(No Model.)

2 Sheets—Sheet 1.

G. M. CLARK & W. H. BRIGGS.

CAR LAMP.

No. 329,535. Patented Nov. 3, 1885.

Fig. 1.

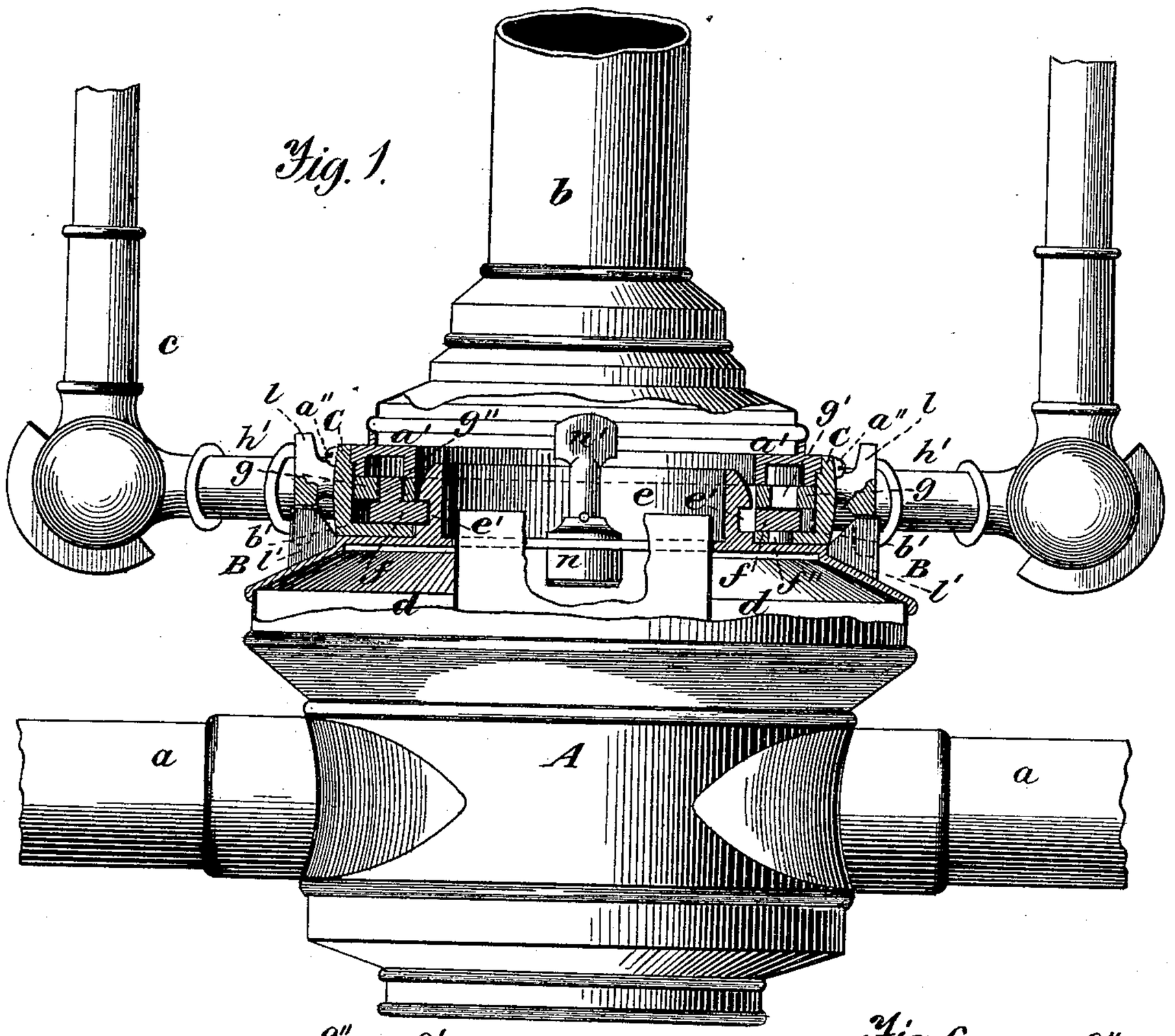


Fig. 5.

