

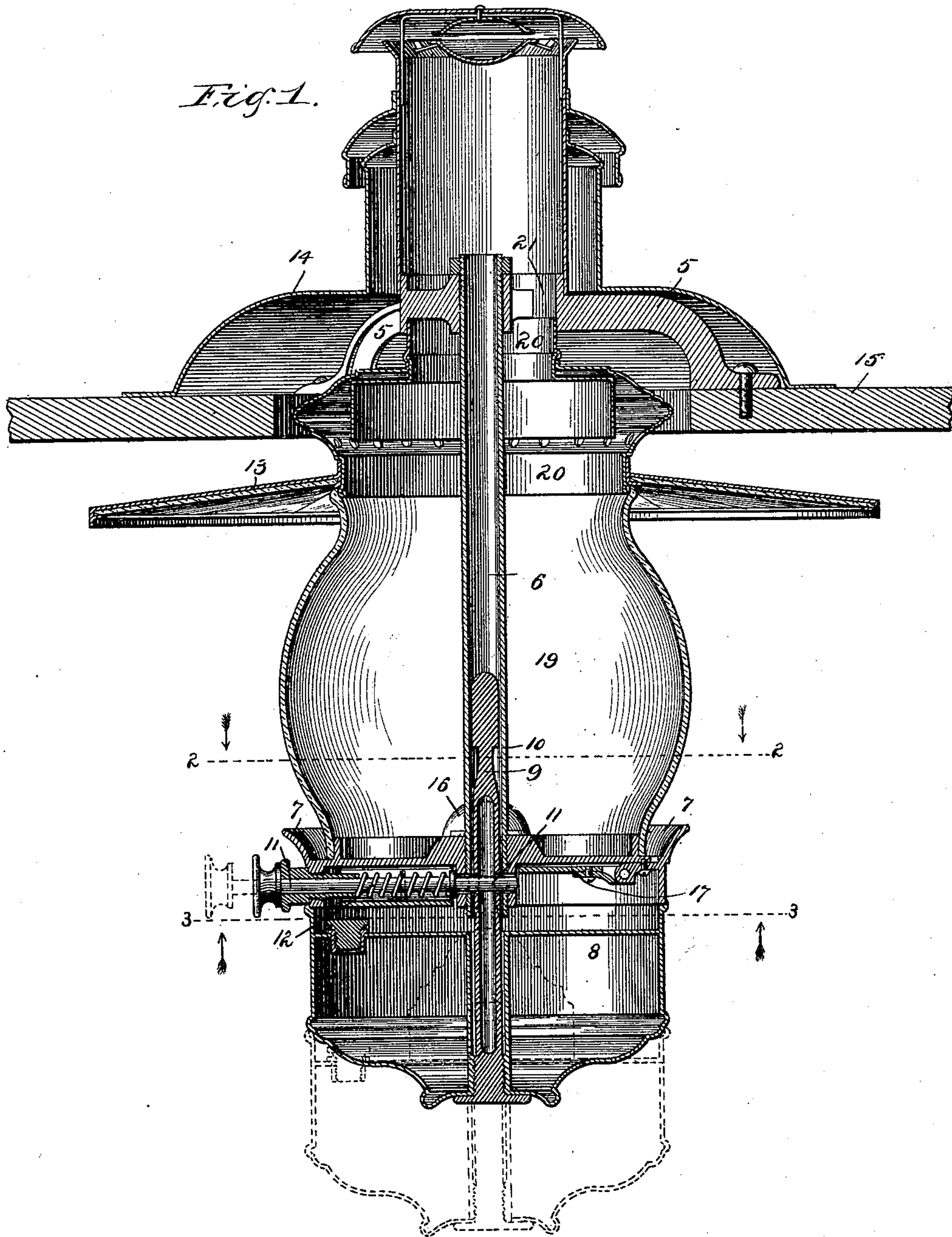
(No Model.)

2 Sheets—Sheet 1.

W. W. WILLITS.
CAR LAMP.

No. 395,937.

Patented Jan. 8, 1889.



Witnesses.
Wm. R. Heum.
J. D. Deeder

Inventor.
W. W. Willits
By J. H. Raymond
Att'y.

