

No. 894,587.

PATENTED JULY 28, 1908.

A. BRILE.

MINER'S LAMP.

APPLICATION FILED NOV. 29, 1907.

2 SHEETS—SHEET 1.

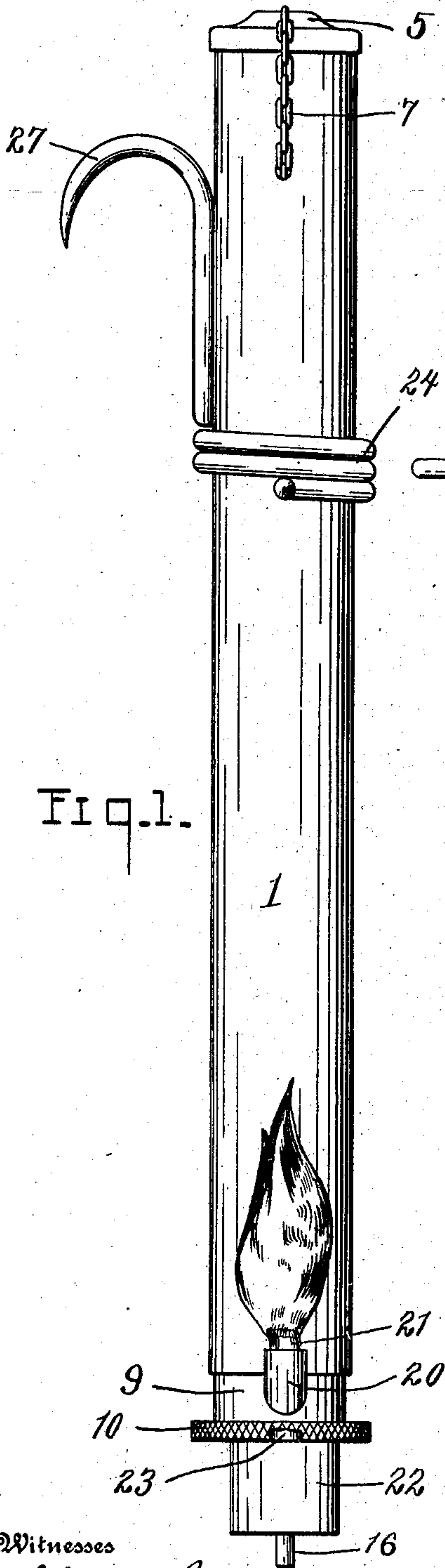


Fig. 1.

