

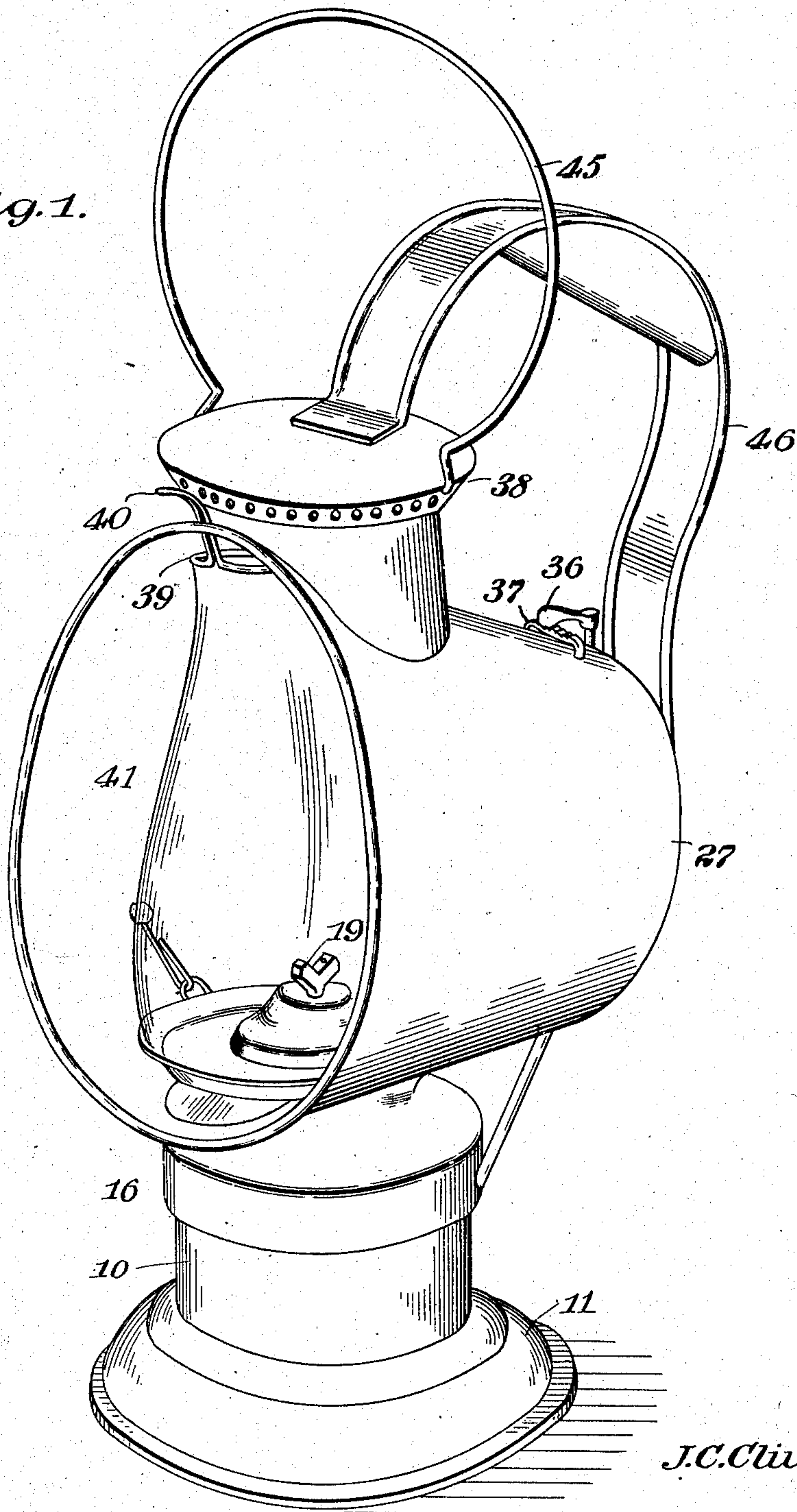
J. C. CLIVER.  
CAR INSPECTOR'S LAMP.  
APPLICATION FILED MAR. 2, 1909.

929,916.

Patented Aug. 3, 1909.

