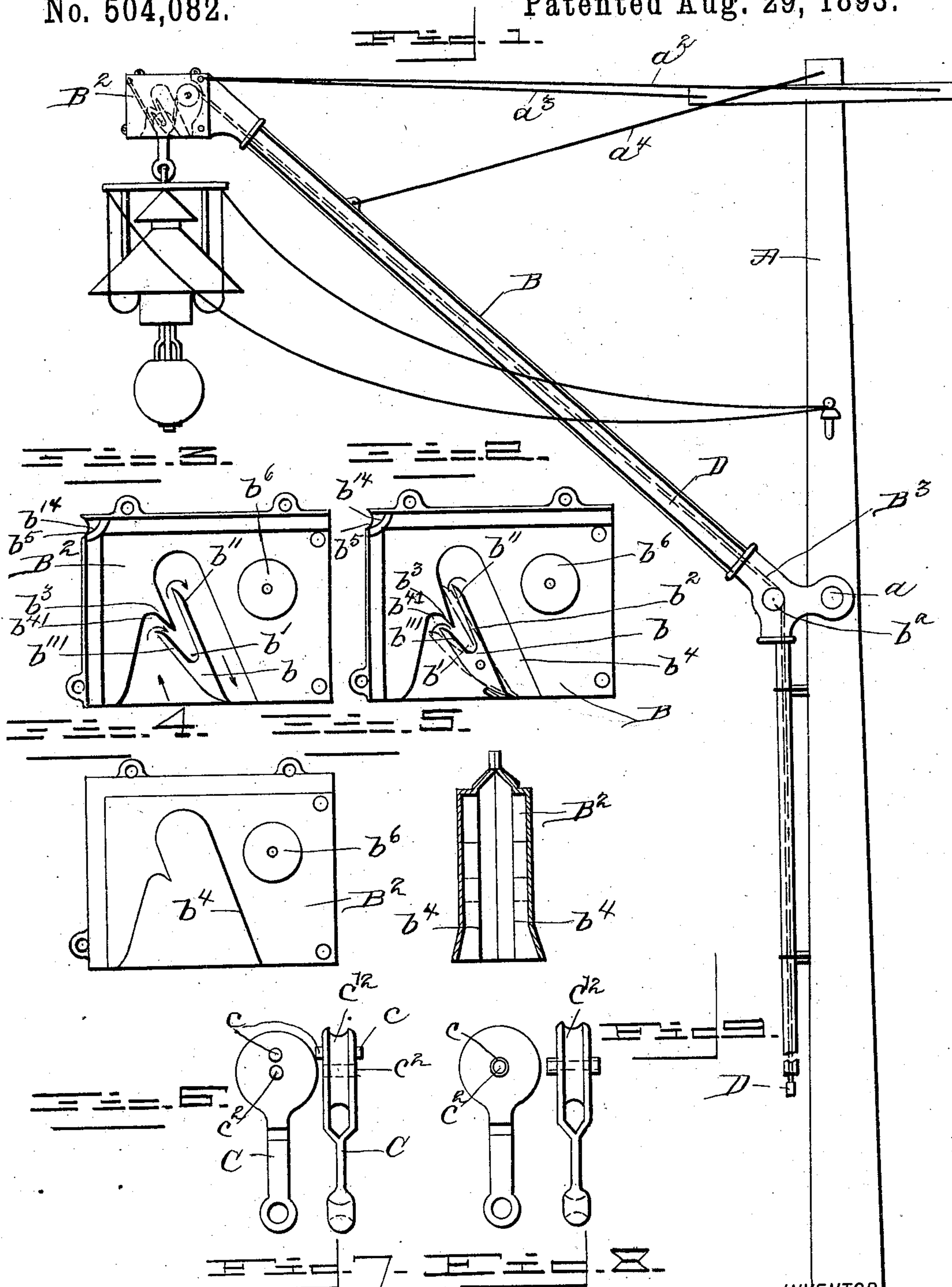


(No Model.)

J. P. HEBENDAHL.  
HANGER FOR ELECTRIC LIGHTS.

No. 504,082.

Patented Aug. 29, 1893.



WITNESSES:

WITNESSES:  
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# UNITED STATES PATENT OFFICE.

JOHN P. HEBENDAHL, OF WEATHERBY, PENNSYLVANIA.

