H. E. DURHAM.

ATTACHMENT FOR LAMP BURNERS.

APPLICATION FILED JULY 8, 1910.

1,006,372. **Patented Oct. 17, 1911.**

Fig. 1.

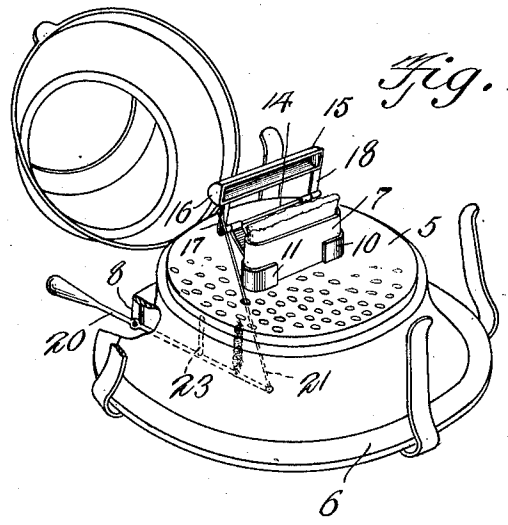
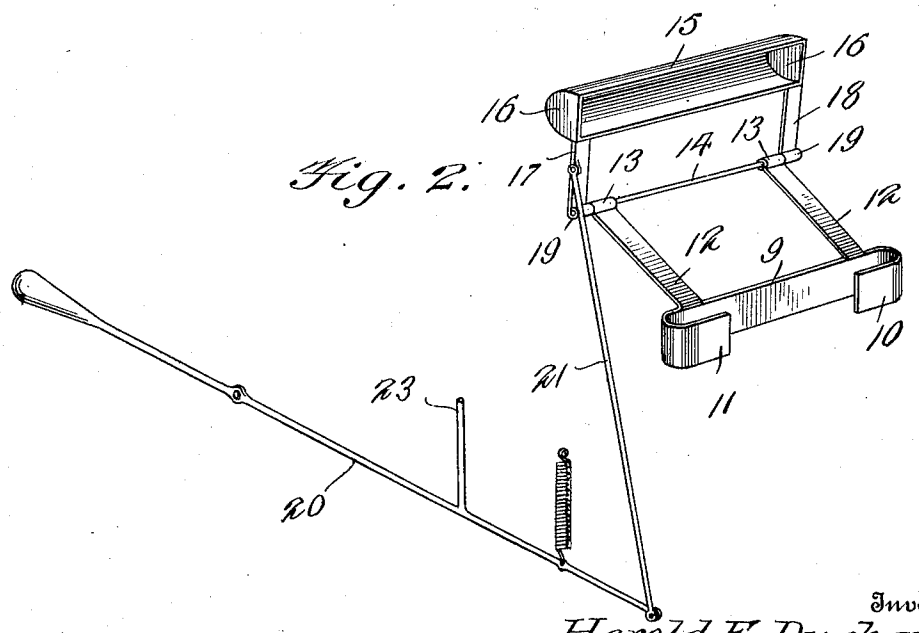


Fig. 2.



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ATTACHMENT FOR LAMP-BURNERS.

1,006,372. Specification of Letters Patent. Patented Oct. 17, 1911.

Application filed July 8, 1910. Serial No. 571,023.

To all whom it may concern:

Be it known that I, HAROLD E. DURHAM, a citizen of the United States, residing at Douglas, in the county of Allegan and State of Michigan, have invented new and useful Improvements in Attachments for Lamp-Burners, of which the following is a specification.

This invention relates to improvements in attachments for lamp burners and more particularly to an attachment adapted to extinguish the light whenever desired.

One object of the invention is the provision of an attachment which may be attached to and detached from most forms of lamp burners now in use without the necessity of making expensive alterations in the construction of the burner.

Another object is the provision of an attachment having means for holding the same away from the flame of the wick so that in the event of excessive vibration or shock the attachment will not move to operative position to extinguish the light.

