

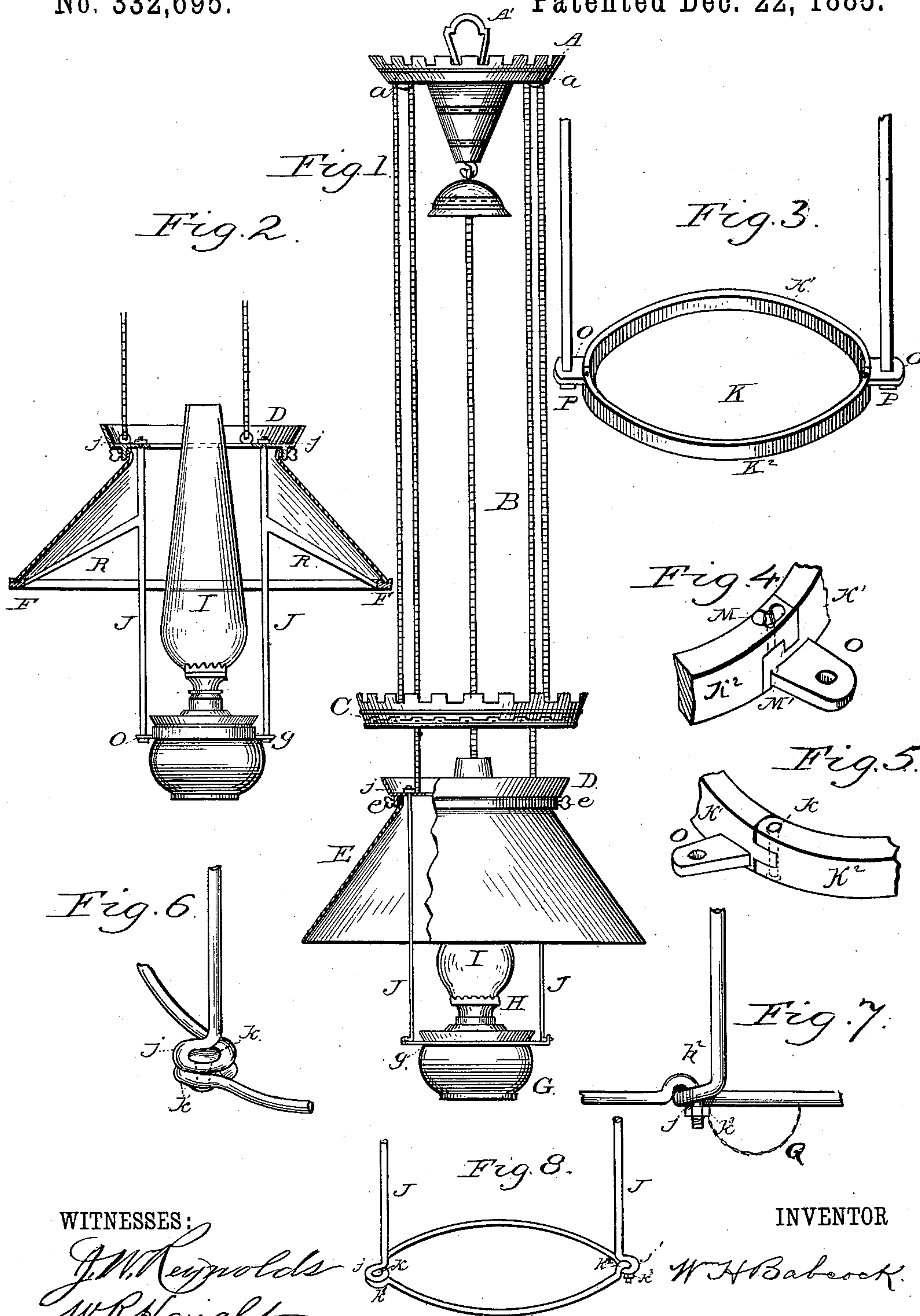
(No Model.)

W. H. BABCOCK.

SUSPENSION DEVICE FOR LAMPS.

No. 332,695.

Patented Dec. 22, 1885.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

WILLIAM H. BABCOCK, OF WASHINGTON, DISTRICT OF COLUMBIA.

## SUSPENSION DEVICE FOR LAMPS.

SPECIFICATION forming part of Letters Patent No. 332,695, dated December 22, 1885.

Application filed July 11, 1884. Serial No. 137,456. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM H. BABCOCK, a citizen of the United States, residing at Washington, in the District of Columbia, have  
5 invented new and useful Improvements in Suspension-Lamps, of which the following is a specification.

This invention relates to the "fixtures," so called, of suspension-lamps, and more particu-  
10 larly to the devices immediately employed for supporting the founts of such lamps.

