

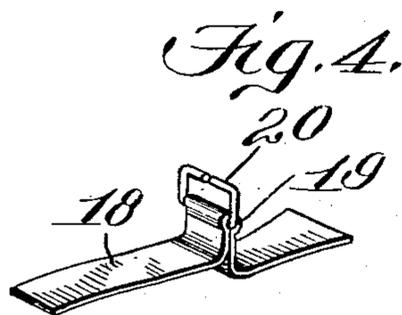
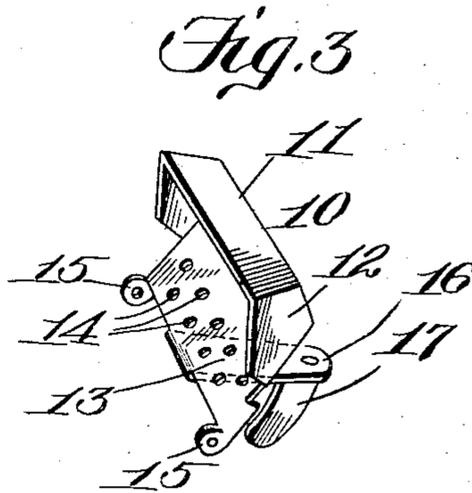
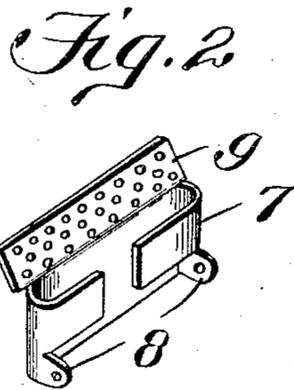
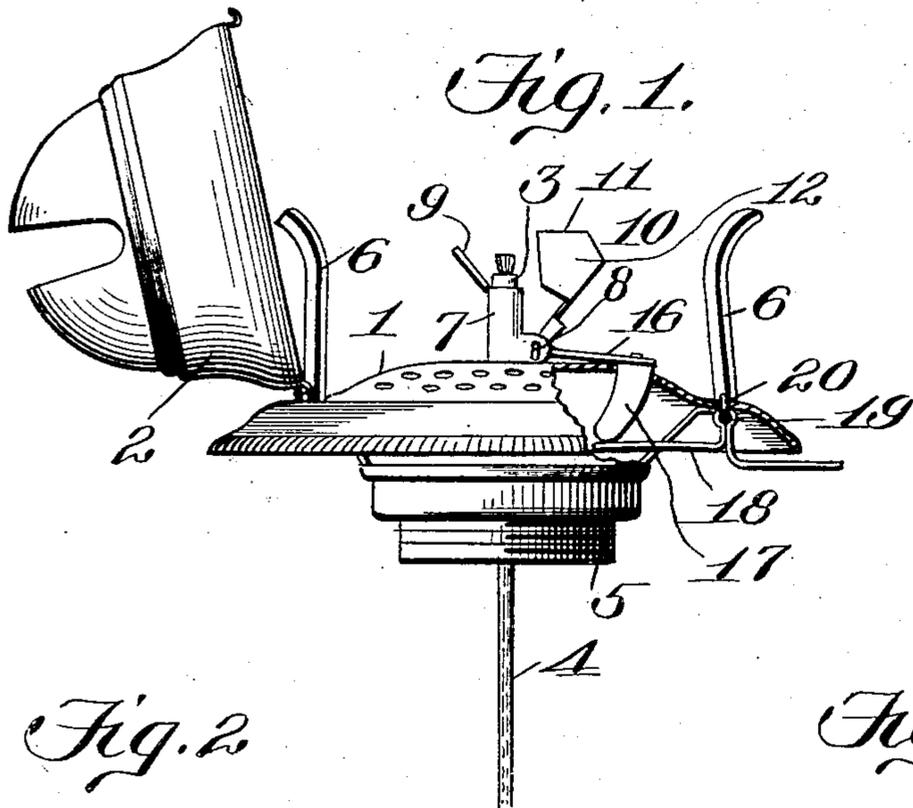
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PATENTED JULY 28, 1903.

