

C. M. NEISLER.

VAPOR LAMP.

APPLICATION FILED JULY 7, 1910.

978,191.

Patented Dec. 13, 1910.

Fig. 1.

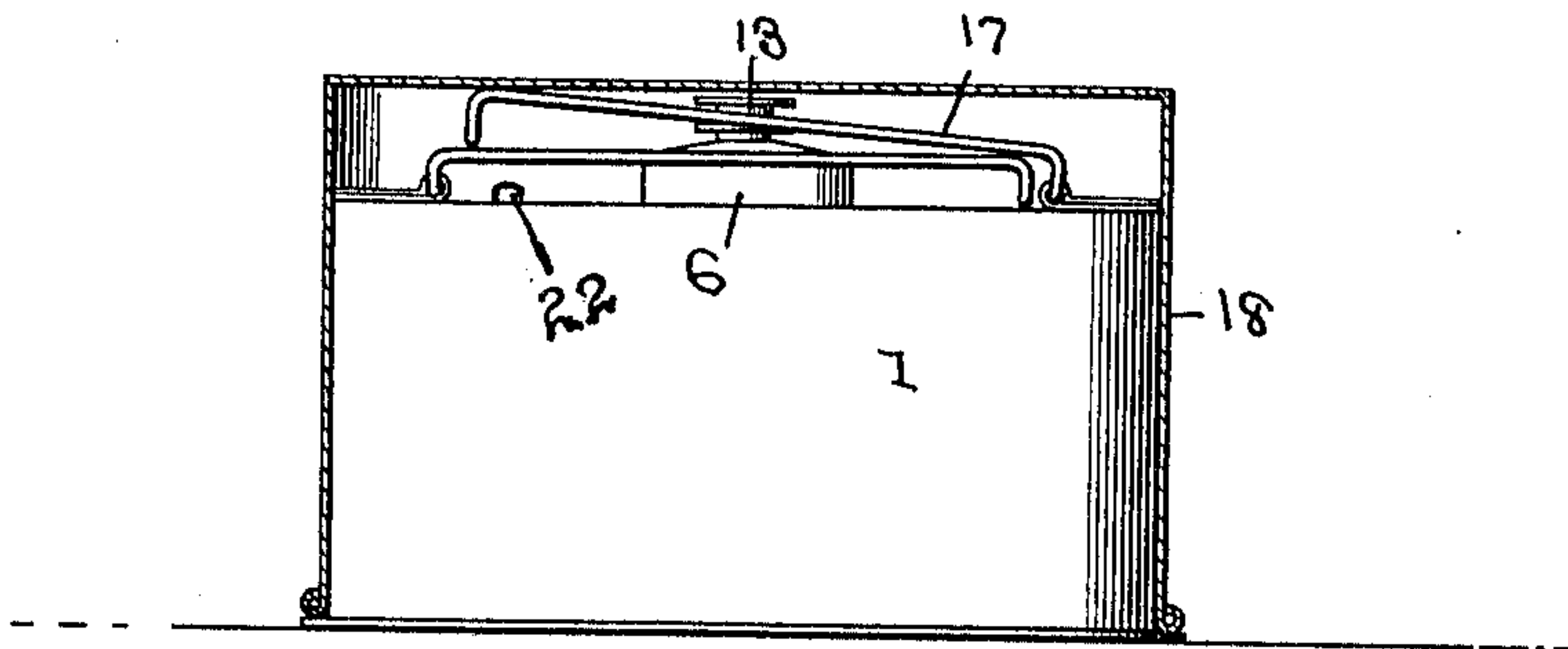
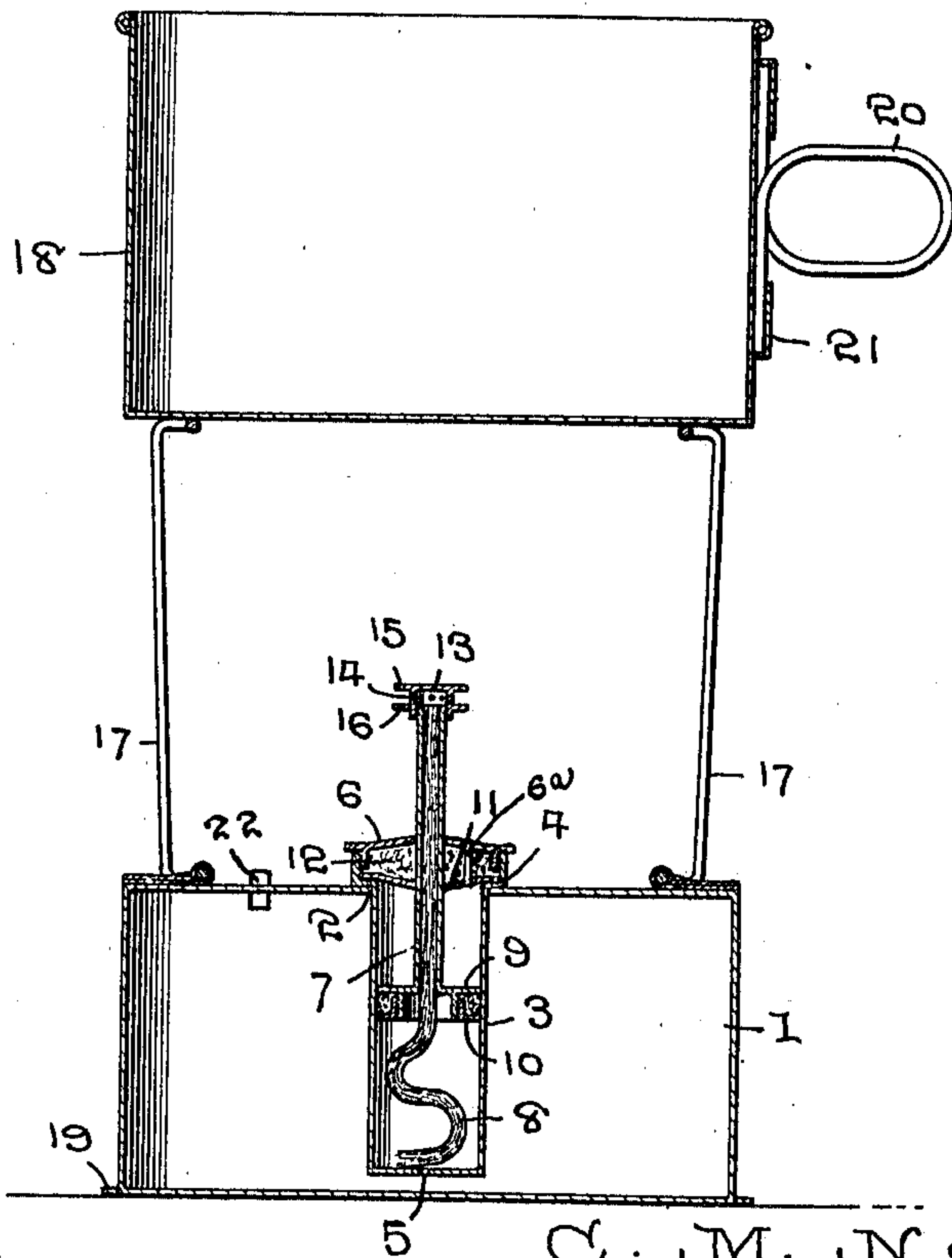


