

(No Model.)

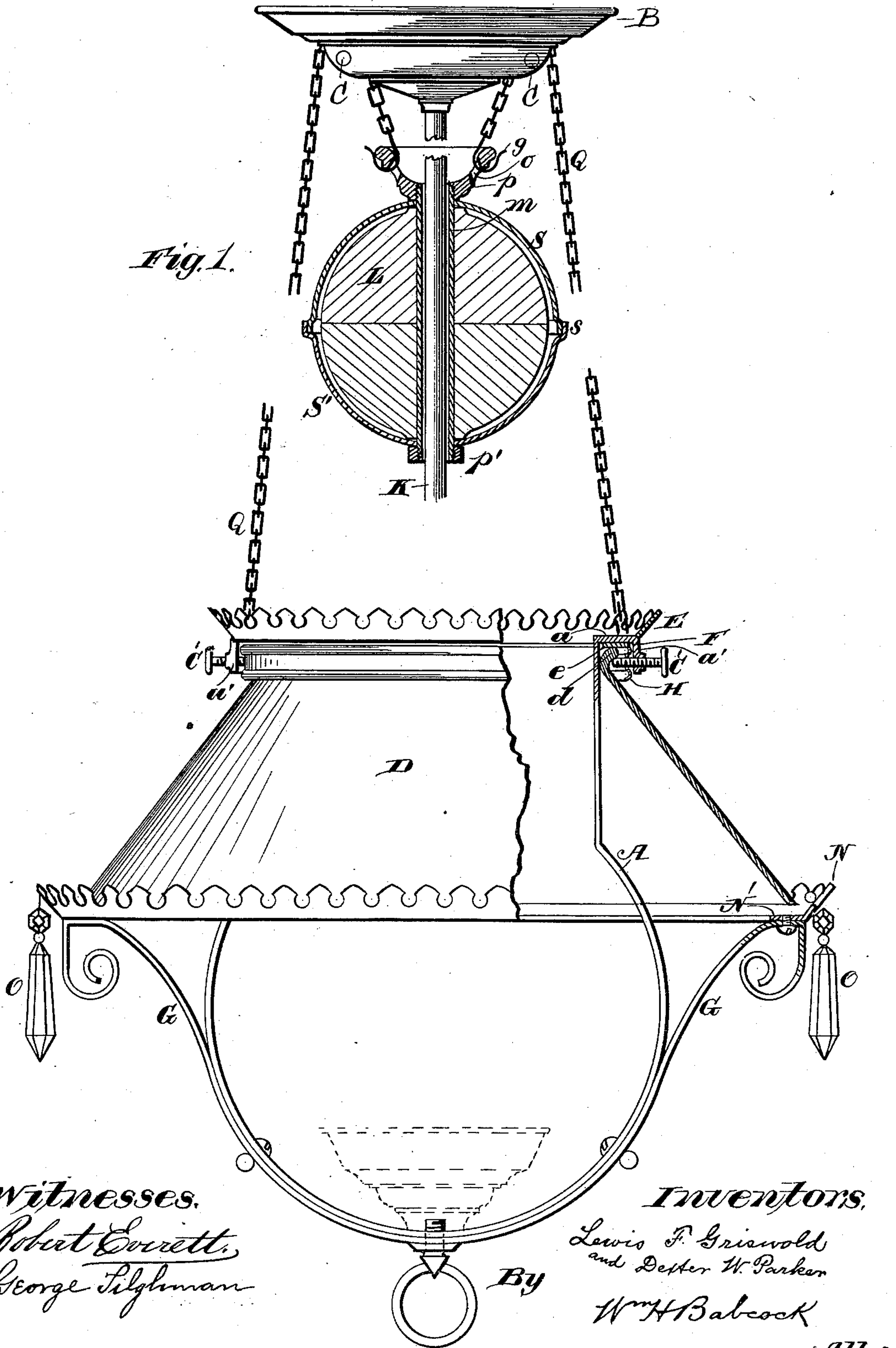
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D. W. PARKER & L. F. GRISWOLD.

EXTENSION LAMP.

No. 297,157.

Patented Apr. 22, 1884.



