

No. 883,720.

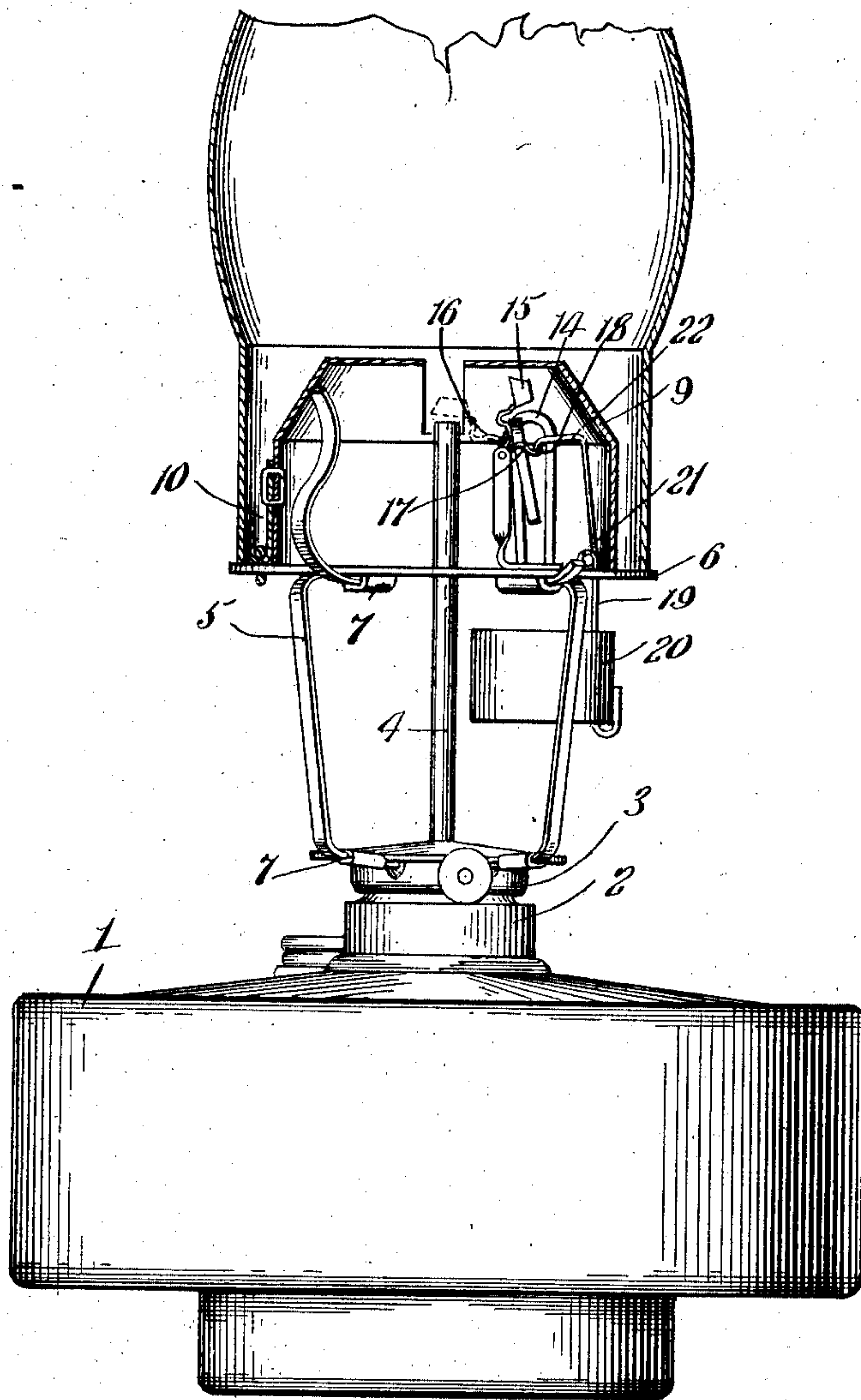
PATENTED APR. 7, 1908.

F. W. KEARSEY.
LAMP.

APPLICATION FILED NOV. 6, 1907.

2 SHEETS—SHEET 1.

FIG. 1.



Witnesses:

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2 SHEETS—SHEET 2.

FIG. 2.