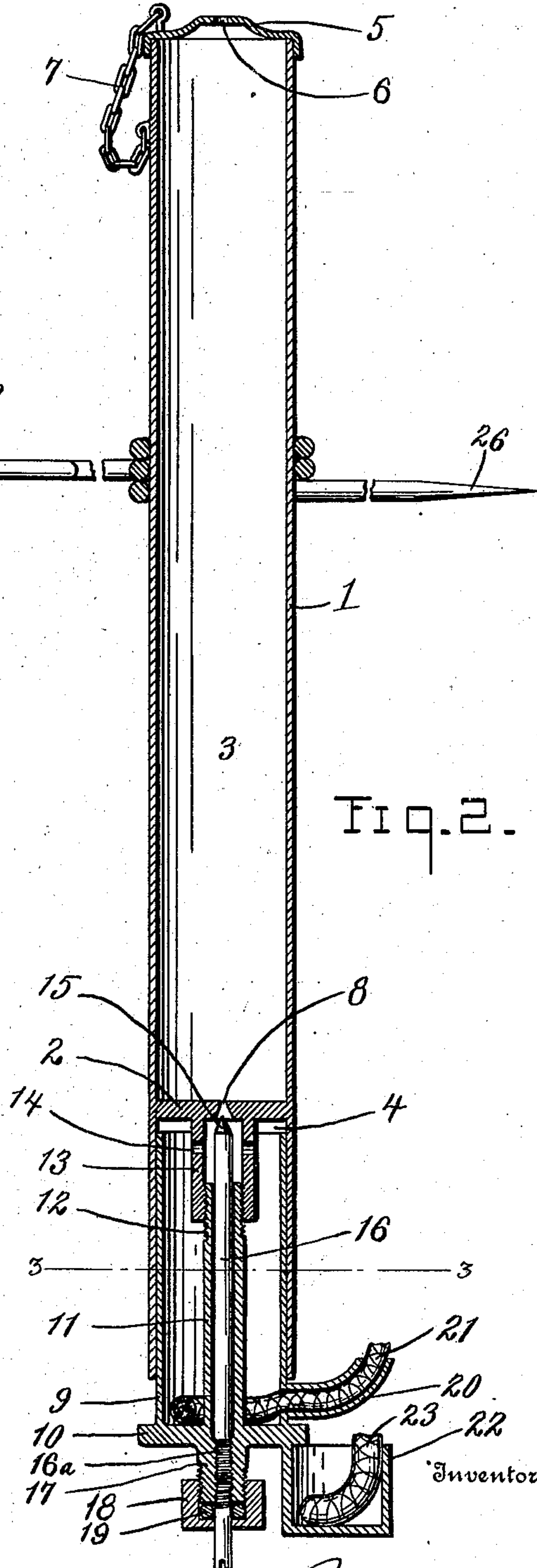


Fig. 2.

Witnesses

Chas. J. Jennings.  
L. O. Little.

By Alfred Brile  
Watson & Coleman Attorney

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2 SHEETS—SHEET 2.

Fig. 3.