*Witnesses.*  
*Robert Corbett.*  
*George Tilghman*

*Inventors.*  
*Lewis F. Griswold*  
*and Dexter W. Parker*  
*Wm H Babcock*  
*Atty.*

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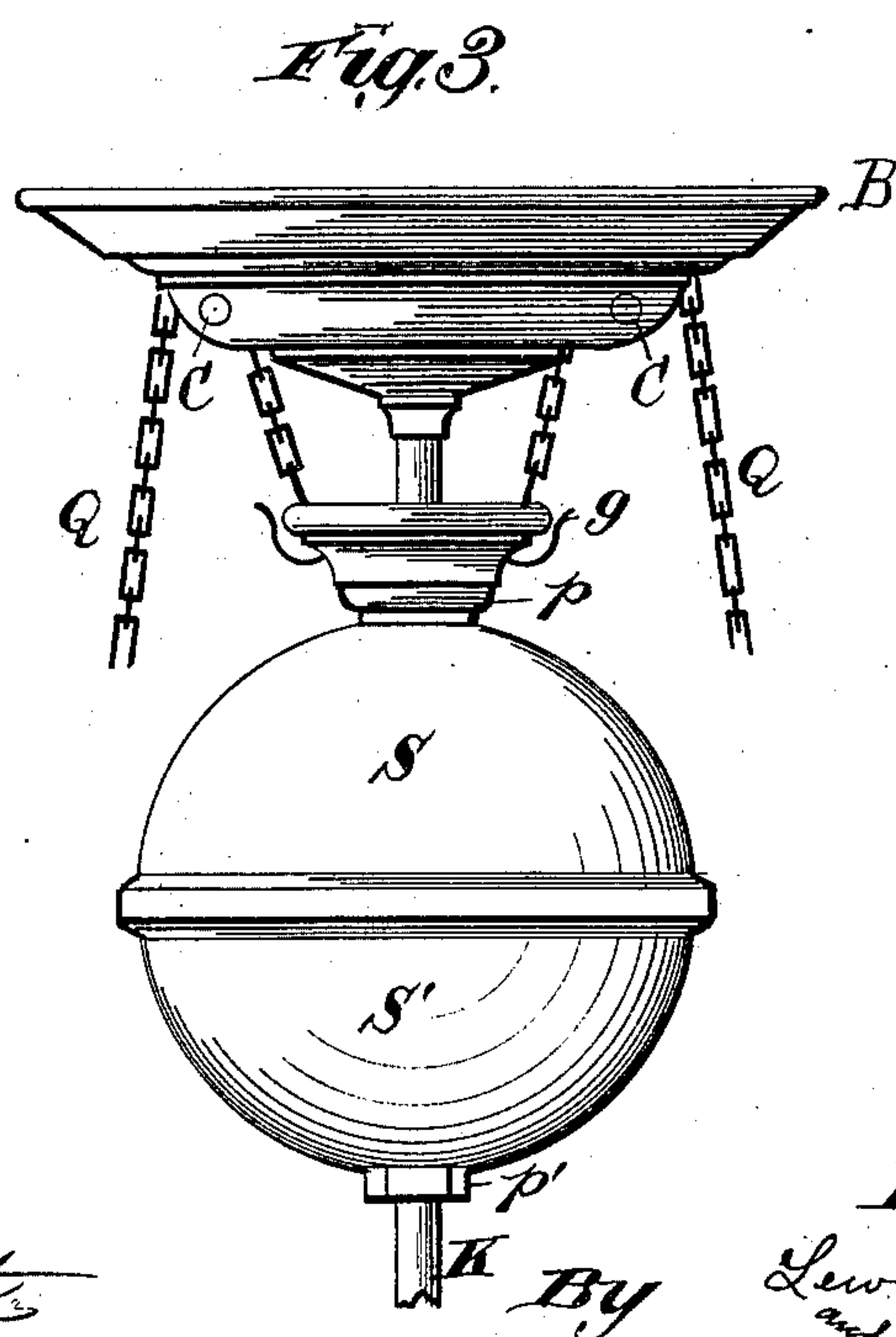
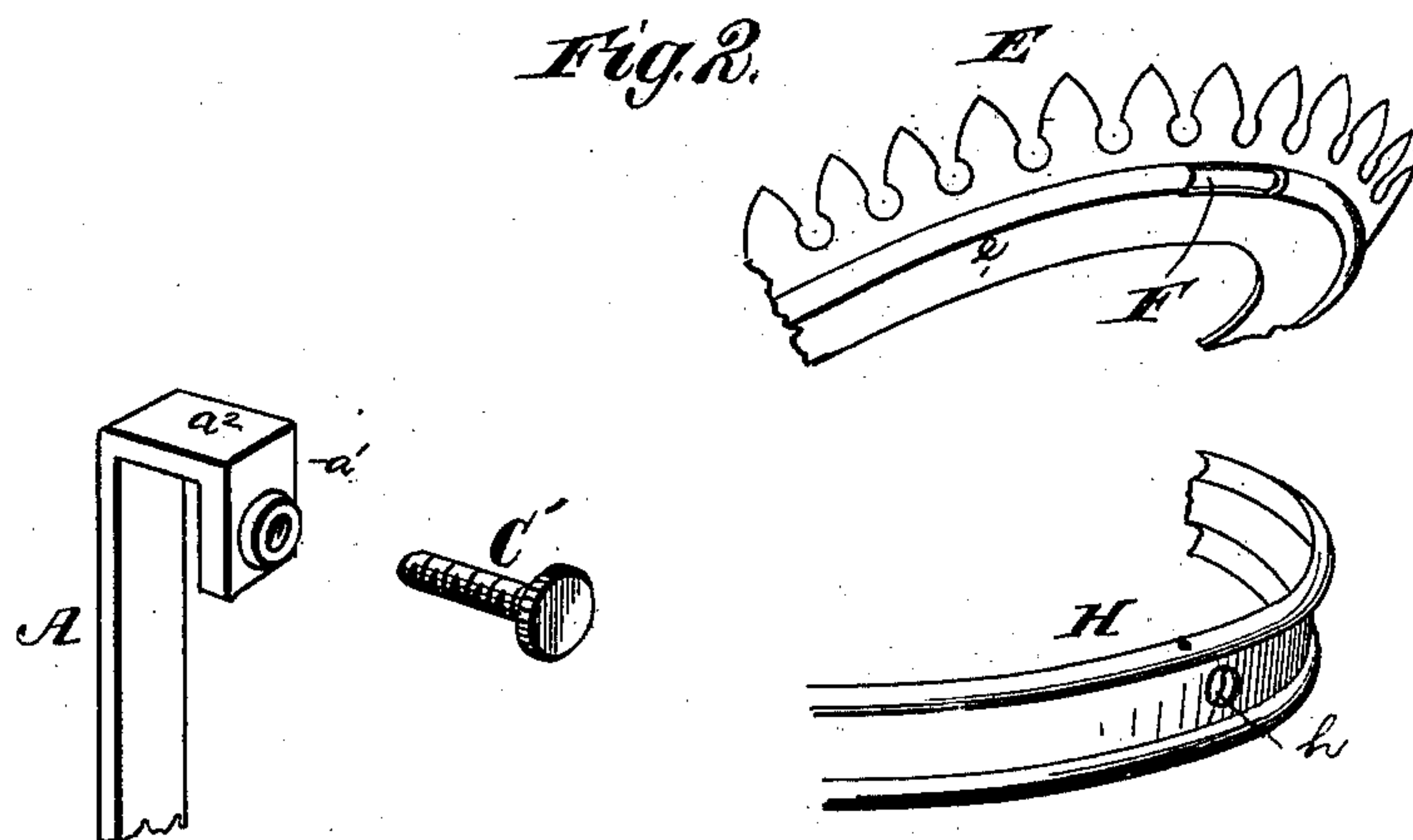
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# UNITED STATES PATENT OFFICE.