Fig. 2.



WITNESSES:

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CLYDUS M. NEISLER, OF LITCHFIELD, ILLINOIS.

VAPOR-LAMP.

978,191.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CLYDUS M. NEISLER, a citizen of the United States, residing at Litchfield, in the county of Montgomery and State of Illinois, have invented certain new and useful Improvements in Vapor-Lamps; and I do hereby 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.

My invention relates to new and useful improvements in vapor lamps and my object is to provide a suitable burner and a reservoir therefor.

A further object is to provide means whereby gasoline or similar substances may be used for creating gas.

Other objects and advantages will be hereinafter referred to and more particularly pointed out in the specification hereunto annexed.

In the accompanying drawings which are made a part of this application, Figure 1 is an elevation partly in section of my improved combination stove and lamp in its folded position, and, Fig. 2 is a central sectional view of the device applied to use.

Referring to the drawings in which similar reference numerals designate corresponding parts throughout the several views, 1 indicates a reservoir or tank, into which any suitable form of liquid fuel is to be introduced, but preferably gasoline. Through the center of the top portion of the reservoir is formed an opening 2, through which is extended a casing 3, said casing being preferably enlarged at its upper end to form a shoulder 4, which, when the casing is introduced into the reservoir, will rest upon the upper face of the reservoir. The lower end of the casing is provided with a port 5, through which the liquid within the reservoir will pass into the casing, while the upper end thereof is provided with a screw cap 6, which is adapted to form a closure for the upper end of the casing. Extending through the screw cap 6 and into the casing 3 is a sleeve 7, through which projects a wick 8, the lower end of the wick extending into the lower portion of the casing. The lower end of the sleeve 7 is provided with a packing ring 9, into which is introduced any suitable form of non-inflammable packing 10, thereby limiting the amount of the liquid in the casing, the packing preventing

the liquid from passing above the lower end of the sleeve, except through the wick.