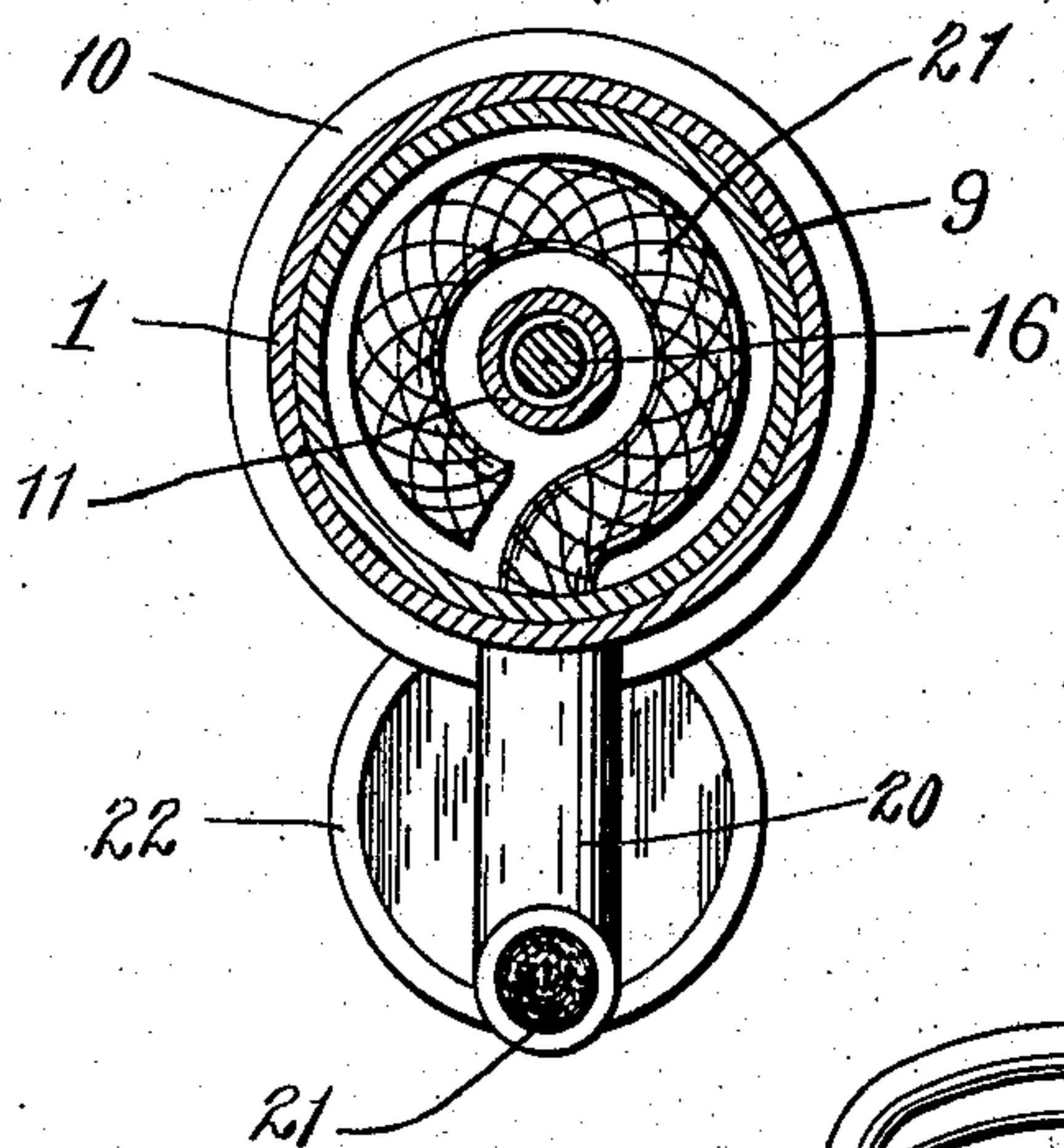


Fig. 5.