DEXTER W. PARKER AND LEWIS F. GRISWOLD, OF MERIDEN, CONNECTICUT;  
SAID GRISWOLD ASSIGNOR TO THE CHARLES PARKER COMPANY, OF  
SAME PLACE.

## EXTENSION-LAMP.

SPECIFICATION forming part of Letters Patent No. 297,157, dated April 22, 1884.

Application filed October 16, 1883. (No model.)

*To all whom it may concern:*

Be it known that we, DEXTER W. PARKER and LEWIS F. GRISWOLD, citizens of the United States, residing at Meriden, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Extension-Lamps; and we 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention consists, partly, of devices for supporting a lamp and lamp-shade provided with an ornamental base-ring supported independently of said shade and surrounding and protecting its lower edge.

The said invention further consists in sundry improvements in the crown-ring, harp, counterbalance-weight, and other devices used in our extension lamp-fixture, which need not be more particularly mentioned here, as they will be fully described, and afterward pointed out in the appended claims.

In the drawings, Figure 1 represents an elevation of an extension lamp-fixture embodying our invention, the shade and crown-ring and base-ring being broken away in part, and the counterbalance-weight and a part of one of the harp-arms being shown in vertical central section. Fig. 2 represents in detail parts of the crown-ring, shade-supporting ring, and harp, and one of the fastening-screws for the latter. Fig. 3 represents an elevation of the counterweight-canopy and guide-rod.