2 SHEETS—SHEET 1.

Fig. 1.



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Witnesses

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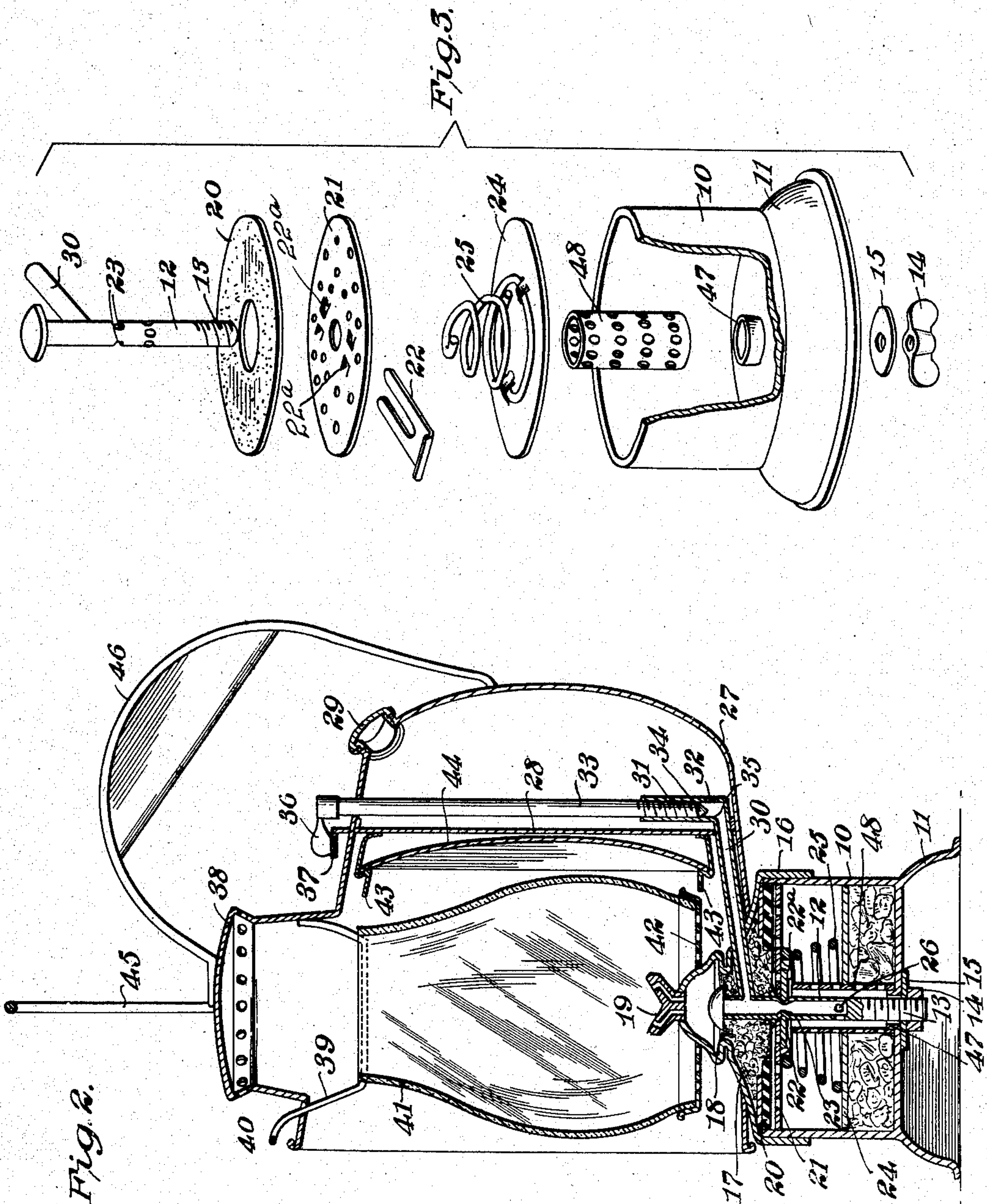


Fig. 2.

Fig. 3.

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# UNITED STATES PATENT OFFICE.