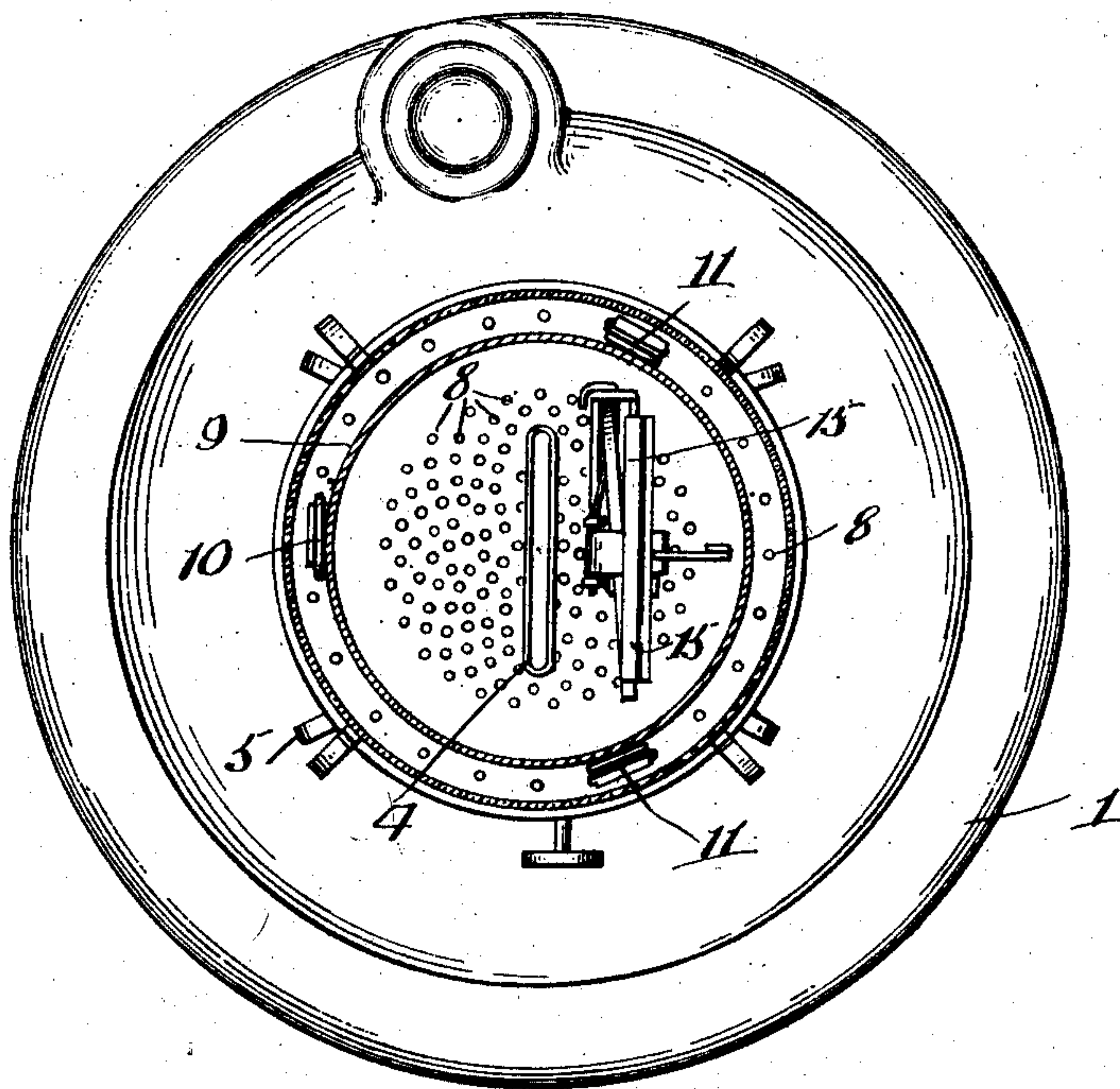
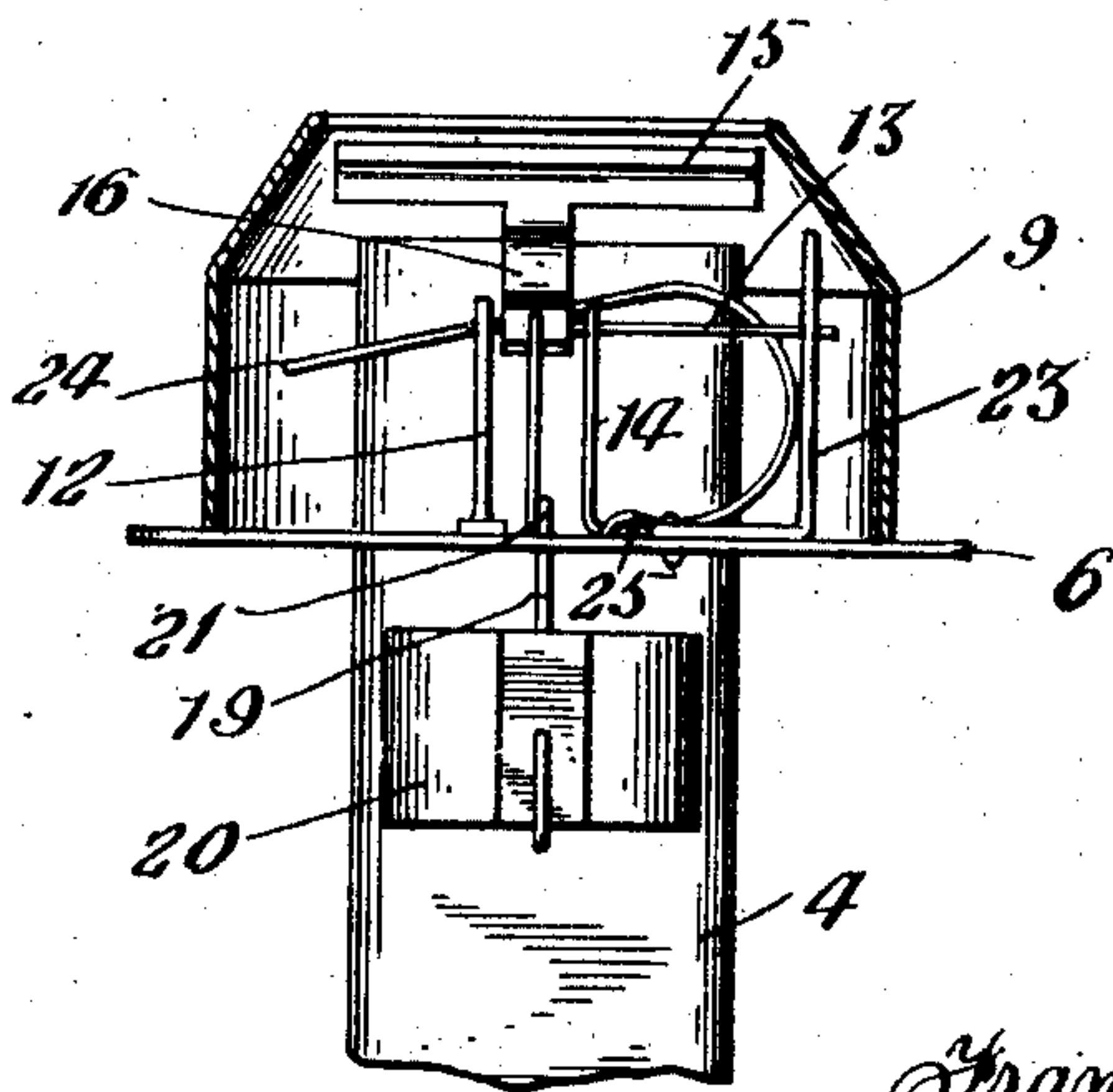