The object of this invention is to provide a satisfactory harp or substitute for the harp, which will allow the lamp and chimney to be  
15 introduced without tilting, and secured without danger of dislodgment, besides very greatly reducing the weight and size of the fixture, and doing away with that part of the harp or lamp-support which ordinarily endangers the  
20 heads of those using it or passing near.

With this object in view my invention consists, chiefly, in an inclosing-ring for a lamp-fount, in combination with the arms of a lamp-harp, whereby said ring is suspended from the  
25 fixture, one side of said ring being movable to allow the lateral insertion and removal of the lamp-fount.

The said invention further consists in certain details of construction and combination, which will be hereinafter fully set forth, and  
30 more particularly pointed out in the claims.

In the accompanying drawings, Figure 1 represents an elevation of an extension-lamp embodying my invention, the shade and shade-ring being partly broken away to show more  
35 fully one of the supporting rods or arms of the lamp-harp. Fig. 2 represents a detail view of the lamp, its shade, and proximate devices, the shade and shade-rings being in vertical  
40 section, and flat bars or castings being used in the construction of the lamp-harp instead of rods. Fig. 3 represents an enlarged detail perspective view of the lamp-inclosing ring and the lower parts of the lamp-harp arms shown in Fig. 2. Fig. 4 represents an enlarged  
45 detail perspective view of the interlocking ends of the lamp-inclosing ring shown in Figs. 2 and 3. Fig. 5 represents an enlarged detail perspective view of the hinge and adjacent parts of the same. Fig. 6 represents an  
50 enlarged detail perspective view of the hinge and adjacent parts of the ring shown in Fig.

1, and shown also in Fig. 8 on a larger scale and more plainly. Fig. 7 represents a similar  
view of the interlocking hook and eye of this  
55 lamp-inclosing ring. Fig. 8 represents an enlarged perspective detail view of this lamp-inclosing ring.

The same letters indicate the same or corresponding parts in the respective figures.

A designates the canopy of an extension-lamp fixture, and A' an eye whereby it is  
60 suspended from a hook fixed in the ceiling of an apartment, as usual. In this canopy are pulleys *a*, indicated in dotted lines in Fig. 1, over which are passed the chains B, having  
65 the annular counterbalance-weight C attached to their outer ends, and the upper shade-ring or crown-ring, D, attached to their inner ends.

There is nothing novel in the above devices  
70 or their combination or arrangement. They are introduced merely because some form of suspension-fixture is requisite, or at least desirable, to fully illustrate the application of my invention. To this upper shade-ring or  
75 crown-ring, D, the shade E is secured by means of screws *e*, which take into its neck or in any other convenient manner. There may be, as shown in Fig. 2, a lower or base ring, F, in  
80 addition, which receives the lower edge of said shade, or this base-ring may be dispensed with, as in Fig. 1.

G designates a lamp-fount, which is provided with an annular groove, *g*, in its periphery, and preferably near its top; and H and I des-  
85 ignate, respectively, the burner and the chimney belonging to said fount.

In all these parts also I claim no novelty, they being well known and in constant use, as  
90 shown.

J designates two lamp-harp arms, which extend downward from the crown-ring D, their upper ends being passed through open-  
95 ings in said crown-ring and screw-threaded to receive nuts *j*, above said ring, whereby they are held in position. Instead of these screw-threaded ends and nuts the upper ends of said lamp-harp arms may be provided with hooks  
100 for catching into or through said crown-ring, or with any other similar means of attachment, such as are now in use for fastening harps to shade-rings.

K designates a lamp-inclosing ring, which fits into the groove *g*, so as to prevent the



fount G from rising or descending through said ring. This ring consists of a relatively fixed section, K', and a hinged section, K<sup>2</sup>, the two being connected at one end by a pin-  
 5 tle, k, which allows the ring-section K<sup>2</sup> to be turned, so as to open the side of the lamp inclosing ring and allow the fount to be inserted without raising it above said ring.

The fixed ring-section K' of the latter may  
 10 be in one piece with the lamp-harp arms J, as shown in Fig. 8, or it may be simply attached thereto, as shown in Figs. 2 and 3; but in either case it is suspended by said lamp-harp arms, and when in use is practically immov-  
 15 able with respect thereto.

As clearly shown in Fig. 8, the lamp-harp arms J and section-ring K' may be formed of a single rod or length of strong wire bent upon  
 20 itself to form a semicircular horizontal piece between the lower ends of the two parallel suspension-rods or lamp-harp arms, eyes j j' being formed on the outer side of the angle made by each arm J with said semicircular ring-section K'. The other ring-section, K<sup>2</sup>, is of  
 25 similar material, and provided at one end with an eye, k', and at the other with a hook, k<sup>2</sup>.

