

(No Model.)

W. A. PENFIELD.

WICK CARRIER FOR CENTRAL DRAFT LAMPS.

No. 492,585.

Patented Feb. 28, 1893.

Fig. 1

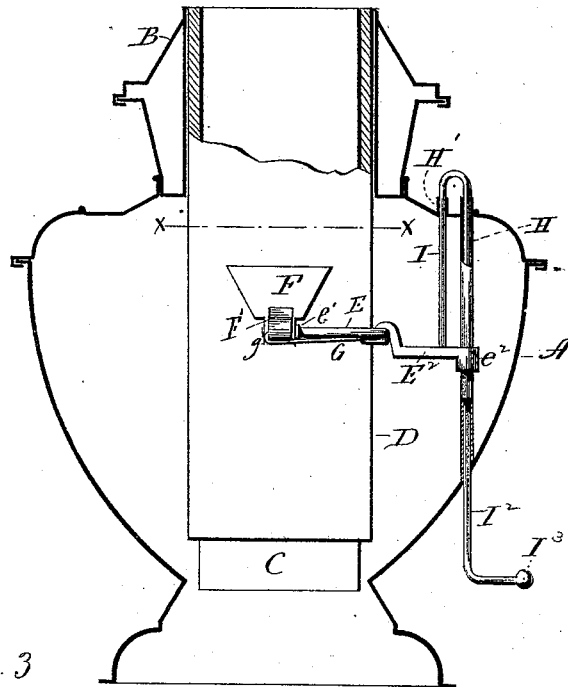


Fig. 3

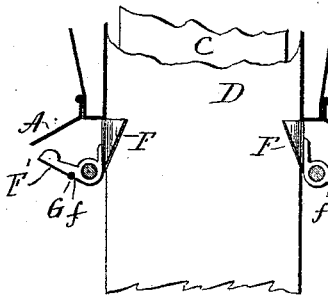


Fig. 4

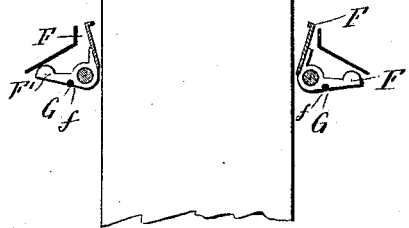
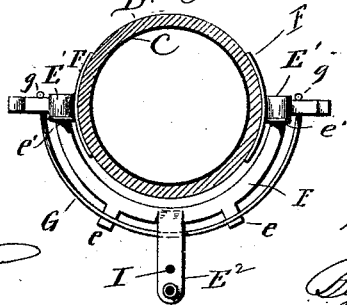


Fig. 2



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# UNITED STATES PATENT OFFICE.

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## WICK-CARRIER FOR CENTRAL-DRAFT LAMPS.

SPECIFICATION forming part of Letters Patent No. 492,585, dated February 28, 1893.

Application filed August 1, 1892. Serial No. 441,843. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM A. PENFIELD, of Meriden, in the county of New Haven and State of Connecticut, have invented a new  
5 Improvement in Wick-Carriers for Central-Draft Lamps; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact  
10 description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a view in vertical section of a lamp provided with a wick-carrier constructed in  
15 accordance with my invention. Fig. 2, a transverse section on the line  $x-x$  of Fig. 1, showing the wick-carrier in plan, and the central-draft tube and the wick in section. Fig. 3, a broken view, partly in vertical section,  
20 and partly in side elevation, showing the action of the burner in preventing the release of the wick by arresting the upward movement of the wick-carrier before that can take place. Fig. 4, a similar view, showing the  
25 burner removed, and the wick-carrier raised, and its jaws disengaged from the wick by the engagement of their tripping-arms with the lower face of the top of the fount.

My invention relates to an improvement in  
30 wick-carriers for central-draft lamps, the object being to produce a simple, cheap, convenient and effective device, constructed so as not to release the wick until the burner has been removed from the lamp-fount.

35 With this end in view, my invention consists in a wick-carrier having certain details of construction and combination of parts as will be hereinafter described and pointed out in the claims.

40 The lamp-fount A, burner B, and central-draft tube C, are of ordinary construction, the latter being provided in the usual manner with a cylindrical wick D.