## HANGER FOR ELECTRIC LIGHTS.

SPECIFICATION forming part of Letters Patent No. 504,082, dated August 29, 1893.

Application filed November 5, 1892. Serial No. 451,098. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN P. HEBENDAHL, a citizen of the United States of America, residing at Weatherby, in the county of Carbon and State of Pennsylvania, have invented certain new and useful Improvements in Hangers for Electric Lights, of which the following is a specification, reference being had to the accompanying drawings.

10 This invention relates to brackets or hangers for lamps, and more particularly for street lamps.

The object of the invention is to employ such peculiar construction in a bracket or hanger, whereby the lamp may be elevated to the proper position and there retained by an automatically operating catch.

15 A further object is to so construct the bracket, whereby the entire weight of the lamp shall be supported thereon to relieve the operating or elevating cable, at the same time overcoming to a great extent the liability of accidents, such as the falling of the lamp, rotating of cable, &c.

25 A further object is to provide a bracket of such peculiar construction whereby the operating cable shall be entirely inclosed to protect the same, said bracket being capable of adjustment to any desired angle; furthermore, to provide a bracket having a head portion carrying an automatically operating catch to engage the lamp when the latter is elevated to a certain height and to release the same when desired by properly manipulating the operating cable.

35 The invention contemplates finally the provision of a bracket or support that shall be simple of construction, strong and durable and comparatively inexpensive of manufacture.

40 With these objects in view, the invention consists in various novel details of construction, combinations and arrangement of parts, hereinafter to be more particularly set forth.

45 In describing the invention in detail, reference is had to the accompanying drawings forming a part of this specification, wherein like letters of reference indicate corresponding parts in the several views, in which—

50 Figure 1, is a view in side elevation of one form of hanger or bracket embodying my improvements, showing the lamp suspended in

proper position thereon. Figs. 2, 3, 4, and 5 are enlarged detail views in elevation and section of the bracket head portion, showing the construction of the automatic catch. Figs. 6 and 7, are enlarged views in detail of the pulley carrying link, and Figs. 8 and 9 indicate slight modifications.

In the drawings: A, indicates the usual pole or standard having pivotally secured thereon as at  $a$ , a bracket arm B, which may be braced by the guy ropes or rods  $a^2$ ,  $a^3$ ,  $a^4$ , to prevent lateral and vertical movement or play. This arm B, is tubular and provided with heads  $B^2$ ,  $B^3$ , said head  $B^2$ , carrying pivoted thereon gravitating latches  $b$ , and having their free ends  $b^2$ , bifurcated to receive between the extremities of said bifurcated arms a V-shaped portion  $b^3$ , of curved tracks  $b^4$ , which tend to limit the swing or movement of said latches.

Referring to Fig. 5, the arrangement of the tracks  $b^4$ , on the interior and at each side of the head  $B^2$  will be clearly seen. These tracks are adapted to effect a locking of the lamp as it is elevated by engaging the stud  $c$ , of the pulley carrying link C, and guiding them to the crotches  $b'$ , formed by the bifurcated portions of the latch  $b$ . As shown, these latches are secured so as to bring the center of gravity on the left hand side of the pivotal points which causes the longer arms  $b''$ , to normally rest on the upper side of the V-shaped projection  $b^3$ , with the shorter arms  $b'''$ , lying in the path of travel of the studs  $c$ , whereby as the lamp is elevated, the said studs  $c$ , engaging these short arms  $b'''$ , will tend to raise them, partially revolving the latches until said studs reach the point  $b'$ , when the latches fall by gravity to assume their normal positions, again bringing the arms  $b'''$ , into the path of travel of the studs  $c$ , and as the elevating cable is slackened the said studs engaging the upper side of these arms  $b'''$  will be guided to the crotches  $b'$ , where they are supported. Again these latches may form a portion of the track, that is to say, may be stationary as in Fig. 3, and effect a similar guiding and locking of the link C.

To secure the operating cable D, it is first passed through the opening  $b^{14}$ , the knotted end being received and retained in the chamber  $b^5$ , while the free end is passed down and



around the pulley  $c^{12}$ , of the link C, again to the head  $B^2$ , around the pulley  $b^6$ , and through the tubular arm B, around a pulley  $b^a$ , in the lower head  $B^3$  and down through a vertical tube, as is clearly shown in Fig. 1. This link C, may be modified as shown in Fig. 8 wherein the studs  $c$ , are cored out to receive the spindle of the pulley  $c^2$ .