FIG. 3.



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UNITED STATES PATENT OFFICE.

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LAMP.

No. 883,720.

Specification of Letters Patent.

Patented April 7, 1908.

Application filed November 6, 1907. Serial No. 400,964.

To all whom it may concern:

Be it known that I, FRANCIS WILLIAM KEARSEY, a subject of the King of Great Britain, residing at the city and district of Montreal, in the Province of Quebec, Canada, have invented certain new and useful Improvements in Lamps; and I do hereby declare that the following is 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 lamp extinguishers.

The object of my invention is to provide a non-explosive lamp adapted to be automatically extinguished when the lamp is tilted or overturned; a more specific object of the invention is to provide gravity actuated means for releasing a spring actuated extinguishing member, which releasing means is so arranged as to have a slight axial movement to insure certainty of action when the lamp is tilted in any direction.

My invention consists of the construction, combination, and arrangement of parts, as herein illustrated, described, and claimed.

In the accompanying drawings, forming part of this application, I have illustrated one form of embodiment of my invention, in which drawings similar reference characters designate corresponding parts, and in which:

Figure 1 is a side elevation; Fig. 2 is a horizontal section through the lamp guard, showing in plan the supporting plate and the extinguishing device, the chimney and guard being removed; and, Fig. 3 is a side elevation of the supporting plate and its connected parts, showing the guard in section.

Referring to the drawings, 1 designates a lamp font having the usual burner opening 2. A burner base 3 is provided with a screw-threaded portion adapted to engage the threads of the opening 2 and carries a tubular wick well 4 which is extended upward for a relatively long distance, so that its upper end is removed from the font to avoid any danger of an accident from overheating. A plurality of arms 5 are secured to the burner base 3 and carry on their upper ends a supporting plate 6 upon which the extinguishing apparatus hereinafter described is mounted. Suitable clips 7 may be used for attaching the members 5 to the plate 6 and burner base 3 if desired. The plate 6 is provided with a plurality of perforations 8 so as to permit a free circulation of air for the double

purpose of keeping the wick well cool and for supplying oxygen to maintain combustion of the wick at the upper end of the well.