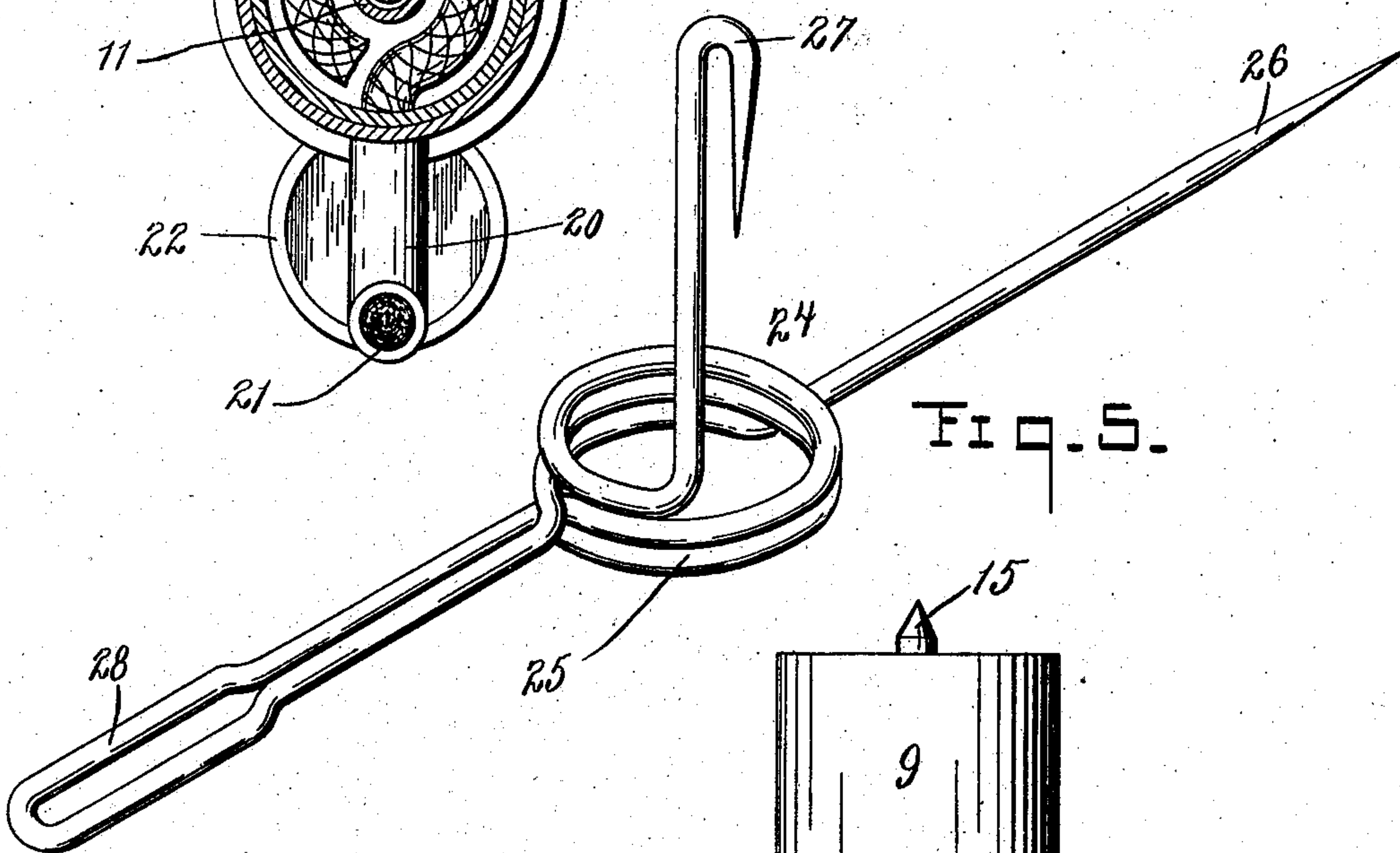
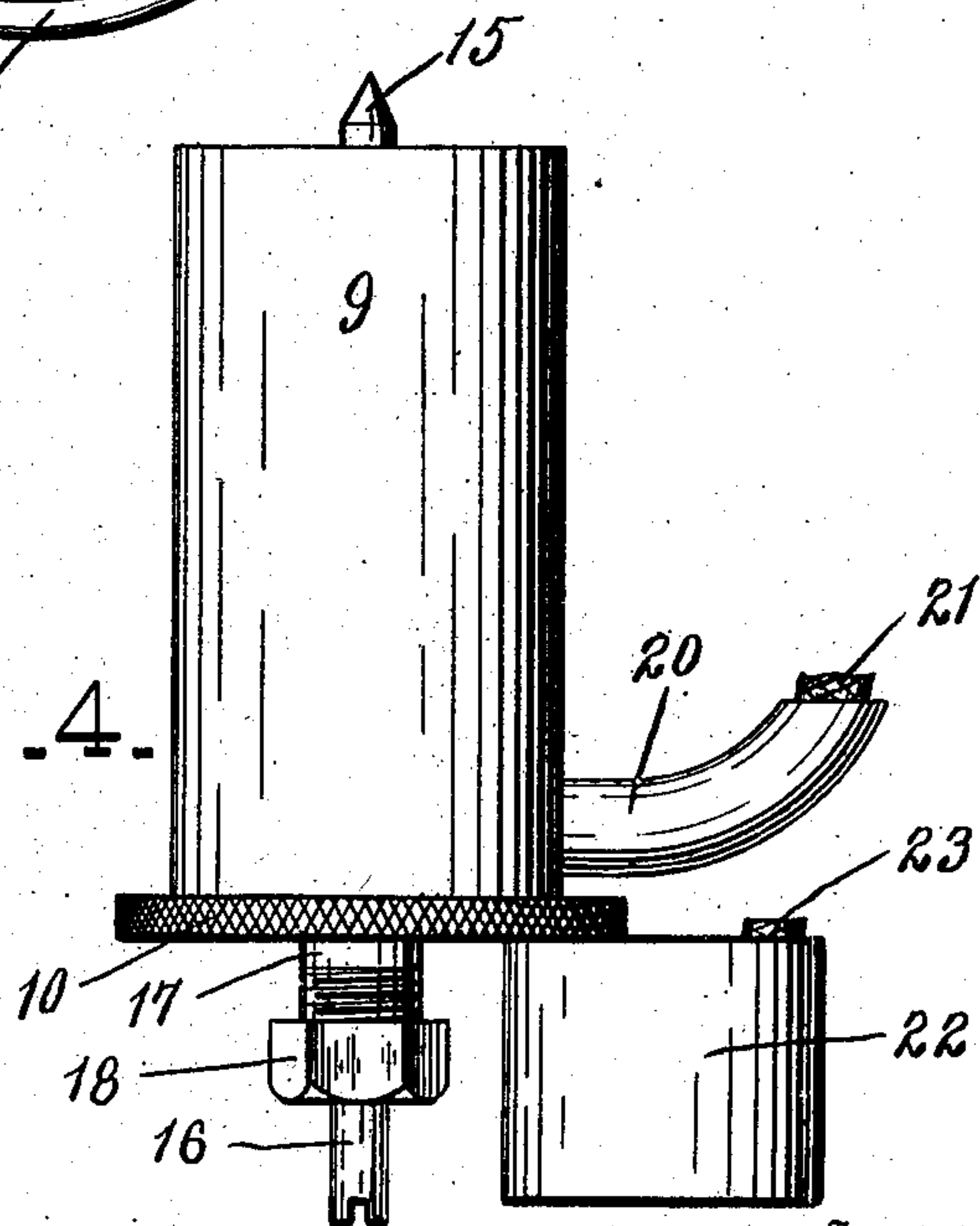


