(No Model.)

A. G. DE WITT.

ELECTRIC LAMP SUPPORTER.

No. 493,578. Patented Mar. 14, 1893

Fig. 1.

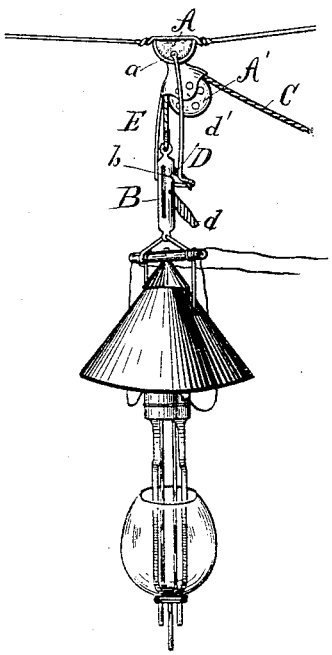


Fig. 2.

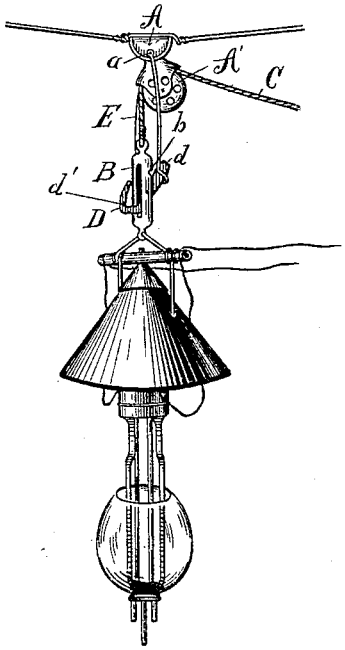


Fig. 3.

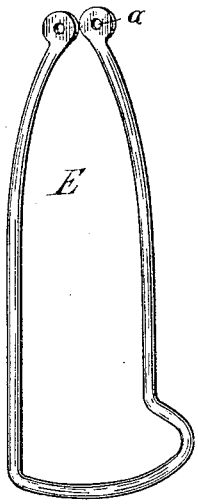
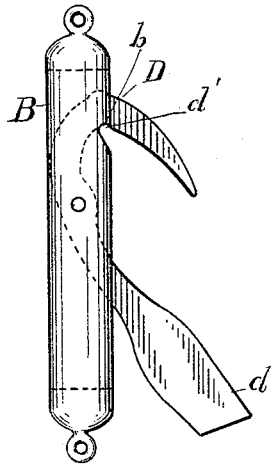


Fig. 4.



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ELECTRIC-LAMP SUPPORTER.

SPECIFICATION forming part of Letters Patent No. 493,578, dated March 14, 1893.

Application filed February 7, 1891. Serial No. 380,583. (No model.)

To all whom it may concern:

Be it known that I, ALVIN G. DE WITT, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Electric-Light Lamp-Supporters; and I 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 pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

In the drawings, Figure 1 shows a side elevation of my device while lamp is being raised. Fig. 2 shows the position of parts while lamp is being lowered. Fig. 3 shows the bail. Fig. 4 shows an elevation of link and hook.

My invention relates to electric light lamp supporters, and has for its object the production of an apparatus that will be positive in its operation, and will when in use entirely relieve the elevating rope from the weight of the lamp.

In carrying out my invention, in the drawings, A represents a saddle on a supporting wire across the street, and may be wired to the span wire, or otherwise attached, as preferred.

A′ is a pulley adapted to carry the rope C, used in elevating the lamp.

B is a link in which is pivoted the hook D. This hook is weighted at its end *d* opposite the hook proper by making that part of sufficient size and weight to overbalance the hook end, and is thereby caused to present its hook end upward when not in engagement with the stirrup as hereinafter explained.

E is a stirrup loosely suspended from a pivot on the saddle A; the cross-bar of the stirrup is in the form of a half circle as shown in Fig. 3, and hangs so far below the saddle and the pulley A′, that it reaches nearly to the bottom of the link B, and below the lower or weighted end *d*, of the hook D, when the link and hook are drawn completely up to the pulley.

The operation of my device is as follows: The operator raises and lowers the lamp by elevating rope C. By drawing on the rope, the lamp and supporter are elevated until the cross-bar of the stirrup E comes in contact with the upper side of the point of the hook D, and the cross-bar of the stirrup is guided over the end of the hook, and drops back against the link under the bend of the upturned hook and with the hook over it. If the lamp is lowered, the hook will engage with the stirrup and the lamp will hang from the saddle. I form the hook with a depression *d′* below the line of its inner face so as to insure its holding the lamp. I also notch the link B at this point where the stirrup comes in contact with it, when in suspending engagement as shown at *b*, to aid in steadying the supporter and bring the weight approximately under the center of suspension. When the lamp is to be lowered, it is first elevated beyond its point of rest until the stirrup E drops under the weighted end of the hook, on lowering the lamp E will lift the weighted end of the hook D and throw the point back so far as to prevent its engaging with the stirrup E when the lamp is still further lowered, as is shown in Fig. 2. The lamp may now be lowered to the ground. In lowering, as soon as the weighted end of the hook D passes the stirrup E, the hook will assume the position shown in Fig. 1.

I am aware that devices have been constructed with a hook adapted to catch a stirrup and suspend the lamp therefrom, but such devices have lacked that positive action essential to the successful operation of the apparatus. The great difficulty has been to cause the hook to take such a position when raised as to engage the stirrup in all cases. In the old devices, if the hook in elevating goes up sidewise and remains so, it will not engage when lowered for suspension. I accomplish this positive action by having my stirrup D loosely pivoted so as to swing out freely and without turning the hook aside, and also by forming it at its lower part as shown, with a loop, so that the link B in coming up slides into this loop formed on the stirrup E, which tends to bring the parts into engaging position and effectually prevents the lamp swinging in the wind away from the link. The form of the loop also allows the hook to turn nearly one hundred and eighty degrees in arc, and still continue in engaging position.

What I claim is—

1. In an electric light lamp supporter, the

combination of a swinging stirrup, a fixed saddle supporting said stirrup, a pulley, a link suspended from a rope passing over said pulley, a swinging hook on said link, adapted to be reversed in position, and adapted to engage with the stirrup in one position and pass without engaging, when in reversed position, substantially as and for the purpose specified.

2. In an electric light lamp supporter, the combination of a fixed saddle, a swinging stirrup supported thereby a curved cross-bar to said stirrup, a pulley supported by said saddle, a link attached to a rope over said pulley, and provided with a swinging hook, adapted to be drawn upward within the curve of said cross-bar and to come into engagement with said cross-bar, substantially as and for the purpose described.

3. An electric light lamp supporter, consisting of a link adapted at its upper end to engage the hoisting rope, and at its lower end provided with means for engaging a lamp; said link provided with a bar pivoted between its ends, having a projecting downwardly turned hook at its upper end, and a weighted stem at its lower end projecting from the same side of the link; the whole adapted to operate in connection with a stirrup depending from the cable or support above, which sustains the hoisting pulley, substantially as described.

4. The combination with the link of the hook as described, pivoted between its ends, said hook provided with a notch *b* in its throat, substantially as and for the purposes set forth.

5. The combination of the hook and link as described, the link being provided with a recess adapted to prevent the stirrup when engaged with the hook to draw into a vertical position, substantially as and for the purposes described.

In testimony whereof I sign this specification in the presence of two witnesses.

ALVIN G. DE WITT.

Witnesses:

CHARLES H. FISK,

MARION A. REEVE.