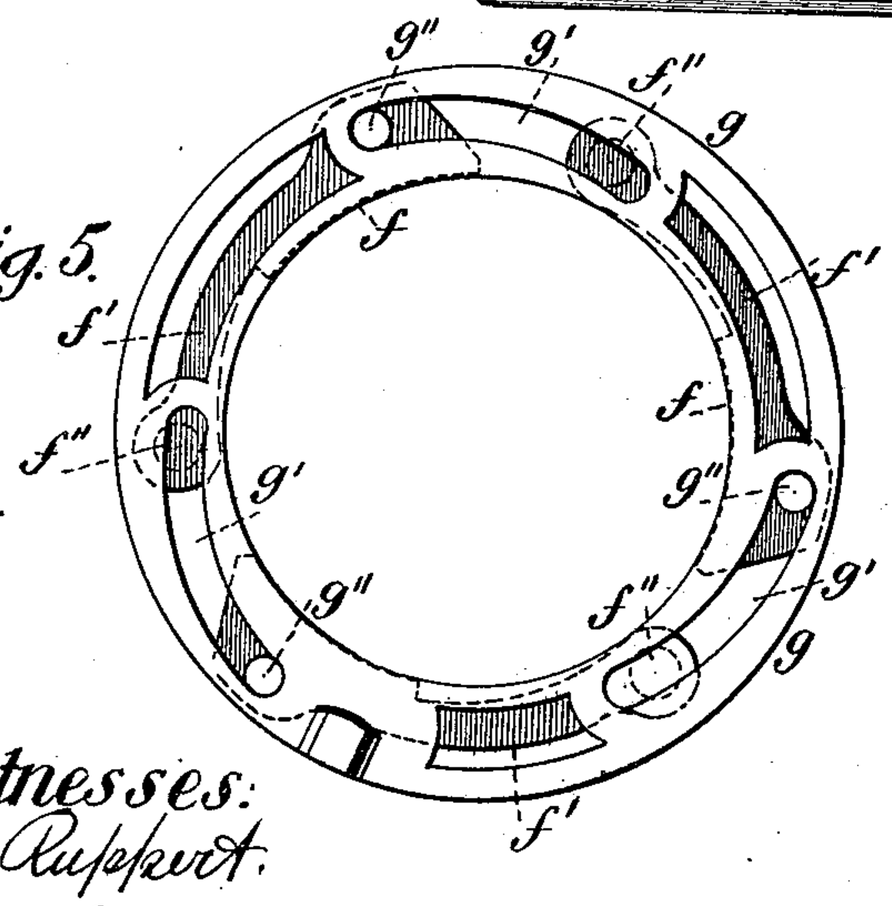


Fig. 6.

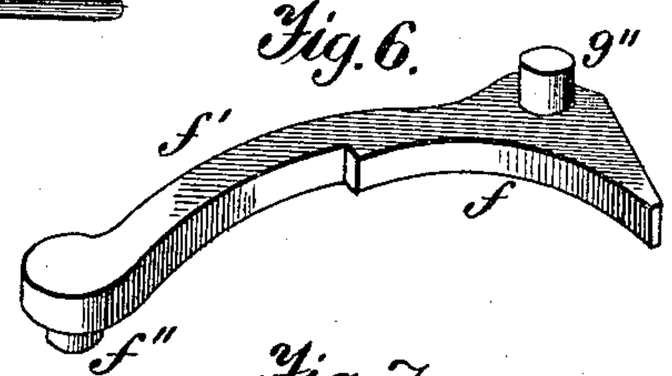
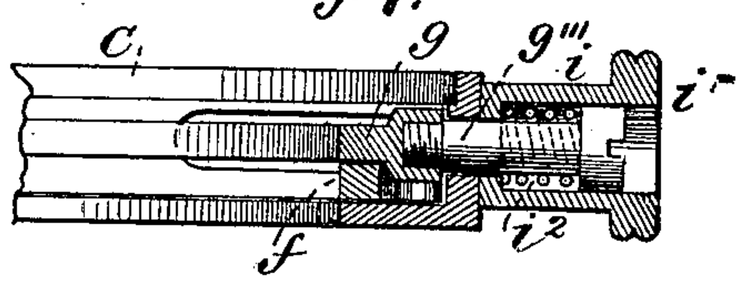


Fig. 7.



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(No Model.)

2 Sheets—Sheet 2.

G. M. CLARK & W. H. BRIGGS.

CAR LAMP.