A. NIETO Y ABEILLÉ & A. GUAL Y S. JUAN.
EXTINGUISHER FOR LAMPS.

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NO MODEL.



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UNITED STATES PATENT OFFICE.

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EXTINGUISHER FOR LAMPS.

SPECIFICATION forming part of Letters Patent No. 734,931, dated July 28, 1903.

Application filed May 12, 1903. Serial No. 156,837. (No model.)

To all whom it may concern:

Be it known that we, AMADO NIETO Y ABEILLÉ and ALEJANDRO GUAL Y SAN JUAN, citizens of the Republic of Cuba, residing at Havana, Cuba, have invented new and useful Improvements in Extinguishers for Lamps, of which the following is a specification.

This invention relates to certain new and useful improvements in extinguishers for lamps.

The invention aims to provide an extinguisher which can be readily attached to the ordinary lamp-burners now in general use and which when operated is adapted to extinguish instantly the flame without any risk whatsoever.

With the employment and use of the extinguisher to be hereinafter more fully described, and illustrated in the accompanying drawings, the trouble and danger at present attendant upon the extinguishing of a lamp are entirely eliminated, and the frequent accidents resulting from the blowing out of the lamp are avoided—as, for instance, should the lamp be set at any height upon a shelf or other object it must first be taken down, the light turned off, and afterward blown out through the top of the chimney.

With the use and simple application of the extinguisher to be hereinafter described, and illustrated in the accompanying drawings, the foregoing objections are overcome and the accidents occurring frequently therefrom cease entirely, especially the final operation of blowing out the light, which is the most frequent cause of accidents.

The extinguisher to be hereinafter described when operated instantaneously extinguishes the lamp, so that the gases around the flame or light are dispersed and at the same time are thrown off in a certain direction, thus avoiding all possibility of explosion or fire.

The invention further aims to construct an extinguisher for lamps which shall be extremely simple in its construction, strong, durable, efficient in its use and operation, and comparatively inexpensive to set up.

To this end the invention consists in the novel combination and arrangement of parts

hereinafter more specifically described, illustrated in the accompanying drawings, and particularly pointed out in the claims hereunto appended.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, wherein like reference characters denote corresponding parts throughout the several views, and in which—

Figure 1 is an elevation of the burner with the improved extinguishing device connected thereto. Fig. 2 is a perspective view of the removable split supporting-sleeve. Fig. 3 is a like view of the extinguishing-hood, and Fig. 4 is a similar view of the operating-lever.

Referring to the drawings by reference characters, 1 denotes the gallery of the burner, 2 the cone which is pivoted thereto, 3 the tube for the wick 4, the tube extending through the gallery and projecting a suitable distance above the top of the same and depending a suitable distance below the bottom of the same. The lower end of the tube 3 communicates with the top of the externally-screw-threaded cap or socket 5 for connecting the burner to the lamp-body. The cap or socket 5 is also adapted to support the gallery 1 and the retaining-arms 6 for the chimney. (Not shown.)

The extinguishing device comprises a removable split supporting-sleeve, an extinguishing-hood, and an operating-lever.

The removable split supporting-sleeve is mounted upon the wick-tube, as shown in Fig. 1, and at its lower end rests upon the upper face of the gallery 1. The split supporting-sleeve is designated by the reference character 7 and is formed of a strip of suitable metallic material which is bent to form a split sleeve of the same contour as the wick-tube. The split supporting-sleeve 7 is formed at its lower end with a pair of laterally-extending apertured lugs 8 and at its upper end at one side with a perforated plate 9, which extends upwardly and outwardly at an inclination. The construction of the split supporting-sleeve 7 is fully disclosed in Fig. 2.