When the parts are put together for use, the eyes j and k' are arranged parallel to one another, and the pintle k is passed through  
 30 them and headed at each end, as indicated in Fig. 6. The hook k<sup>2</sup> is then passed through the eye j' and further secured there by a nut, k<sup>3</sup>, which turns on the screw-threaded tip of said hook.

35 Instead of being formed from a cylindrical rod or wire, the lamp-harp arms J and ring K may consist of cast-metal or of wrought-metal bars or plates or sheet-metal strips having the required form. In this case, as shown in Fig.  
 40 4, the detachable ends of the lamp-inclosing ring-sections are provided with interlocking hooks M M', leaving all the faces flush, a thumb-screw, N, being passed down through the hook M of ring-section K<sup>2</sup> into the hook  
 45 M' of ring-section K'; or a screw may extend up from the lower hook through the upper and receive a thumb-nut above it.

Either the screw or the hooks may be dispensed with, but it is preferable to employ  
 50 both.

As shown in Fig. 5, the other ends of said ring-sections are also made flush and hinged together in any ordinary way consistent there-  
 55 with. The ring-section K' is provided with ears O, Figs. 2, 3, 4, and 5, which are perforated to allow the passage of the diminished lower ends of lamp-harp arms or bars J, said diminished ends being screw-threaded below  
 60 said ears to receive nuts P, which, with the shoulders o on said arms, immediately above ears O, hold said ring-section K' steadily in place.

Of course said lamp-harp arms and ring-sections K' may be cast in one piece, or when  
 65 the rod or wire or sheet-metal form of lamp-harp is employed the arms may be separate

pieces fastened to said ring-section in any convenient manner.

The lamp-harp is essentially the same, whether made of cast metal or wire, or in two, 70 three, or four pieces. The lamp-harp arms and lamp-inclosing ring constitute the whole of it in either case, and dispense with by far the greater part of the weight of the ordinary harp, and consequently of the counter-balance 75 also. The fixture is thus made very light to handle and convenient for packing, and there is a very great saving of material. There is no protruding part of the lamp-harp below the fount or around the lower part thereof, 80 and many accidents will thereby be avoided. Finally, to introduce a lighted lamp with the chimney on requires no further preparation than the unfastening of ring-section K<sup>2</sup> and turning it back on its hinge. The lamp is 85 then easily passed in laterally, and the ring-section K<sup>2</sup> is turned into groove g and fastened to the ring-section K' again. Of course the ring-sections K' K<sup>2</sup> and the other devices 90 named may be used with a lamp-fount which does not have a groove, g, but is of sufficient diameter at the top not to pass through the ring. It will not be held so securely, how-  
 ever.

The screw O or nut k<sup>3</sup> should be attached 95 to ring-section K' by a chain, Q, as shown in Figs. 4 and 7, in order that it may be ready when wanted.

When a base-ring for the shade is used, as in Fig. 2, the arms R, for supporting it, may 100 be cast with the lamp-harp arms J, or otherwise made rigid therewith.

The lamp-harp arms J, if of wrought metal, may be attached to ring-section K' by head- 105 ing them below the same, or any other permanent attachment may be adopted instead of the detachable nuts before described.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is— 110

1. In a fixture for suspension-lamps, a lamp-harp consisting of vertical rods or bars and a horizontal ring-section fixed thereto, in combination with a hinged laterally-opening section completing the lamp-inclosing ring, sub- 115 stantially as set forth.

2. In a suspension-lamp fixture, a lamp-harp consisting of upright rods and a ring-section in a single piece, in combination with a ring-section hinged thereto and completing 120 the lamp-inclosing ring, substantially as set forth.

3. In a suspension-lamp fixture, a wire lamp-harp consisting of a single piece bent to form vertical supporting-rods and a hori- 125 zontal ring section, in combination with another ring-section hinged or pivoted thereto and completing the lamp-inclosing ring, substantially as set forth.

4. The rods J J and a ring-section formed 130 in one piece therewith, in combination with the additional section, which completes the

lamp-supporting ring, the latter section being hinged to the former, so as to open and close laterally, for the purpose set forth.

5     5. The supporting rods, the fixed ring-section, and the hinged laterally-opening ring-section provided with a screw-threaded hook which passes through an eye of the former section to close the lamp-supporting ring, in combination with a nut which screws on said  
10 hook below said eye, and a chain which con-

nects said nut to said fixed ring-section, substantially as set forth.

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

WM. H. BABCOCK.

Witnesses:

WILLARD R. HAIGHT,  
H. B. ZEVELY.