No. 329,535. Patented Nov. 3, 1885.

Fig. 2.

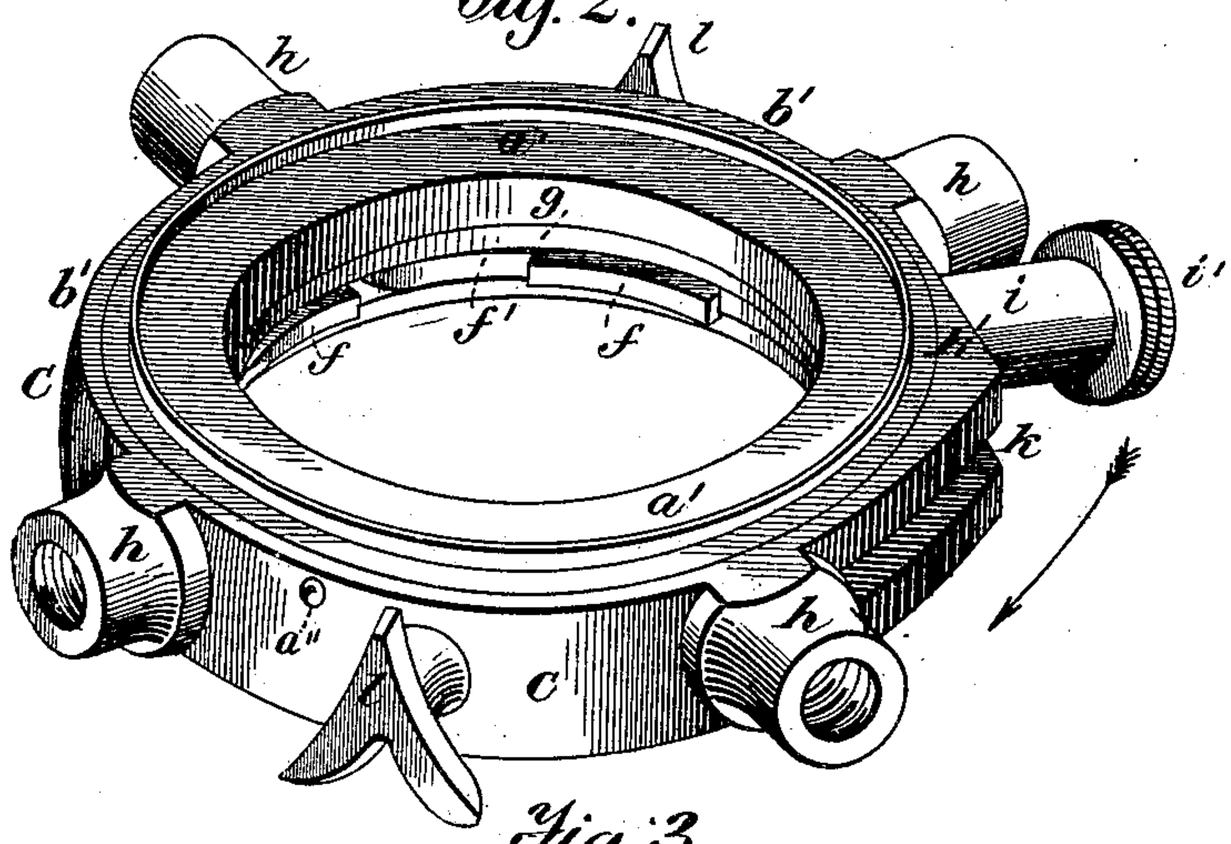


Fig. 3.