The extinguishing-hood 10 when in position is adapted to be pivoted to the lugs 8, as

shown in Fig. 1, and the construction of the extinguishing-hood 10 is fully disclosed in Fig. 3. The top of the extinguishing-hood 10 is substantially V-shaped in contour, as at 11, and is mounted upon the side walls 12, and the said top wall is connected to or forms a part of the front wall 13. The preferred construction is that the upper portion of the front wall be bent substantially V shape, so as to project therefrom. The lower portion of the front wall 13 is perforated, as at 14. The side walls 12 extend approximately half the distance of the front wall 13 and are connected thereto or may be an integral portion thereof. The side walls 12 and top wall 11 are imperforate. The lower portion of the front wall 13 is formed with a pair of laterally-extending apertured lugs 15, so that the extinguishing-hood 10 can be pivotally connected to the apertured lugs 8 of the split supporting-sleeve. The construction of the extinguishing-hood in such a manner—that is to say, making the upper portion larger than the lower portion or cutting away the side walls 12—permits, when the extinguishing-hood is operated, the enlarged portion to pass over the top of the wick-tube and extinguishes the flame. Connected to one face of the wall 13 of the extinguishing-hood 12 is a laterally-extending arm 16, provided at its free end with a depending curved arm 17. The latter is adapted to be engaged by the operating-lever when it is desired to operate the hood to extinguish the flame. When the hood is operated, the side walls 12 are adapted to engage the plate 9. That portion of the side walls which engages the plate 9 is beveled, so it will lie flush with the said plate. The gallery 1 is provided with an opening, so that the arm 17 can extend therethrough and be engaged by the operating-lever, which is connected to the lower face of the gallery. The operating-lever 18 (fully shown in Fig. 4) is bent upon itself to form an eye, as at 19. The eye 19 receives a small link or loop 20, which is carried by the gallery 1 and depends from the lower face thereof. By this arrangement the operating-lever 18 is pivotally connected with the gallery. The inner end of the operating-lever 18 is adapted to engage the arm 17, so that when the outer end of the operating-lever which extends beyond the edge of the gallery is depressed the inner end of the said lever will engage the arm 17 and operate the extinguishing-hood, thereby extinguishing the flame. The movement of the hood will be such that when it is operated it will move over the top of the wick-tube 3. When the operating-lever is released, the hood 10 will resume its inoperative position by gravity, owing to the fact that the arms 16 and 17 form a counterbalance. The inner arm of the operating-lever 18 is somewhat elongated, so that when it is released by the operator it will also resume its inoperative position by gravity.

When it is desired to extinguish the lamp,

all that is necessary is to exert a slight pressure upon the outer end of the operating-lever 18, which will cause the inner portion of said operating-lever 18 to rise and transmit vertical motion to the arm 17, which through the intervention of the arm 16 will push the hood 10 over the top of the wick-tube 3 and against the inclined perforated plate 9, forming a sealed chamber, which action extinguishes the flame instantaneously, the little remaining gas in the chamber formed by the hood 10 and plate 9 escaping through the perforations of the plate 9 and also through the perforations 14 of the hood. The perforated plate 9 also serves the purpose of feeding air to the flame when the extinguisher is opened. After the flame is extinguished and the pressure of the finger upon the outer portion of the lever 18 is released the latter falls by its own weight, as well as the arms 16 and 17, which causes the hood to resume its inoperative position, and consequently the extinguisher is again opened and the lamp in condition to be again lighted.

It will be evident that from the foregoing construction, operation, and arrangement of the extinguisher there is no necessity for touching the lamp at all or for removing the lamp from its resting-place, or to lower the flame or to blow out the flame in order to extinguish it, and it will furthermore be evident that when the extinguisher is operated the flame will be instantaneously extinguished.

It is thought the many advantages of an extinguisher for lamps constructed in accordance with the foregoing description, taken in connection with the accompanying drawings, can be readily understood, and it will furthermore be evident that changes, variations, and modifications can be resorted to without departing from the spirit of the invention or sacrificing any of its advantages, and we therefore do not wish to restrict ourselves to the details of construction hereinbefore described and as shown in the accompanying drawings, but reserve the right to make such changes, variations, and modifications as come properly within the scope of the protection prayed.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a device of the character described, a supporting-sleeve provided with an inclined perforated plate, a gravity-return extinguishing-hood pivoted to said sleeve and cooperating with said plate, and a gravity-return lever independent of said hood and adapted when operated to engage with and operate said hood.