45 As herein shown, the frame of the wick-carrier is semi-circular in form and constructed at its ends with bearings E', E', respectively receiving two pivotal jaws F, F', which turn upon them in the same vertical plane, and which are located directly opposite each other  
50 on opposite sides of the draft-tube, and so as to engage with the wick at opposite points

thereon. These jaws are tapering in form, being widest at the top, where they are furnished with inwardly projecting teeth, and conformed to the curvature of the wick, with  
55 which their teeth engage. The said jaws are formed with outwardly projecting tripping-arms F', F', having cam-like formations at their ends for engagement with the inclined lower face of the top of the fount A, as shown  
60 by Fig. 4 of the drawings. Normally the jaws are urged inwardly toward each other, and thus against the wick, by means of a semi-circular spring G, made of wire, and having  
65 its ends engaged with the lower faces of the inner ends of the tripping-arms F' F', which are thereto notched as at  $f$ , as shown by Figs. 3 and 4 of the drawings. This spring is placed  
70 under the required tension by having its central portion passed under the central, outwardly projecting arm E<sup>2</sup>, of the frame, and over two  
small grooved lugs  $e, e$ , formed on the frame at  
75 equi-distant points from the opposite faces of the said arm, E<sup>2</sup>. As herein shown, the extreme ends  $g, g$ , of the said spring G, are bent  
upward, as best shown in Fig. 1, and hold the  
80 jaws in place on the bearings E', E', the jaws being thus held against the shoulders  $e', e'$ , formed on the frame just inside of the said  
bearings. I would have it understood, how-  
85 ever, that if preferred, I may employ a single spring otherwise arranged, for operating the jaws, or I may employ two independent springs therefor. The arm E<sup>2</sup>, before mentioned, projects  
90 outwardly and downwardly from the center of the frame and is furnished at its extreme outer end with a vertical sleeve  $e^2$ , which receives a vertical guide-tube, H, the  
upper and lower ends of which project through  
95 the lamp-fount A.

As herein shown, the draw-bar of my improved carrier has the form of a loop, the  
legs whereof are unequal in length, its short  
leg I, being attached to the arm E<sup>2</sup>, between  
100 the frame E and the sleeve  $e^2$ , while its long leg I<sup>2</sup>, passes downward through the guide-tube H and projects from the lower end thereof, where it is bent outward and furnished  
105 with a knob I<sup>3</sup>. A short tube H', mounted in the top of the fount, in line with the guide-tube H, forms a bearing for the short leg of  
the draw-bar, the loop at the upper end where-

of projects above the fount in position to be grasped by the fingers for the operation of the carrier from above the fount, while the projecting lower end of the leg I<sup>2</sup> of the bar, enables the carrier to be operated from a point below the fount.

It will be understood that in the normal operation of the lamp, the jaws will be engaged with the wick, so that when the carrier is raised and lowered, the wick will be correspondingly moved upon the draft tube C. The carrier, however, is arrested by the engagement of its jaws with the lower end of the burner as shown by Fig. 3 of the drawings, before its tripping arms are brought into contact with the inclined lower face of the top of the fount, so that the wick is prevented from being released until after the burner has been removed from the lamp. That done, the carrier may be elevated still higher, as shown by Fig. 4 of the drawings, when the tripping-arms of its jaws engage with the top of the fount, and turn the jaws outwardly on their pivots until they are disengaged from the wick, which may then be slipped off from the tube, or slipped over the same, moving freely between the said jaws.

I have shown the jaws and their tripping arms cast in one piece, and the frame and its grooved lugs and arm cast integrally; but obviously such constructions are not imperative, neither are the particular forms in which these parts are shown herein. I would therefore have it understood that I do not limit myself to the exact construction and combination of parts herein shown and described, but hold myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of my invention. I am aware, however, that a prior patent shows a wick-lift employing two spring-actuated gripping-jaws hung opposite each other in a horizontal frame, carried by the draw-bar, and each having an outwardly projecting tripping-arm by means of which the jaws are turned on their pivots and disengaged from the wick when the device is sufficiently lifted by the draw-bar.

I am aware that it is old to make a bowed draw-bar having a long leg which is passed through a vertical tube mounted in the fount,

and a short leg to which a wick-holder is attached.

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

1. In a central-draft lamp, the combination with the fount and the draft-tube thereof, of a guide-tube mounted in the fount and projecting through the same at its upper and lower ends; and a wick-carrier comprising a frame constructed with a central, outwardly projecting arm terminating in a sleeve which slides up and down over the said guide-tube, and thus steadies the wick-lift, two spring-actuated jaws pivoted to the said frame at points thereon opposite each other, and each provided with an outwardly projecting tripping-arm, and a bowed draw-bar having its short leg attached to the said arm of the frame at a point between the sleeve and the body thereof, and having its long leg passed through the said guide-tube in which it has bearing and plays up and down, substantially as set forth.

2. In a central-draft lamp, the combination with the fount and the draft-tube thereof, of a guide-tube mounted in the fount and projecting through the same at its upper and lower ends; and a wick-carrier comprising a semi-circular frame having a bearing at each of its ends, and constructed with a central, outwardly projecting arm terminating in a sleeve, two jaws respectively mounted on said bearings, to turn in a vertical plane, and each provided with an outwardly projecting tripping-arm, a semi-circular spring applied in tension to the frame, and having its ends engaged with the jaws, for turning them inward, and a bowed draw-bar having its short leg attached to the said arm of the frame, and its long leg passed downward through the guide-tube which passes through the sleeve of the said arm, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

WILLIAM A. PENFIELD.

Witnesses:

H. S. SAVAGE,

F. E. WATROUS.