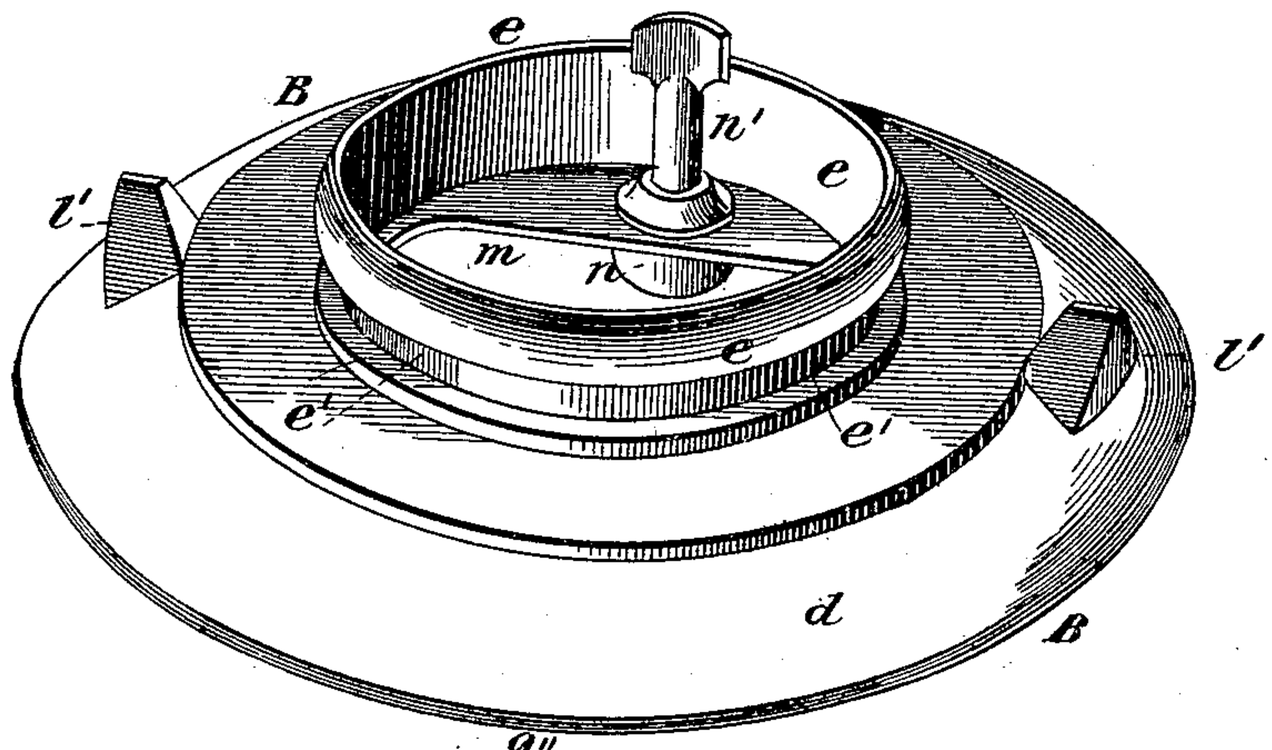
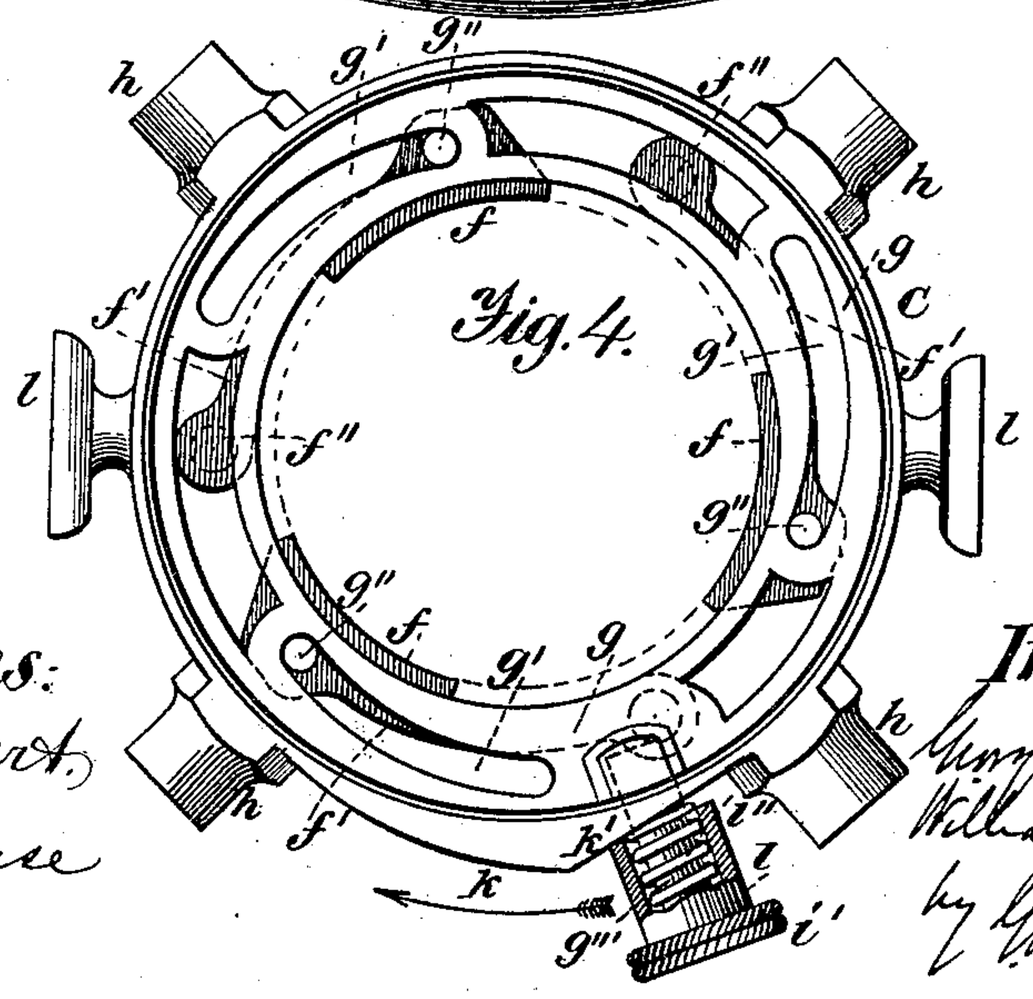