The operation of this device in securing the lamp in its elevated position will be readily understood from the foregoing description. To release the lamp the operating cable is manipulated to further elevate the same and, referring to Figs. 2, 3 and 5 it will be at once apparent that the tendency of the studs  $c$ , will be to hug the inner sides of the longer arms to swing the weight toward the center of gravity until the said studs have passed the extremities of said arms  $b''$ , when the lamp will automatically swing into the downwardly inclined passage-way where an unobstructed path of travel is presented.

Having fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a lamp support, a bracket-arm, a terminal head thereon, fixed and movable guides within the head at each side thereof, said movable guides being suitably notched to receive approximately V-shaped projections of the fixed guides, as specified.

2. In a device for suspending lamps, a head or casing suitably supported, fixed guides of an approximately inverted V-shape arranged within at each side of the casing, and the pivoted latches provided with recesses or notches to receive V-shaped projections of the fixed guides, as specified.

3. In a lamp support, a head or casing, suitable guides at the sides within the casing and the pivoted gravitating latches having their free ends forked, as specified.

4. In an automatic catch for the purpose set forth, comprising a suitable casing, the V-shaped guides arranged at each side thereof and provided with stops  $b^3$ —the gravitating catches as described, and an operating cable having one end fixed and the opposite end passing over a pulley in said casing to form an engaging loop, said pulley being so arranged whereby the object suspended shall tend to swing toward the same, substantially as specified.

5. In an automatic catch for the purpose set forth, a casing, the V-shaped guides formed at each side thereof and provided with stops  $b^3$ —the gravitating latches, the fixed and movable points of support for the operating cable, the engaging loop formed by the latter, the supporting link having engaging projections and the pulley of the said link being encircled by said loop, as specified.

6. In a support for lamps, a casing having V-shaped guides formed within at the sides thereof in combination with the gravitating latches pivotally secured at or near their lower ends and having their upper ends bifurcated to form engaging arms, substantially as specified.

7. In a support for lamps, the combination with the support —A— of the tubular bracket arm —B—, the heads  $B^2$ — $B^3$ — the self acting catch located in the said head  $B^2$ —, comprising the tracks  $b^4$ — provided with projections  $b^3$ —, the latches  $b$ — pivotally secured therein and having arms  $b''$ — $b'''$ — and crotch  $b'$ —, the lamp supporting link provided with lateral studs  $c$ — adapted to engage the said arm  $b'''$ — to partially rotate the said latches as described, and the operating cable —D— having the fixed and movable supports  $b^5$ — $b^6$ — forming an engaging loop to encircle pulley  $c^{12}$ — the opposite end of said cable being passed down through said bracket arm, and suitably secured, substantially as specified.

8. In an automatic catch for the purpose set forth, a casing, the guides formed at each side thereof, the gravitating latches, the fixed and movable points of support for the operating cable the engaging loop formed by the latter, the supporting link having engaging projections, and the pulley of the said link being encircled by said loop, substantially as specified.

9. In a support for lamps, the combination with a casing having suitable guides formed at the sides, of the gravitating latches pivotally secured at or near their lower ends and having their upper ends bifurcated to form engaging arms, substantially as specified.

10. In a support for lamps, the combination with the support A, of the tubular bracket arm B, the heads  $B^2$ ,  $B^3$ , the self acting catch located in the said head  $B^2$ , comprising the tracks  $b^4$ , having the V-shaped projections  $b^3$ , the latches  $b$ , pivotally secured therein and having arms  $b''$ ,  $b'''$ , and crotch  $b'$ , the lamp supporting link provided with lateral studs  $c$ , adapted to engage the said arm  $b'''$ , to partially revolve the said latches as described, and the operating cable D, having the fixed and movable supports  $b^5$ ,  $b^6$  forming an engaging loop to encircle pulley  $c^{12}$ , the opposite end of said cable being passed down through said tubular bracket arm, and suitably secured, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN P. HEBENDAHL.

Witnesses:

WM. N. HANN,  
ROBERT KINNEY.