforations as shown, to allow access of the oil to the wick. An outer tube 6 is soldered to the side of the bowl and surrounds the wick-tube as shown. 60

The operation of the device is as follows:— The lid being opened, the wick is inserted in the wick-tube and forced therethrough until it protrudes from the outer end. The lid is then closed, and the oil entering the tube
65 through the perforations saturates the wick and is drawn up to the point of combustion.

The advantages of the construction are obvious. The wick cannot become tangled or knotted as it is inclosed in the tube. The
70 sediment cannot settle in the wick and make it gummy, and moreover the oil cannot run out into the wick tube, as it only enters the tube through the perforations in its lower side.

Many variations may be made in the form
75 and arrangement of the parts, and therefore, without limiting myself to the precise arrangement herein shown and described,

What I claim as new, and desire to secure
80 by Letters Patent, is—

1. A miner's lamp, having a wick-tube extending within the lamp body and curved upwardly, said inner portion having perforations in the lower side of its bent portion; substantially as and for the purposes described. 85

2. A miner's lamp, having a wick-tube extending within the oil reservoir and bent upwardly therein, said tube having perforations in the lower side of its bent portion, and an outer tube surrounding the outer portion of
90 the wick-tube, substantially as and for the purposes described.

In testimony whereof I have hereunto set my hand this 12th day of March, A. D. 1892.

WILLIAM P. McMASTERS.

Witnesses:

W. B. CORWIN,
C. BYRNES.