Fig. 4.



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UNITED STATES PATENT OFFICE.

GEORGE M. CLARK AND WILLIAM H. BRIGGS, OF CHICAGO, ILLINOIS, ASSIGNORS TO THE ADAMS & WESTLAKE MANUFACTURING COMPANY, OF SAME PLACE.

CAR-LAMP.

SPECIFICATION forming part of Letters Patent No. 329,535, dated November 3, 1885.

Application filed January 24, 1885. Serial No. 153,880. (No model.)

To all whom it may concern:

Be it known that we, GEORGE M. CLARK and WILLIAM H. BRIGGS, both of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Car Lamps or Chandeliers, of which the following is a specification.

Our invention is intended particularly for use in the construction of such a car lamp or chandelier as is supported from the ceiling by a central air-tube and suitable standards.

Our invention relates specially to a lamp pot or holder, the construction being such as will enable it to conveniently and effectively clamp or secure the oil-pot against loosening by the vibrations of the train, and allow of the ready removal of the vessel when desired.

In the accompanying drawings, Figure 1 is a side elevation of a car lamp or chandelier, that part thereof constituting our invention being shown in section. Fig. 2 is a perspective view of the clamp proper detached from the part with which it is adapted to unite. Fig. 3 is a view in perspective of the part which connects with the clamp proper and forms the top of the oil-pot. Fig. 4 is a plan view of the clamp proper, its interior parts being shown by the removal of the upper annular plate or ring. Figs. 5, 6, and 7 are views of detached details of the clamp proper.

Similar letters of reference indicate similar parts in the respective figures.

A is the oil-pot of the lamp, from which extend laterally the tubes *a*, which support the burners. The central air-tube is shown by *b* and the standards by *c*.