A designates the harp; B, the canopy; C, the journals of the rollers, which turn as usual within said canopy; D, the shade; E, the crown-ring, which is in contact with and crowns the top of the shade; and Q, the chains which pass over said rollers and are attached at one end of each to the crown-ring E aforesaid, these chains being attached at the other end of each to the counterbalance-weight hereinafter described. The shade D is not directly attached to the crown-ring E, but is secured and suspended in the following manner: At diametri-

cally-opposite points in said crown-ring openings F, one of which is clearly shown in Fig. 2, are provided on the line of junction of the outer wall of said ring with its horizontal annular inner flange, *e*. The upper ends of the harp are bent into angular hooks having the shape, approximately, of a square, with the lower side removed. These hooks are then passed outward and downward through the openings F, so that the horizontal upper part, *a*<sup>2</sup>, of each hook rests upon and is supported by the annular flange *e* of said crown-ring, as shown in Fig. 1. The outer downwardly-extending part, *a'*, of each hook is screw-tapped, to allow a horizontally-operating screw, C', to work through it into the neck *d* of the shade.

By making the neck-ring separate from the crown-ring, the one may be of light sheet metal, while the other is of cast metal. When the neck-ring forms part of the crown-ring, they must be cast in one piece; or, if made of wrought metal, they must be much thicker than is desirable in the neck-ring, as the entire weight of the fixture is suspended from the crown-ring, and the counterbalance-weight pulls upon it in the opposite direction. Our detached neck-ring may be of the lightest sheet metal.

The aforesaid parts are the only ones absolutely necessary to support the lamp and shade and allow their rising and falling together, for the weight and chain suspend the crown-ring E, the latter supports the harp, and the latter has the shade clamped to it at the top, as stated, beside carrying the lamp as usual. It is, however, desirable to protect the upper and lower edges of the shade and to give them a more ornamental appearance. For this purpose we employ two rings, which for clearness will be denominated the neck-ring H and the base-ring N. The former encircles the neck and the upper edge of the shade, extending to the lower edge of the outer wall of the crown-ring E, and taking the place of the downward extension of the crown-ring in common use. This ring H is, however, without direct attachment to said crown-ring, and is held in place by said screws C', which pass through



holes in it. (One of which, marked *h*, is shown in Fig. 2.) By withdrawing this screw and raising the parts *a'* of the harp through the holes *F*, the shade, harp, and neck-ring may at any time be separated from the remainder of the fixture without disturbing the crown-ring. This is really an important feature of our invention. The neck-ring is desirable for the purposes stated; but if it be made in one piece with the shade-ring, the latter must be unfastened from the chains (which will then fly up as far as they can go) every time there is need to clean the neck-ring.

Our method of attaching and detaching the harp is also important, as the screw is accessible conveniently from the side, and the harp may be held down by hand until both screws are withdrawn and even thereafter, whereas when a harp's straight screw-threaded upper end is clamped by nuts to a crown-ring, the counterbalance-weight will strain the said ring away from the harp on one side as soon as the first nut is removed, thus bringing an oblique strain on the other nut, making the further separation very difficult, and causing the harp to tilt, so that there is danger of smashing the shade and lamp. Indeed, it is hardly practicable for a single person to remove the harp and shade from the shade-ring when thus attached without first detaching the entire fixture, yet these parts, and especially the shade, frequently need to be detached and cleaned. When our present construction is used there is no sort of trouble, as the harp remains in its normal position even after the screws are removed, and while one hand of the operator holds down the crown-ring his other hand has nothing to do but to raise said harp out of its place.

The base-ring *N*, before referred to, is attached to arms *G*, which are formed with or firmly attached to harp *A* on each side thereof. It is provided with an internal horizontal annular flange, *N'*, which extends below the lower edge of the shade, and is screw-tapped for such attachment to said arms, the latter being screw-tapped also, and screws being passed through said arms and said flange. This base-ring *N* does not under ordinary circumstances aid in the support of the shade *D* or touch the lower edge thereof. If it did so, it would prevent the parts from being separated, as above described, since the shade would fill the entire space between the crown-ring *E* and base-ring *N*, and the harp being in immediate contact with the upper face of flange *e* of ring *E*, and attached to flange *N'* of ring *N*, could not be raised or lowered. The shade, therefore, and for other reasons, does not rest upon base-ring *N*, but terminates some distance above the flange *N'*. The outer wall of said base-ring extends, however, above the lower edge of said shade and surrounds the same, protecting it at all points and presenting an ornamental surface, which adds greatly to the appearance of the lamp. The chief advantage of using a base-ring which protects the shade without supporting it, or

being supported by it, is that the protection is much more efficient, there being an interval between the shade and the base-ring, so that a shake on the latter will not injure the former. When the screws *C'* are withdrawn for detaching the harp, shade, &c., as above described, the shade *D* will slide down and rest upon the base-ring *N*, which will support it during the act of separation; but under ordinary circumstances the base-ring *N* is not used as a supporting-ring, but as a protecting and ornamental ring, the shade being held solely by screws *C'*.