Disposed on the plate 6 is a guard 9 connected to said plate 6 as at 10 by any suitable form of hinge, and held against lateral movement thereon by lugs 11 struck up from the plate. The guard 9 is made of sufficient height to accommodate the extinguishing mechanism hereinafter described, which is placed within the same so as to be protected.

Secured on the supporting plate 6 is a bracket 12, or the like, adapted to support a pintle 13. One side of the bracket 12 is formed by an arm 14 bent up from the yoke 23 hereinafter described. The pintle 13 pivotally supports the spring actuated extinguisher cap 15 by passing through the arm 16 of the same. The arm 16 is bent as at 17, and is provided with an extension 18 on its lower end. A rod 19 is provided with an eccentrically mounted weight 20 at its lower end and is projected through the supporting plate 6. At a point just above the supporting plate 6 the rod 19 is provided with a small coil 21 which rests upon said plate thus allowing a universal movement of the rod and its attached weight.

In order to prevent rotation of the weight about the rod 19, said weight is provided with a flattened surface and the end of the rod is upturned about the weight as shown to engage the same. The rod 19 is set into the weight 20 at a point removed from the center of the same so that tilting of the lamp will cause a slight axial movement to unseat the hooked end 22 from the extension 18. The rod 19 is provided with a hooked upper end 22, adapted to engage the extension 18 on the lower end of the arm 16 and when the rod 19 is in a position of rest to maintain said arm in the position shown in full lines in Fig. 1. Should the lamp be tilted or upset, movement of the rod 19 will release its hooked upper end from the extension 18 so that the arm 16 is free to move to its dotted line position shown in Fig. 1, thereby closing the extinguisher cap 15 over the wick and extinguishing the lamp.

For the purpose of actuating the arm 16 after it is released, there is disposed on the supporting plate 6 a bent yoke 23 carrying one end of the pintle 13. A spring 24 has its lower end 25 disposed between the arms and said yoke and held against the support-

ing plate 6 by means of a staple or the like, while its upper end engages under the bent portion 17 of the arm 16 and when the arm 16 is released, as described, it is adapted to
 5 actuate the arm to its dotted line position (Fig. 1) so that the cap 15 moves to extinguish the wick. The preferred method of mounting the spring 24 is to secure its lower
 10 end to the plate 6 by a suitable staple or the like, pass it upward on the further side of the pintle and then bring it back over the pintle and downward beneath the bent portion 17 of the arm 16, all as clearly shown in Fig. 2. This holds the spring in position and
 15 at the same time insures its efficient action.

In the operation of the invention, the wick well 4 being relatively long and the wick being lighted at its upper end the free circulation of air as described keeps the wick
 20 well cool so that its heat is not transmitted to the font 1, and danger of exploding and overheating of the lamp is avoided. Tilting or overturning of the lamp will immediately release the arm 16 by the movement of the
 25 rod 19 under the influence of the weight 20 so that the lighted wick is extinguished by the cap 15 being actuated against it. The arms 5 are sufficiently separated on the side of the plate 6 where the weight is mounted,
 30 to allow free and unrestricted movement of the same, and, it will be obvious that they may be secured to both the burner 3 and the plate 6 either by clips, by soldering, or by any other desirable way.

35 Having thus fully described my invention,

what I claim as new, and desire to secure by Letters Patent, is:—

1. An extinguisher for lamps comprising a spring-actuated pivotally mounted cap, a pintle for supporting said cap, an arm extending from said cap, a spring adapted to engage beneath said arm and to be retained by said pintle, a rod mounted to have universal movement and provided with a hook adapted to engage said arm to hold the cap elevated, and a weight mounted on said rod and adapted to actuate said rod to free the cap to the action of its spring whenever the lamp is moved in any direction from an upright position.

2. An extinguisher for lamps comprising a spring-actuated pivotally mounted cap, a pintle for supporting said cap, an arm extending from said cap, a spring adapted to engage beneath said arm and to be retained by said pintle, a rod mounted to have universal movement and provided with a hook adapted to engage said arm to hold the cap elevated, and a weight eccentrically mounted on said rod and adapted to actuate said rod to free the cap to the action of its spring whenever the lamp is moved in any direction from an upright position.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

FRANCIS WILLIAM KEARSEY.

Witnesses:

C. E. FACOMPRES,
 W. S. BABCOCK.