Fig. 4.



Witnesses

Chas. J. Jennings  
L. O. Little.

Alfred Brile

By

Watson E. Coleman

Attorney



# UNITED STATES PATENT OFFICE.

ALFRED BRILE, OF ENCAMPMENT, WYOMING.

## MINER'S LAMP.

No. 894,587.

Specification of Letters Patent.

Patented July 28, 1908.

Application filed November 29, 1907. Serial No. 404,415.

*To all whom it may concern:*

Be it known that I, ALFRED BRILE, a citizen of the United States, residing at Encampment, in the county of Carbon and State of Wyoming, have invented certain new and useful Improvements in Miners' Lamps, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to improvements in miners' lamps and its object is to provide one which will be simple, strong, durable and inexpensive in construction and exceedingly convenient to handle.

With the above and other objects in view, the invention consists of the novel features of construction and the combination and arrangement of parts hereinafter described and claimed, and illustrated in the accompanying drawings, in which

Figure 1 is a front view of my improved miner's lamp; Fig. 2 is a vertical longitudinal section; Fig. 3 is a detail horizontal or transverse section taken on the plane indicated by the line 3—3 in Fig. 2; Fig. 4 is a side elevation of the feed or wick cylinder; and Fig. 5 is a perspective view of the support or holder for the lamp.

The invention comprises a cylindrical tubular body 1 having open ends and a partition 2 arranged a suitable distance from its lower end and adapted to divide it into upper and lower chambers 3, 4. The upper one 3 is adapted to receive the grease, tallow, oil, candle or the like that is to be burned by the lamp and serves as a supply reservoir. Such material is introduced into the chamber or reservoir 3 through its open top which is adapted to be closed by a removable cap 5 having a centrally arranged vent hole 6 and a surrounding flange which frictionally engages the upper edge of the body 1 and retains the cap thereon. To prevent the latter from becoming lost I preferably attach it by a chain or the like 7.

The tallow or other material in the supply reservoir 3 is fed through a valve opening 8 arranged centrally in the partition 2 into the lower chamber 4 into which latter telescopes a feed cylinder or cup 9. The latter has an enlarged or reinforced bottom 10 from the center of which rises a tube 11 having a threaded upper end 12 to screw into a tube 13 which is formed integral with and depends from the partition 2 and at the top of which is located the valve opening or seat 8.

In the tube 13 are formed outlet openings 14 which permit the tallow or oil passing through the opening 8 and into the tube 13 to pass through the latter into the feed chamber or cylinder formed by the telescoping parts 1, 9. The valve seat 8 which is preferably cone-shaped is adapted to receive a similar shaped valve 15 formed on the upper end of a stem or rod 16 which passes through the tube 13 and has its lower portion screw threaded as at 16<sup>a</sup> and engaged with corresponding threads formed in an extension or nipple 17 on the bottom portion of the feed cylinder. A screw cap 18 containing a suitable packing 19 is engaged with the externally screw threaded lower end of the nipple 17 and forms a stuffing box for the stem 16, which latter has at its lower extremity a notch to receive a screw driver or similar tool by means of which the valve 15 may be adjusted toward or from its seat 8 to control the feed of the tallow from the supply reservoir to the feed chamber or reservoir. The edge of the bottom or head 10 of the feed cylinder 9 is preferably milled as shown so that it may be readily rotated to apply it or remove it from the body 1.

