(No Model.)

E. F. PIERCE.

LAMP HOLDER.

No. 385,522. Patented July 3, 1888.

Fig. 1.

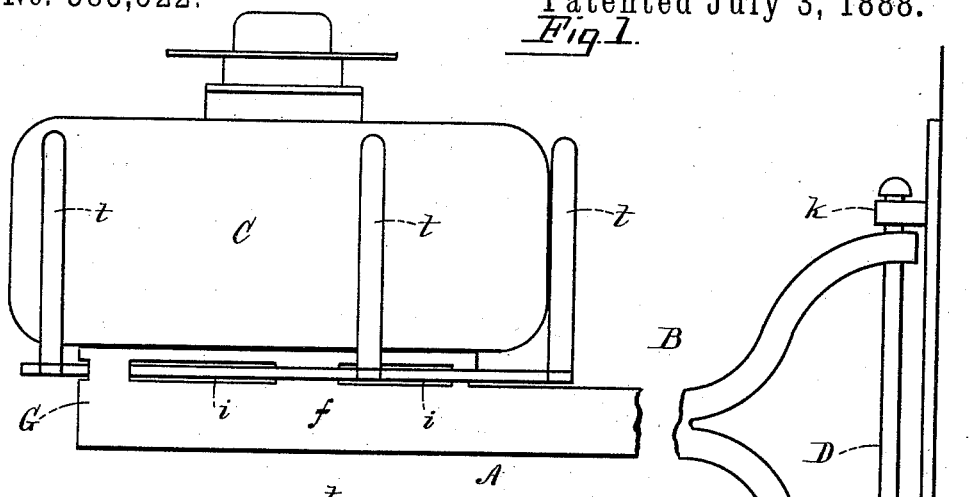


Fig. 2.

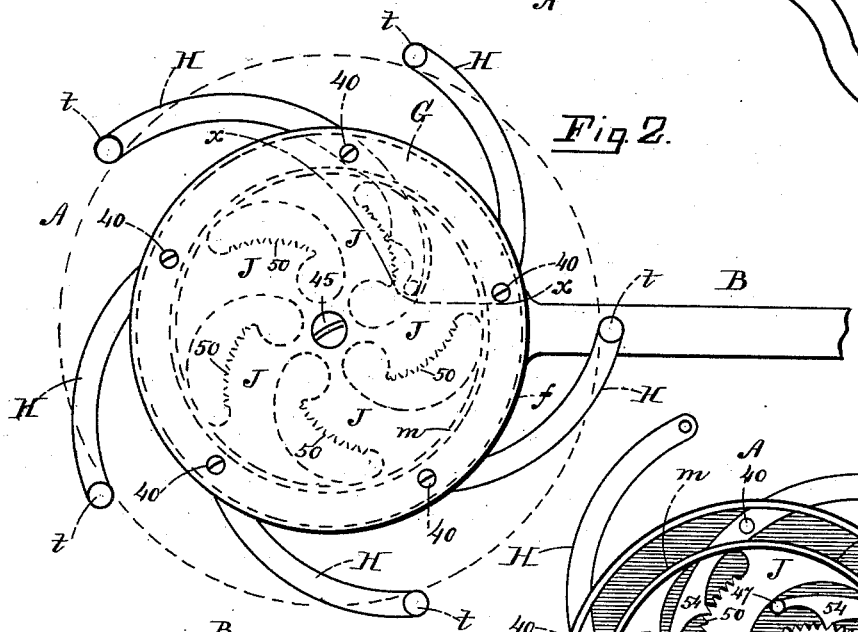


Fig. 3.

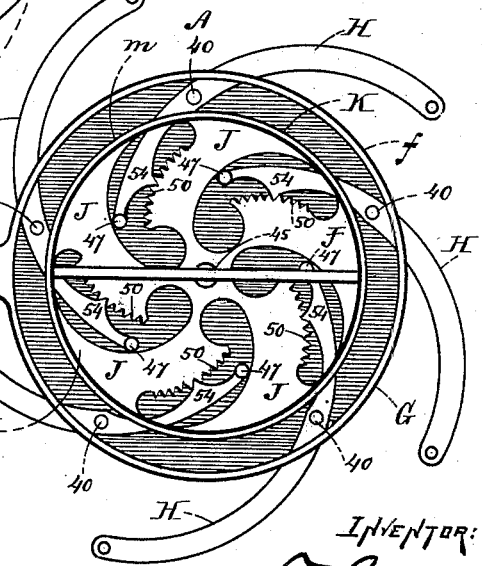
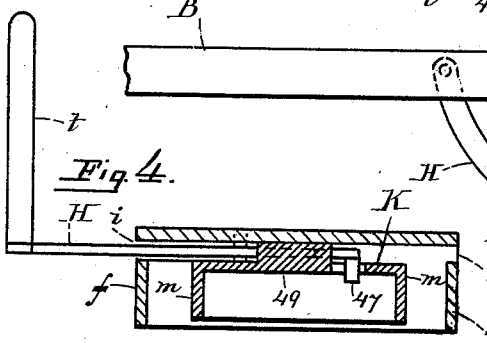


Fig. 4.



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UNITED STATES PATENT OFFICE.

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LAMP-HOLDER.

SPECIFICATION forming part of Letters Patent No. 385,522, dated July 3, 1888.