We do not claim a supporting-ring which holds the shade at its base, nor do we claim a base-ring for ornamental and protective purposes only. The former device has long been known. The latter is described and claimed in an existing patent as attached to and supported by the shade itself; but we hold it to be new and useful to provide an extension lamp-fixture with means for supporting the shade at its neck and with a protecting-ring which surrounds the lower edge of the shade, but is not attached to said shade, and neither supports it nor is supported by it. This is perhaps the most important feature of our invention. To the said base-ring we attach pendants *O*, of glass, for increasing the ornamental effect. These, however, are not at all essential.

The counter-weight consists of a core, *L*, formed of two hemispherical solid sections of metal, a shell formed of two corresponding hollow sections, *S S'*, and a tube, *m*, which extends through central openings of said shell and a central passage through said core, at right angles to the joints of said sections and shells. The protruding ends of said tube are screw-threaded, the upper end having a cup or cup-shaped nut, *p*, secured thereon, which holds the parts of the weight in place, and is attached to the suspending-chains *Q* by hooks *g* on the ends of said chains, which enter holes *o* of said cup *p*. The lower end of said tube receives clamping-nut *p'*, whereby the shell-sections and core-sections may be tightened or loosened at will, and which hold them together as a complete weight. The inner face of the tube *m* is perfectly smooth, and it fits upon a guide-rod, *K*, depending from canopy *B*. This guide-rod compels the weight to move in a vertical path without swinging, and the tube preserves the rod from wear, and prevents the central passage through the weight from being worn, and thereby enlarged, so that the weight would rattle in its ascent and descent. By removing nut *p'*, or screw-tapped cup *p*, the separation of the parts of the weight is made very easy, and this is a convenience for storage and other purposes. When the tube, or any of said parts, is worn it is easily replaced. The shell protects the core and makes the appearance of the weight smoother and more ornamental. The sections *S S'* overlap, so that they will allow a little compression of the core without obstructing one another, and will not leave a gap if the nut be slightly loosened.



Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

5 1. An extension lamp-fixture provided with supporting devices for the neck of a shade, and a ring which surrounds and protects the lower edge of the shade, but is not supported thereby.

10 2. An extension lamp-fixture, provided with a crown-ring, shade-supporting devices attached to said crown-ring, and an additional separable ring which surrounds and protects the neck of the shade and occupies the place of the lower part of the ordinary crown-ring, 15 substantially as set forth.

20 3. A lamp-harp having its ends extended above the top of the shade, and bent down outside of the same, in combination with a crown-ring and devices attached to said arms outside of said shade, and adapted to grasp or clamp the upper part of the latter, substantially as set forth.

25 4. The combination, with the harp-arms having outwardly-projecting hooked upper ends provided with binding-screws, of the crown-ring provided with openings for the passage of said hooked portions, substantially as set forth.

30 5. The combination, with the harp-arms having outwardly-projecting hooked upper ends provided with binding-screws, of means of supporting said arms, and the neck-ring H, having holes for the passage of said screws.

35 6. The combination, with the harp-arms having outwardly-projecting hooked upper ends provided with binding-screws, of the

crown-ring provided with openings for the passage of said hooked portions, and the neck-ring arranged within the hooks and provided with holes for the binding-screws to pass 40 through, substantially as set forth.

7. The counter-weight composed of a solid core having an axial passage, a smooth tube lining said passage, and having protruding 45 ends, the hemispherical shells inclosing said core, and having openings through which the ends of said tube protrude, and a nut screwed on one of the ends of the said tube, a device being on the other end of said tube which confines the core and shell thereto, substantially 50 as shown.

8. The combination, with the shells and a tube extending through the same, of nuts screwed on the protruding ends of said tube, the upper nut being provided with means for 55 attaching the same to suspending devices, substantially as set forth.

9. The combination, with the counterweight-core, of the tube arranged through the same and having protruding ends, the shell inclos- 60 ing the core and having central openings for the tube ends, and the nuts screwed upon said ends, the upper nut being cup-shaped and perforated to receive the chain-hooks, substantially as set forth. 65

In testimony whereof we affix our signatures in presence of two witnesses.

DEXTER W. PARKER.  
LEWIS F. GRISWOLD.

Witnesses:

R. A. PALMER,  
FRED PEASE.