The feature of the lamp constituting our invention comprises the part B, which forms the top of the oil-pot *d* and the clamp-ring C and its adjuncts. The ring C is formed in two parts, *a'* and *b'*, the upper part, *a'*, being in the form of a ring, (shown in cross-section in Fig. 1,) and which is attached to the part *b'* by screws *a''*. To the clamp-ring C are cast the bosses *h*, interiorly threaded, to which are screwed the standards *h'*, aiding in the support of the lamp or chandelier from the ceiling. The part B is provided with an annularly-grooved neck, *e*, the groove *e'* of which receives the tongues *f* of the hinged segmental plates *f'*. The plates *f'* are hinged or pivoted at *f''* within the lower part, *b*, of the clamp-ring C, any suitable number of hinged plates being used. The drawings show three. The moving part of the clamp consists of a ring, *g*, having segmental slots *g'*, eccentric with the ring C, which receive pins *g''*, projecting upwardly from the free ends of the segmental plates *f'*. The ring *g* and the curved plates are all contained within the interior of the clamp-ring C. The interior of the ring *g* is of substantially the same diameter as that of the clamp-ring C. To the ring *g* is secured a screw, *g'''*, which passes through a segmental slot in the periphery of the clamp-ring C, and over which slips a sleeve, *i*, having a milled button, *i'*. A spiral spring, *i''*, is confined within the sleeve abutting against the head of the screw *g'''*. The effect of the spring *i''* is to cause the inner end of the sleeve *i* to be forced against the outer surface of the clamp-ring C. A portion of the periphery of the ring C is deflected, so as to form an eccentric surface agreeing with the eccentricity of the slots *g'*. The surface *k* terminates in or unites with a straight surface, *k'*. The clamp-ring C is provided with sockets *l*, each having, preferably, the shape of an inverted V, which sockets fit over similarly-shaped lugs, *l'*, formed upon the top of the part B. That portion of the area of the part B which is inclosed within the neck *e* is provided with a longitudinal slot, *m*, through which pass the wick-tubes of the lamp. The opening for the supply of oil to the pot is shown at *n* and closed by a screw-plug, *n'*. The parts being in the normal position represented in Fig. 1—that is to say, the lugs *l'* being fitted within the V-shaped sockets *l*, and the segmental plates *f'* fitted within the groove *e'* of the neck *e*—the oil-pot A attached to the part B, and carrying the burners and chimneys, is found to be secured to the clamp-ring C, which is fixedly attached to the car. To remove the oil-pot for any purpose, it is only necessary to draw the sleeve *i* from the straight surface *k'* of the clamp-ring C over upon the curved eccentric surface *k* of said ring, by which movement the ring *g* is revolved. By

the action of the eccentric segmental slots g' of said ring upon the pins g'' of the segmental plates f' the said plates are drawn from a position in which they project within the inner circle of the clamp-ring back to a position within the ring, so as to clear the groove e' of the neck e. Thus it will be seen the part B is made capable of being lowered or removed from the clamp-ring. To lock the clamp upon the neck of the part B, the sleeve must be drawn against the force of the spring i'' along the eccentric surface k until the junction with the straight surface k' is reached. The straight surface k' serves as an inclined plane down which the force of the spring forces the sleeve i, thus effecting a locking action. This action is such that the jarring or vibration of the train cannot loosen the parts as the engagement between the tongues f and the groove e' cannot be released until the sleeve has been drawn from the straight surface k' and down upon the eccentric surface k. This change of position of the sleeve can only be effected by a positive exertion of force, such as could not be imparted by any jar or vibration of the train.

Having described our invention, we claim—

1. In a lamp-support, a fixed clamp-ring having within it pivoted segmental plates, each provided with a tongue, and a ring, adapted to be partially revolved, having eccentric slots to engage with a pin or part of each segmental plate, and thus move said plates to and from the center of the clamp-ring or support, substantially as set forth.

2. A clamp-ring constructed to be secured to the frame-work or support of the lamp and inclosing an eccentrically-slotted ring adapted to be partially revolved and pivoted segmental arms provided with tongues, said arms having pins resting in the eccentric slots of said revolving ring, combined with a stem attached to said revolving ring and moving in a segmental slot of the clamp-ring and a spring-sleeve sliding upon said stem and having contact with an eccentric portion of the periphery of the said clamp-ring agreeing with the eccentricity of the slots in the said revolving ring, substantially as set forth.

3. In a lamp-support, a clamp-ring having a portion of its periphery eccentric, said eccentric surface uniting with a straight surface, an internal revolving ring having eccentric slots, and pivoted segmental plates provided with tongues and having pins entering said slots, combined with means, substantially as described, engaging with the said eccentric and straight surfaces of the clamp-ring for rotating and locking the pivoted segmental plates, substantially as set forth.

4. In a lamp-support, a clamp-ring attached to a fixed part of the frame-work of the lamp and containing an eccentrically-slotted ring and segmental plates operated thereby, combined with a top for the oil-pot, having a ring slotted to be engaged by the said segmental plates, substantially as set forth.

In testimony whereof we hereunto set our hands and seals.

GEORGE M. CLARK. [L. S.]
WILLIAM H. BRIGGS. [L. S.]

Witnesses:
OSBORNE SAMPSON,
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