JENS C. CLIVER, OF OGDEN, UTAH.

## CAR-INSPECTOR'S LAMP.

No. 929,916.

Specification of Letters Patent.

Patented Aug. 3, 1909.

Application filed March 2, 1909. Serial No. 480,826.

*To all whom it may concern:*

Be it known that I, JENS C. CLIVER, citizen of the United States, residing at Ogden, in the county of Weber and State of Utah, have invented certain new and useful Improvements in Car-Inspectors' Lamps, of which the following is a specification.

This invention relates to lamps and has particular reference to a lamp in which acetylene gas is to be burned.

An object of this invention is to provide a lamp of this character which is for use by railway employees and particularly by car inspectors where a bright steady flame is necessary for the carrying on of their work.

Another object of this invention is the provision of a lamp of this character which may be easily carried and operated and one which is of simple construction thereby enabling access to the working parts thereof when it is necessary to clean out the passage through which the water and gas are to pass.

The invention further aims to produce a lamp of this character which can be economically manufactured so that a gas lamp will be produced which will involve but slight additional expense over the oil lamps or lanterns now commonly employed in the railway service.

For a full understanding of the invention reference is to be had to the following description and accompanying drawings, in which,

Figure 1 is a perspective view of the complete lamp. Fig. 2 is a vertical longitudinal section through the same. Fig. 3 is a view of the operative parts of the lamp disposed in the gas forming receptacle shown in detached relation.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Referring to the drawings the numeral 10 designates a cylindrical receptacle which is provided with a flanged base 11 upon which the same is to be supported and to be raised slightly from the ground. The receptacle 10 is centrally apertured at its bottom

through which is positioned vertically a tube 12 which is closed at its lower extremity and provided with a threaded portion 13 upon which a winged-nut 14 is positioned which is engaged with a washer 15 to secure the tube 12 in an upright position within the receptacle 10. An annular flange 47 is formed upon the bottom of the receptacle 10 for the purpose of supporting a foraminous sleeve 48 in a vertical position about the tube 12 and which is extended upwardly in the receptacle 10 to a point slightly below the upper edge thereof. The sleeve 48 is provided for the purpose of preventing the choking of the tube 12 by the engagement of the gas forming substances therewith.

Upon the upper extremity of the receptacle 10 is positioned a cap 16 which frictionally engages thereover and which is conical in formation, the upper portion of the cap 16 being preferably filled with a filtering material 17, which comprises cotton or the like, the cap 16 being rigidly mounted upon the upper end of the tube 12 by means of a web 18 positioned in the upper end of the cap 16 and engaged over the upper extremity of the tube 12 to close the same. The web 18 is provided with a plurality of apertures therethrough which admit gas upwardly into the cap 16 which passes into a suitable burner 19 disposed upon the apex of the cap 16. The cap 16 is provided with a washer 20 which is composed of a flexible material and which is held against the filtering material 17 by means of a plate 21 held rigidly upon the tube 12 by means of a slide 22 which is carried upon the plate 21 by means of lugs 22<sup>a</sup> which are struck downwardly from the plate 21 and impinged over the edges of the slide 22. The slide 22 is forked upon the inner extremity and engaged in recesses 23 formed oppositely in the sides of the tube 12. The receptacle 10 is provided with a plunger 24 which carries upon its upper face a coiled spring 25 for engagement against the under face of the plate 21 and which engages the upper surface of a gas forming material which is loosely placed in the bottom of the recep-



tacle 10, The tube 12 is provided with a plurality of apertures 26 which are opened into the receptacle 10 and admit water thereto which is conveyed downwardly through the tube 12.