Application filed April 19, 1888. Serial No. 271,223. (No model.)

To all whom it may concern:

Be it known that I, EUGENE F. PIERCE, of Boston, in the county of Suffolk, State of Massachusetts, have invented a certain new and useful Improvement in Lamp-Holders, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation of my improved lamp-holder represented as in use; Fig. 2, a top plan view of the same with the arm of the bracket represented as broken off; Fig. 3, a bottom plan view, and Fig. 4 a vertical section taken on the dotted line *x x* in Fig. 2.

Like letters and figures of reference indicate corresponding parts in the different figures of he drawings.

My invention relates to that class of lamp-holders which are adjustable or adapted to receive lamps of different sizes; and it consists in certain novel features, as hereinafter fully set forth and claimed, the object being to produce a more effective and otherwise desirable device of this character than is now in ordinary use.

The nature and operation of the improvement will be readily understood by all conversant with such matters from the following explanation:

In the drawings, A represents the holder proper, B the bracket, and C a lamp.

The bracket is bifurcated at its inner end and pivoted to swing laterally by means of a rod, D, inserted in lugs *k* on the plate E, said plate being represented as secured to the wall F; but it may be pivoted in any other suitable manner, or rigidly secured to its support, if preferred.

The holder proper comprises a circular horizontally-arranged plate, G, which is provided at its periphery with an annular downwardly-projecting flange, *f*, in which are cut, at equal distances apart near its top, a series of lateral slots, *i*.

Inserted in each of the slots *i* and pivoted to the plate G, as shown at 40, there is a curved arm, H, provided at its outer end with an upwardly-projecting standard, *t*, and at its inner end with a short downwardly-projecting stud, 47.

A circular plate, K, smaller in diameter than the plate G, and having on its upper side a hub, 49, is pivoted to the center of the plate G over the inner ends of the arms H, as shown at 45, said plate K being provided with a series of evolute spokes, J, one of which stands between the inner ends of each pair of the arms H. These spokes are smooth on their backs or inwardly-curved edges, but provided with teeth 50 on their outwardly-curved edges, which respectively engage teeth 54 on the contiguous inner edges of the arms H. (See Fig. 3.) Said teeth are not ratchet-teeth, but are short and have equally-inclined faces to permit the tooth 54 to slip readily over them when sufficient force is applied to the plate K.

In the use of my improvement the lamp C is placed on the plate G between the standards *t*, and the plate K turned or revolved to the left, thereby causing the inner ends of the arms H to be swung outward and their outer ends inward, and said arms to grasp and hold the lamp in a manner that will be readily understood by all conversant with such matters without a more explicit description.

In releasing the lamp from the grasp of the arms the plate K is turned to the right, thereby bringing the inwardly-curved rear edges of the spokes J against the studs 47 at the inner ends of the arms, and at the same time withdrawing or partially withdrawing the serrated outwardly-curved edges 50 of said spokes from the teeth 54 on the arms, thereby causing the outer ends of the arms to be separated and permitting the lamp to be removed from the plate G.

When the standards *t* are in contact with the lamp, it is difficult to expand the arms H and release the lamp by applying force to the outer ends of said arms, on account of the engagement of the teeth 50 on the spokes J with the teeth 54 on the inner ends of the arms, and the peculiar arrangement of said parts; but by revolving the plate H to the right and causing the inwardly-curved rear edges of said spokes to act on the studs 47 this may be readily accomplished.

Having thus explained my invention, what I claim is—

1. In a lamp-holder, the plate G, provided with the downwardly-projecting annular flange *f*, having the lateral slots *i*, the arms H, inserted in said slots and pivoted to said plate, said arms being provided at their outer ends with upwardly-projecting standards *t* and at their inner ends with studs 47 and teeth 54, and the plate K, pivoted to the plate G, and provided with the curved or evolute spokes J, having teeth 50 on their outwardly-curved edges, all being combined and arranged to operate substantially as set forth.

2. In a lamp-holder, the plate G, provided with the downwardly-projecting annular flange *f*, having the lateral slots *i*, the arms H, inserted in said slots and pivoted to said plate, said arms being provided at their outer ends with upwardly-projecting standards *t* and at their inner ends with studs 47 and teeth 54, the plate K, pivoted to the plate G, and provided with the curved or evolute spokes J, having teeth 50 on their outwardly-curved edges, and the arm B, for supporting the plate G, all combined and arranged to operate substantially as described.

3. In a lamp-holder, the plate G, provided with the downwardly-projecting annular flange *f*, having the lateral slots *i*, the arms H, inserted in said slots and pivoted to said plate, said arms being provided at their outer ends with upwardly-projecting standards *t* and at their inner ends with studs 47 and teeth 54, the plate K, pivoted to the plate G, and provided with the curved or evolute spokes J, having teeth 50 on their outwardly-curved edges, and the arm B, for supporting the plate G, said arm being pivoted to the plate E, substantially as set forth.

4. In a lamp-holder of the character described, the arm B, pivoted to the plate E by the rod D and lugs *k*, the plate G, mounted on said arm and provided with the annular flange *f*, having the slots *i*, the arms H, inserted in said slots and pivoted to the plate G, said arms being provided with standards *t*, teeth 54, and studs 47, and the plate K, provided with the curved serrated spokes J, all being constructed, combined, and arranged to operate substantially as specified.

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Witnesses:
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