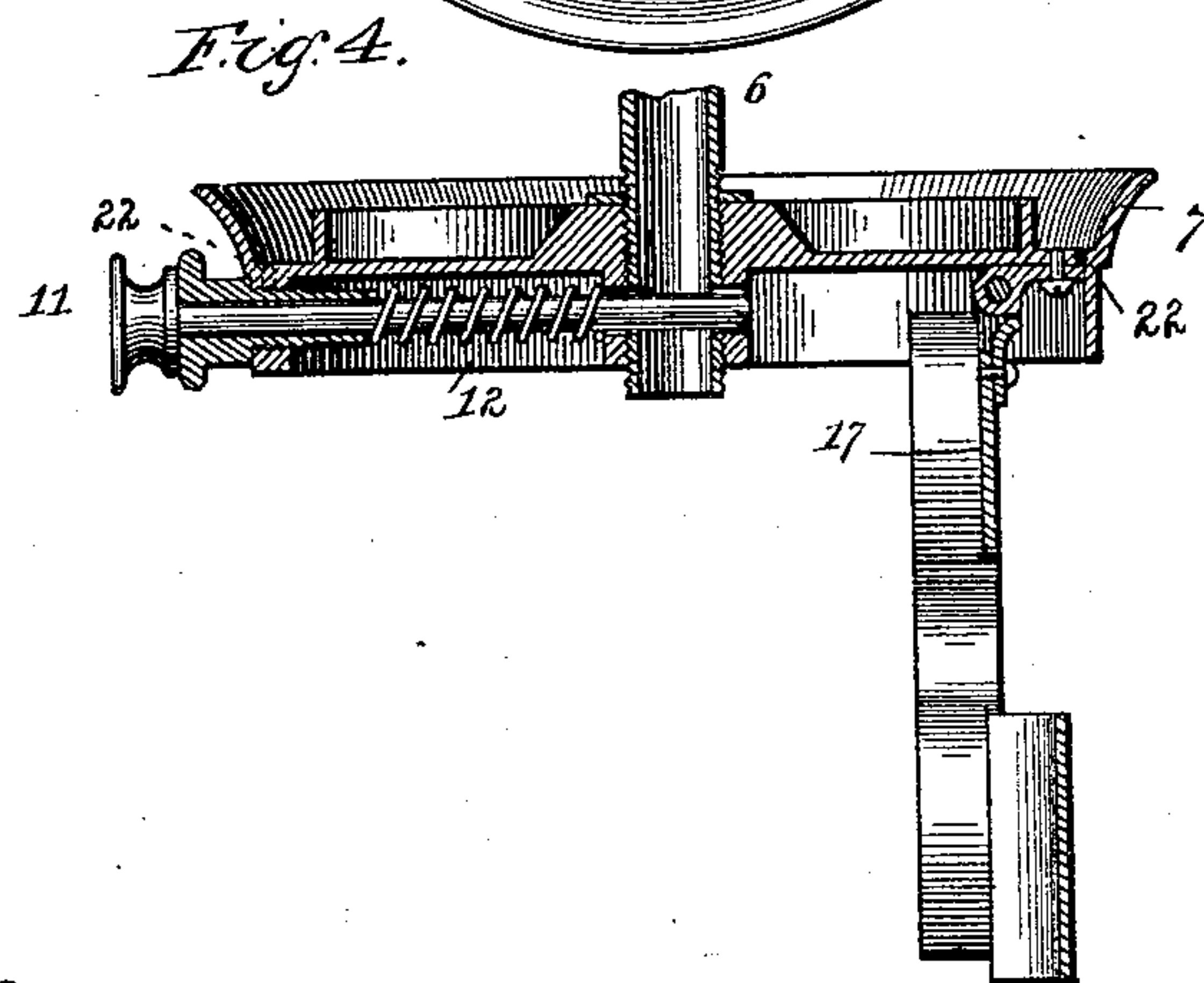
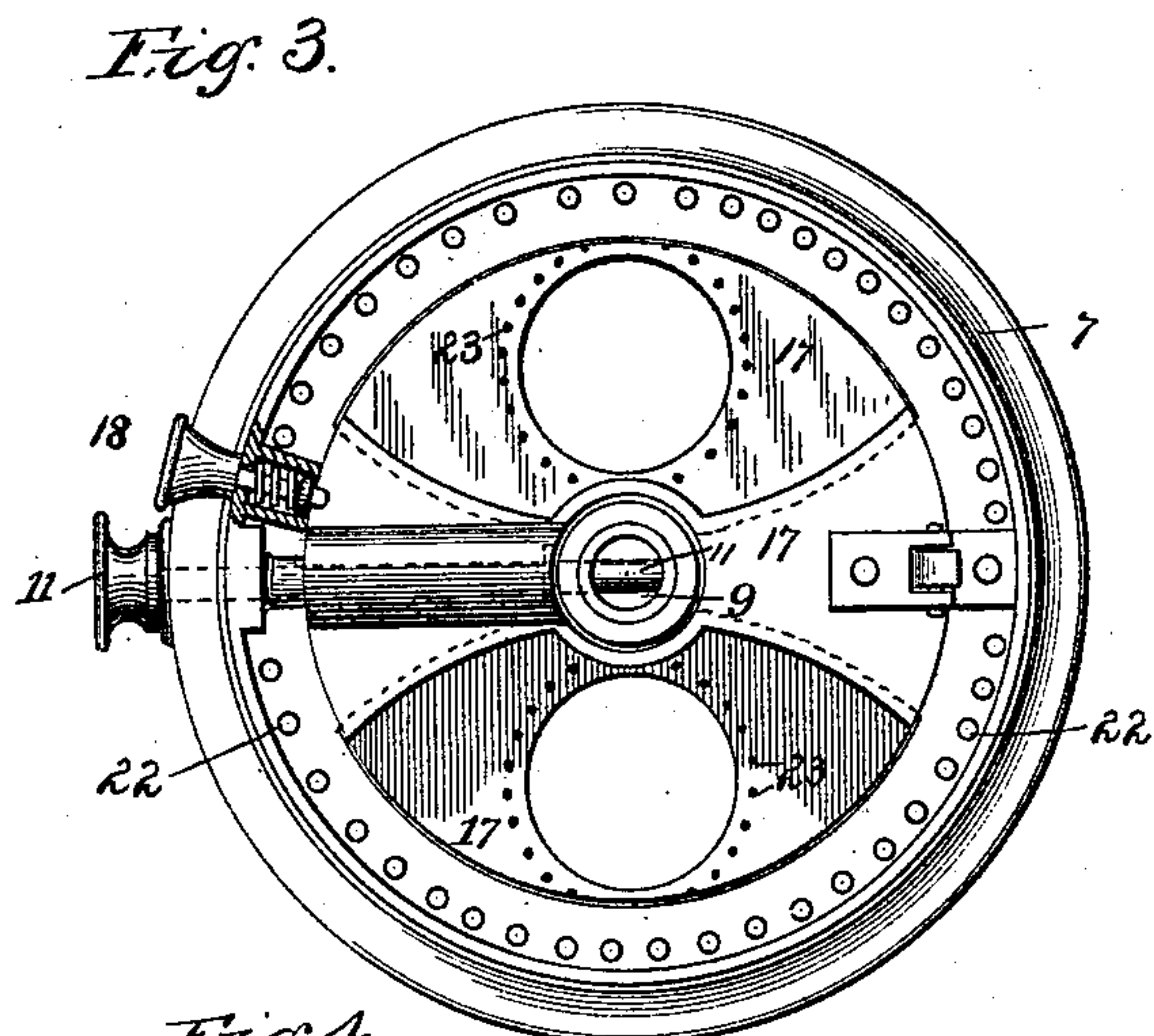