With these and other objects in view, which will more fully hereinafter appear, the present invention consists in certain novel details of construction and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and more particularly pointed out in the appended claim; it being understood that various changes in the form, proportion, size, and minor details of the device may be made, within the scope of the appended claim, without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings, forming part of the specification:—Figure 1 is a detail perspective of a burner provided with my improved device and showing the cap thereof thrown back. Fig. 2 is a detail perspective of the device removed from the burner.

Similar numerals of reference are employed to designate corresponding parts throughout.

The burner is shown to include the ordinary perforated diaphragm designated by the numeral 5 from the periphery of which depends the usual flange 6. Extending through the central portion of the diaphragm 5 is the usual wick tube 7, and depending from the flange 6 is a hanger 8.

The attachment forming part of the subject matter of the present invention is shown to include a bracket comprising a base or clamping portion designated by the numeral 9, the said clamping portion being preferably formed of an oblong piece of metal the opposite end portions of which are curved and extend in a direction to overlie one face of the body, as shown at 10 and 11. The body 9 and extensions 10 and 11 are adapted to embrace the wick tube 7, as shown in Fig. 1. Extending upwardly and outwardly from the opposite end portions of the body 9 are arms 12, the said arms extending to a point beyond the upper end of the wick tube 7, and having their free end portions curved so as to provide knuckles 13. Extending through the knuckles 13 are the opposite end portions of a spindle rod 14, the opposite ends of said rod extending beyond the outer sides of the arms 12.

What will subsequently be termed a cap is designated by the numeral 15 and is shown to be formed of a single piece of sheet metal bent into a substantially U-shape, the opposite ends of said cap being closed by end walls 16. Extending outwardly from the opposite end portions of the cap 15 are arms 17 and 18, the free end portions of which are curved to provide knuckles 19 which receive the portions of the pintle rod 14 extending beyond the arms 12 of the bracket. With this construction it will be manifest that the cap is pivotally connected with the bracket, the arms 17 and 18 of the cap being of such length that when the arms are moved in one direction to a horizontal position the cap will house the upper end of the wick tube, or one end of the wick extending through the tube, whereby the flame will be extinguished. In order that the cap may be operated from a point beyond the burner the following construction is employed:—By reference now to Fig. 1 it will be seen that fulcrumed on the bracket and hanger 8 is the intermediate portion of a lever 20 whose outer end is weighted, and pivotally connected with the arm 17 of the cap is one end of a connecting rod 21, the said connecting rod passing through the perforated diaphragm 5 and having its opposite end pivotally connected to the inner end of the operating lever 20. With this construction it will be manifest when the operating lever is oscillated the cap will be raised and lowered. In order that the operating lever may be maintained in a substan-

tially horizontal position and the cap held away from the wick tube a helical retractile spring is employed. This element has one end connected to the lever 20 at a point adjacent to the connecting rod 21, while its opposite end is connected with the perforated diaphragm 5. The contraction of this spring together with the weighted end of the lever tends to move the connected end of the lever upward, and since upward movement of the connecting end of the lever will impart a similar movement to the cap, it is evident the cap will be maintained in spaced relation to the wick tube when pressure on the free end of the lever is removed. In order to limit the upward movement of the connected end of the lever and likewise the upward and outward movement of the lever a stop 23 is employed. This member projects upwardly from the lever 20 and at a point between the fulcrum thereof and the connecting rod 21, the upper end of the stop engaging with the diaphragm 5 after the lever has been moved to a substantially horizontal position and the cap moved upwardly and away from the wick tube.

From the foregoing, it is evident that I have provided a device which is comparatively simple in structure and inexpensive in manufacture, embodying few parts and these so arranged that the danger of derangement will be reduced to a minimum.

I claim:—

The combination with a burner, of an extinguisher comprising a bracket mounted upon the wick tube, a cap hingedly supported by the bracket, an operating lever pivoted intermediate its ends to the burner, one end of lever being formed with a weighted handle, a rod connected to the opposite end and to the cap, a stop lug projecting up from the said lever, and a retractile spring connected to the lever adjacent its connection with the said rod and burner, said spring and the weighted handle coöperating to normally hold the stop lug in engagement with the burner whereby the opening movement of the cap will be limited.

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

HAROLD E. DURHAM.

Witnesses:
BEN WIEGERT,
L. W. MCDONALD.