A hood 27 is rigidly mounted upon the cap 16 and extended upwardly therefrom, the hood being of frusto-conical formation and being also disposed as to position the open base end thereof outwardly through which the light is reflected, the hood 27 being grounded at its inner extremity and provided with a partition 28 which is spaced from the inner end thereof in order to form a tank for the reception of water by the removal of a detachable cap 29. A second tube 30 is provided which is positioned in the bottom of the hood 27 and which extends backwardly therein from the tube 12 where it is curved upwardly as at 31 and provided with apertures 32 which form a communication between the tube 30 and the tank. The upper extremity of the upwardly turned tube 31 is threaded upon its inner face into which is engaged a valve stem 33 which is disposed in threaded engagement therewith and which is provided upon its lower extremity with a needle valve 34 which is engaged against a shoulder 35 formed in the upturned tube 31. The upper extremity of the valve stem 33 is provided with a laterally extended arm 36 which is formed at its outer extremity with a depended edged portion for engagement upon a segment 37 rigidly disposed upon the upper face of the hood 27 to retain the valve 34 in adjusted position. The hood 27 is provided with a cap 38 which is apertured at its upper end to admit of the escape of heated air and gases from the flame incident to the burning of the gas within the hood 27. The cap 38 is provided upon its inner face with bail arms 39 which are rigidly mounted at the rear sides of the cap 38 and which extend forwardly therefrom where a lip 40 is formed which extends upwardly and preferably through the edge of the hood 27 to enable the raising of the forward end of the bail arms 39 from their normal position. The bail arms 39 are of arcuate formation for the reception of the upper extremity of a lamp chimney 41 in order to retain the same in rigid position within the hood 27. The lamp chimney 41 is positioned upon a foraminous base 42 which is formed for the purpose of retaining the chimney 41 in position and of admitting of the passage of air to the burner 19 during the combustion of the gas.

Within the inner reduced end of the hood 27 a plurality of spring clips 43 are positioned in distanced relation to each other and detachably support the reflector 44 of

any desired and adaptable formation to reflect the rays of light emitted from the flame outwardly to the base or open end of the hood 27. For the purpose of conveying the lamps a bail 45 is hingedly mounted upon the opposite sides of the cap 38 and is normally retained in a vertical position upon which the lamp is swung. When it is desired to insert the lamp in confined and restricted places, as for instance, beneath a car about the trucks of the same, a handle 46 is provided which is rigidly mounted at its opposite extremities upon the top of the cap 38 and the rear portion of the hood 27 respectively. The provision of these two forms of handles in a lamp of this structure is found to be not only convenient but necessary as can be readily understood in the operation of the device.

Having thus described the invention what is claimed as new is:—

1. A lamp as specified comprising a receptacle, a flanged base disposed on said receptacle, a cap frictionally engaged on the upper end of said receptacle, a tube rigidly mounted in said cap and extended downwardly through the bottom of said receptacle, a threaded closed portion formed on said tube, a winged-nut engaged on said threaded portion against the under face of the bottom of said receptacle, a portion of filtering material engaged in said cap, a washer positioned in said cap against said filtering material, a plate detachably positioned about said tube in said cap, a hood of frusto-conical formation rigidly disposed on said cap and extended upwardly therefrom, a burner positioned upon the upper extremity of said cap and communicated therewith, a plunger mounted in said receptacle for holding a gas forming substance within the bottom of said receptacle, a spring interposed between said plate and said plunger for depressing said plunger, a second tube extended from the upper end of said first tube laterally within the bottom of said hood, an upturned tube formed upon the rear extremity of said second tube, a valve formed in said upturned tube, a tank positioned about said valve, a valve stem upwardly extended through said hood and adapted for engagement by the operator, a cap positioned on said hood over said burner, a chimney detachably positioned in said hood and a handle carried by said hood for supporting the lamp.

2. In a device as specified the combination of a receptacle, a cap frictionally engaged on said receptacle, a tube depended from said cap and engaged through the bottom of said receptacle, said tube being closed and secured at its lower end, filtering material carried by said cap, a hood mounted on said



cap, a burner carried by said cap and extended in the said hood, a plunger mounted about said tube in said receptacle for holding a gas forming substance in the bottom of  
5 said receptacle, a plate mounted about the upper end of said tube, a spring interposed between said plate and said plunger for actuating the same, a second tube laterally, and upwardly extended from said first tube  
10 into said hood, a valve formed in the upper

end of said second tube, a tank formed in said hood about said valve and a valve stem extended upwardly through said hood from said valve for operating the same.

In testimony whereof I affix my signature 15  
in presence of two witnesses.

JENS C. CLIVER. [L. s.]

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