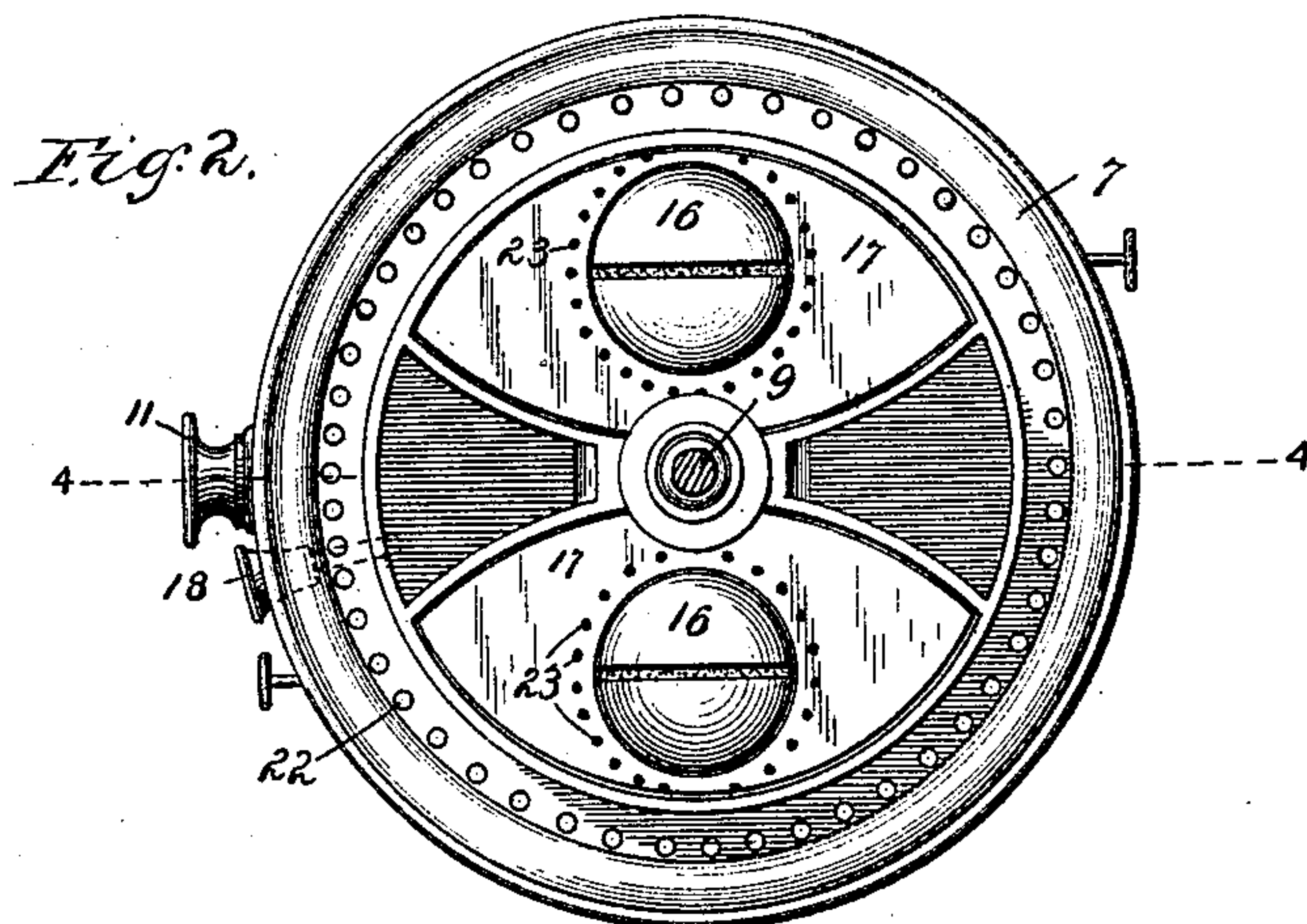
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UNITED STATES PATENT OFFICE.