2. A device of the character described, comprising a removable supporting-sleeve provided at its upper end with an upwardly-extending inclined perforated plate and at its lower end with a pair of apertured lugs, an extinguishing-hood pivoted at its lower end to said lugs and adapted to have its upper

portion cooperate with said plate, and means independent of said hood and when operated adapted to engage therewith for operating it.

3. In a device of the character described, a removable split supporting-sleeve provided at its upper end with an upwardly-extending inclined perforated plate and at its lower end with a pair of apertured lugs, an extinguishing-hood provided at its lower end with a pair of apertured lugs pivoted to the lugs of the sleeve and adapted to have its upper portion cooperate with said plate, said lower portion of said extinguishing-hood being perforated, and means independent of said hood and when operated adapted to engage therewith for operating it.

4. In a device of the character described, a removable split supporting-sleeve provided at its upper end with an upwardly-extending inclined perforated plate and at its lower end with a pair of apertured lugs, an extinguishing-hood provided at its lower end with a pair of apertured lugs pivoted to the lugs of the sleeve and adapted to have its upper portion cooperate with said plate, said lower portion of said extinguishing-hood being perforated, a laterally-extending arm connected to the lower portion of said hood, a depending arm carried by said laterally-extending arm, and a lever, when operated, adapted to engage said depending arm, causing thereby the operation of said hood.

5. In a device of the character described, a supporting-sleeve provided at its upper end with an upwardly-extending inclined perforated plate, an extinguishing-hood pivoted at its lower end to the lower end of said sleeve and adapted to have its upper portion cooperating with said plate, a laterally-extending arm connected to the lower portion of said hood, a curved depending arm carried by said laterally-extending arm, and a lever adapted when operated to engage said depending arm causing thereby the operation of said hood.

6. In a device of the character described, a supporting-sleeve provided with an upwardly-extending inclined perforated plate, an extinguishing-hood pivoted to said sleeve and cooperating with said plate, an L-shaped member connected with said hood, and means independent of said L-shaped member and adapted when operated to engage said member, causing thereby the operation of said hood.

7. In an extinguishing device for lamp-burners, the combination with a burner provided with a wick-tube and a gallery, of a sleeve mounted upon said tube and provided with an upwardly-extending inclined perforated plate, a hood pivotally connected to said sleeve and adapted when operated to cooperate with said plate, an L-shaped member

secured to said sleeve and depending through said gallery, and a lever suspended from the lower face of said gallery, projecting from the edge of the latter and adapted when operated to have its inner end engage said L-shaped member, causing thereby the operation of said hood.

8. In an extinguishing device for lamp-burners, the combination with a burner provided with a wick-tube and a gallery, of a sleeve mounted upon said tube and provided with an upwardly-extending inclined perforated plate, a hood pivotally connected at its lower end to the lower end of said sleeve and when operated adapted to cooperate with said plate, said hood having its lower portion perforated, an L-shaped member secured to said hood and depending through said gallery, an operating-lever arranged below the said gallery, extending from the edge thereof and adapted when operated to engage said L-shaped member, causing thereby the operation of said hood, and a link for pivotally suspending the said lever from the lower face of said gallery.

9. In an extinguishing device for lamp-burners, the combination with a burner provided with a wick-tube and a gallery, of a removable sleeve mounted upon said tube and provided with an upwardly-extending inclined perforated plate, a hood suitably connected to said sleeve and adapted when operated to cooperate with said plate, means carried by the said hood and depending through said gallery and adapted when operated to operate the said hood, and an operating-lever suspended from the gallery and independent of said L-shaped member, said lever when operated adapted to operate the said L-shaped member.

10. In an extinguishing device for lamp-burners, the combination with a burner provided with a wick-tube and a gallery, of a removable sleeve mounted upon said tube and provided with an upwardly-extending inclined perforated plate, a gravity-return hood pivotally connected to said sleeve and when operated cooperating with said plate, and a gravity-return operating-lever suspended from the gallery, and independent of said hood, said lever adapted when operated to engage with the hood, causing thereby the operation thereof.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

ANADO NIETO Y ABEILLÉ.
ALEJANDRO GUAL Y S. JUAN.

Witnesses:

JOSEPH A. SPRINGER,
JAMES H. SPRINGER.