Projecting laterally from the cylinder 9 adjacent to its bottom is a burner tube 20 which has an upwardly turned outer end and which is adapted to contain a wick 21. Formed upon the bottom 10 of said cylinder is a cup or pan 22 which serves both to catch the drippings from the burner or wick tube and also as a starting cup, a wick 23 being adapted to be saturated in oil or grease and placed in said cup or pan and ignited when it is desired to start the lamp as presently explained.

In order to enable the lamp to be readily suspended from any kind of a support and adjusted so that its flame may be turned in any direction and disposed at different elevations, I provide a holder 24 constructed of heavy wire and preferably from a single piece as shown. This holder comprises a cylindrical coil 25 adapted to slidably receive the body 1 and to frictionally engage it so that it will remain in any adjusted position in the coil to support the lamp at the desired height or elevation. One end of the wire from which the holder is made is shaped to provide a spur 26 which may be readily forced into a wall or other vertical support, and its other end is bent upwardly from the coil and then curved outwardly and downwardly to pro-



vide a suspending hook 27 which may be conveniently caught over or forced into a suitable support. A portion of the wire from which said support is made is shaped to provide a handle 28 which preferably projects radially from the coil and in a direction opposite to that of the spur 26, the hook 27 being disposed preferably in a plane at right angles to that of the spur 26 and handle 28 as clearly shown in Fig. 1.

In using the lamp it will be understood that it is designed to burn grease, tallow oil or any other illuminating material or substance that will harden when cold and that will liquefy when heated. Such material is placed in the supply chamber or reservoir 3 through its open top after the cap 5 is removed. When it is desired to start the lamp the wick 23 is ignited and allowed to burn and heat the burner tube 20 and the adjacent parts of the lamp so that the illuminating material in the feed cylinder will pass through the wick 21 and burn at the upper end of the tube 20. The heat from this flame gradually warms the entire body of the lamp and liquefies the material in the same so that it feeds from the chamber 3 down through the valve opening 8, the tube 13 and the apertures 14 into the feed chamber or cylinder. By adjusting the valve stem 16 the feed of the illuminating material may be regulated as desired. The holder 24 provides an exceedingly convenient means for carrying or suspending the lamp and owing to its slidable and rotatable engagement with the body, the latter may have its flame turned in any direction and adjusted at different elevations. When the flame of the burner is extinguished the illuminating substance will harden and cease to feed through the valve opening 8.

From the foregoing it will be seen that my lamp will be exceedingly economical in operation since there will be practically no dropping of the grease, as is the case when candles are used. The tallow or oil is completely consumed and by burning it as set forth a better light is obtained than that given by the ordinary candle. It is easy to light and extinguish and there is no waste or

dropping of grease when it is extinguished. It will be further noted that the device is simple, strong and durable in construction and that it may be produced at a comparatively small cost.

Having thus described my invention what I claim is:

1. A miner's lamp comprising a body having a horizontal partition formed with a valve seat and adapted to divide it into an upper supply chamber and a lower feed or wick chamber, said partition being formed upon its bottom with a depending tube which surrounds the valve seat and is formed with transverse apertures, a feed cylinder to telescope the lower chamber and provided upon its bottom with a central tube having a screw threaded engagement with the depending tube upon the partition, a screw threaded valve stem arranged in the last mentioned tube and having a valve at its upper end to engage said seat and a wick tube projecting laterally from the lower portion of the feed cylinder.

2. A miner's lamp comprising a body having a horizontal partition formed with a valve seat and adapted to divide it into an upper supply chamber and a lower feed or wick chamber, said partition being formed upon its bottom with a depending tube which surrounds the valve seat and is formed with transverse apertures, a feed cylinder to telescope the lower chamber and provided upon its bottom with a central tube having a screw threaded engagement with the depending tube upon the partition, a screw threaded valve stem arranged in the last mentioned tube and having a valve at its upper end to engage said seat, a wick tube projecting laterally from the lower portion of the feed cylinder, a starting cup or pan upon the feed cylinder beneath said wick tube and a removable closure for the upper end of the body.

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

ALFRED BRILE.

Witnesses:

C. B. BERGQUIST,  
A. H. OLDMAN.