WARD W. WILLITS, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE ADAMS & WESTLAKE COMPANY, OF SAME PLACE.

CAR-LAMP.

SPECIFICATION forming part of Letters Patent No. 395,937, dated January 8, 1889.

Application filed May 9, 1888. Serial No. 273,349. (No model.)

To all whom it may concern:

Be it known that I, WARD W. WILLITS, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Lamps, of which the following is a specification.

My invention relates to car or other lamps which are suspended from the roof; and its object is to provide means for suspending the lamp which shall be simple, strong, and convenient for use, shall permit the free radiation of light in all directions, and shall not interfere with the use of a reflector of any size or shape desired.

My invention consists in the parts and combinations hereinafter described.

The special features of my invention will appear from the following description, taken in connection with the accompanying drawings, in which—

Figure 1 is a vertical central section of a lamp embodying my invention, showing likewise a part of the car or other roof and the hood or jack surmounting the same. Fig. 2 is a plan of the part of the lamp below the line 2 2, Fig. 1. Fig. 3 is a view from below of the part of the lamp above line 3 3, Fig. 1. Fig. 4 is a vertical section of the lower part of the lamp, the oil-pot having been removed and the burner-plate 17 swung down.

A frame or "spider," 5, Fig. 1, spans the opening in the car-roof 15, and a supporting-rod, 6, depends from the center thereof, which rod in the present instance is made tubular, partially to secure great stiffness. At the lower end of supporting-rod 6 is secured a globe-support, 7, on which rests the globe 19. The upper end of the globe is steadied by the metal top 20, which extends up into the ring 21 of the spider 5. A reflector, 13, surrounds the metal top 20 immediately above the globe. The oil-pot 8 has an upwardly-projecting pin, 9, which may be inserted in the lower end of the tubular rod 6, said pin being shouldered at 10 and provided with a transverse hole, through which the catch 11 may pass when the oil-pot is in its normal position. The spring-catch 11 is carried by the globe-support 7, and is pressed inward by a spiral spring, 12. The shoulder 10 enables the pin 11 to

sustain the oil-pot in the position shown in dotted lines, in which position the burners are accessible for lighting.

The hood 14 needs no special description, as it forms no part of the present invention, and its structure is clearly shown in the drawings.

Referring now to Figs. 2 and 3, it will be seen that burners 16 are placed in opposite sides of the oil-pot and project through holes in the burner-plate 17. Air is supplied to the burners through perforations 22, a part being directed against the flame by the burner-caps and a part issuing through the perforations 23 23 in the burner-plate 17 partially for the purpose of cooling said plate as well as for sustaining combustion. The burner-plate 17 is hinged at one side to the globe-support, the opposite side being sustained by the spring-catch 18. When the oil-pot is removed, the burner-plate 17 may be swung down, as shown in Fig. 4, thereby leaving openings of sufficient size to admit the hand to the inside of the globe for cleaning the same.

It will be seen by reference to Fig. 1 that the parts of the lamp which would cast shadows are reduced to a minimum, and that light from one or the other of the burners is radiated freely in all directions except downward. The reflector may be made with surfaces of such angles and dimensions as to entirely neutralize the shadow of the oil-pot within a short distance of its bottom. The absence of any outside supporting-arms, which, if used, must either surround the reflector or pass through it, enables me to use a reflector having an unbroken surface and of any dimensions and shape best suited to destroy the shadow of the oil-pot.

Lateral steadiness is given the lamp by securing the globe 19 and metal top 20 firmly between the globe-support 7 by means of the rod 6, acting as a tie-rod, and spider 5, so that the stiffness of the tube 6 need not be solely depended upon for this quality.

The supporting-rod 6 may in general be solid or tubular. The lower part must be tubular in this particular instance, because the catch herein used for sustaining the oil-pot requires it to be so; but other catches may

be employed in connection with my invention which would permit the use of a solid rod, and I therefore contemplate such a rod as within the scope of my invention.

5 I claim—

1. In a lamp, a globe-holding device consisting of a bottom globe-support, in combination with a spider secured to the roof or ceiling and a rod depending therefrom, running through said globe, and connecting said spider and bottom support.

15 2. In a lamp, the globe-holding device comprising the spider adapted to be secured to the roof, the central rod depending therefrom, the single globe surrounding said rod, the globe-support at its lower end, and the metal top between the spider and the globe.

3. In a lamp, the combination of a single central supporting-rod, 6, the supporting-spider adapted to be attached to the roof, the globe-support 7, spring-catch 11, and pin 9, projecting upwardly from the oil-pot, and the oil-pot adjustably supported by said pin.

4. In a lamp, the combination of a spider, 5, adapted to be attached to the roof of the car, a central supporting-rod, 6, globe-support 7, and hinged burner-plate 17, attached to the globe-support.

WARD W. WILLITS.

Witnesses:

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