Positioned a distance below the screw cap 6 is a partition 11 and between said partition and the screw cap is any suitable form of packing 12, a vent 6^a being provided to extend through the cap, packing and partition to allow the inlet and exhaust of air upon the lowering and raising of the sleeve 7.

At the upper end of the sleeve is provided a burner 13, the peripheral wall of which is provided with a plurality of openings 14, through which the gases from the fluid escape and in order to provide a suitable combustion chamber, flanges 15 and 16 are placed respectively above and below said openings.

Hingedly secured to the upper face of the reservoir 1 are brackets 17, which, when elevated, extend a distance above the burner and are adapted to support a receptacle 18, into which a liquid or other substance is to be placed when being heated. The receptacle 18 is in the form of a cup and when not in use, it is inverted and disposed over the reservoir, the bottom of the reservoir preferably having a peripheral flange 19, upon which the open edge of the receptacle rests. The receptacle 18 is provided with a suitable handle, which preferably comprises a ring 20 formed by bending a section of wire, the ends of the wire being extended so as to parallel the vertical wall of the receptacle and are seated in sockets 21, so that when the receptacle is not in use, the ring may be swung into engagement with the wall of the receptacle, so as to occupy but a minimum amount of space.

When in use, the receptacle 18 is lifted from over the reservoir and the sleeve 7, which is slidably mounted through the screw cap and partition, elevated a predetermined distance, the suction in the lower portion of the casing, caused by the packing in the ring 9, drawing a quantity of the liquid within the reservoir into the lower portion of the casing. The air necessary to the reservoir, upon the suction of the fuel therefrom into the casing, is supplied through a vent 22. The brackets 17 are then swung upwardly and the gases leaving the sleeve through the openings in the burner ignited, when the articles to be heated are placed in the receptacle and said receptacle rested over the brackets.

If it is desired to use the device for illu-

minating purposes, the receptacle 18 is removed from the reservoir and the sleeve 7 elevated and ignited in the same manner, as when it is to be used for heating purposes, the flame from the burner being used for illumination.

When the device is not in use, the sleeve 7 is lowered, which will expel so much of the oil in the casing as is not used, the burner resting upon the screw cap 6. The brackets are then lowered and the receptacle turned upside down and extended over the reservoir and parts carried thereby.

By this construction, it will be readily seen that the device will occupy but a minimum amount of space when not in use and by folding the ring used for a handle against the side of the receptacle, there will be no parts projecting which will catch upon an obstruction and it will likewise be seen that the burner and other exposed parts will be fully protected by the receptacle. It will likewise be seen that when igniting the gases, the holding of a lighted match adjacent the sleeve and below the burner will sufficiently heat the sleeve to convert the oil into a gas and by applying a match to the burner, said gas will readily ignite and it will also be seen that this device can be readily stored in a valise or other convenient place for transporting the same.

What I claim is:—

1. In a vapor lamp, the combination with a reservoir, of a casing extending through the upper end wall of the reservoir, the lower end of said casing having a port therein, a screw cap closing the upper end of the casing, a partition adjacent the upper end of the casing, packing between said partition and screw cap, a sleeve slidably mounted through said screw cap and partition, a packing ring at the lower end of said sleeve, a burner at the upper end of the sleeve and an oil conveying medium extending through the sleeve and into the lower portion of the casing.

2. In a vapor lamp, the combination with a reservoir adapted to contain an inflam-

mable liquid, of a tubular casing adapted to enter said reservoir and having a port in its lower end, a closure for the upper end of said casing, a sleeve extending through said closure, a burner at the upper end of the sleeve, a packing ring at the lower end thereof adapted to close communication between the upper and lower end of the casing and means to cause the inflammable liquid within the casing to move through the sleeve to a point adjacent the burner.

3. In a vapor lamp, the combination with a reservoir adapted to contain an inflammable liquid, of a casing extending within said reservoir and provided with a shoulder adjacent the upper end resting on the upper wall of said reservoir, said casing being provided with a port at the lower end thereof and a removable closure at the upper end, a sleeve extending through said closure and slidably mounted within said casing, said sleeve being provided with a packing ring at the lower end thereof to prevent the rise of the liquid within the casing above such point, and means to convey said inflammable liquid through the sleeve to a point adjacent the burner.

4. In a vapor lamp, the combination with a reservoir adapted to contain an inflammable liquid, of a casing inserted within said reservoir and said casing being provided with a port at the lower end and a closure at the upper end thereof, a sleeve extending through said closure and slidably mounted within said casing, means to draw the liquid from said reservoir within said casing when said sleeve is moved upwardly, and additional means to convey said liquid within the casing to a point adjacent the burner.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CLYDUS M. NEISLER.

Witnesses:

E. R. RICE,
C. A. GIESCH.