

April 16, 1935.

M. STANSBURY

1,998,339

CIGARETTE LIGHTER

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Fig. 1.

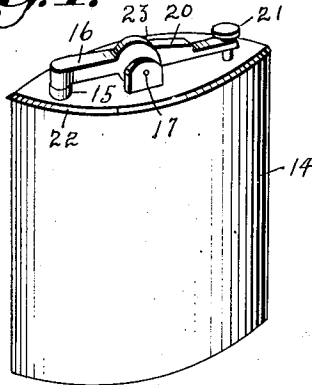


Fig. 2.

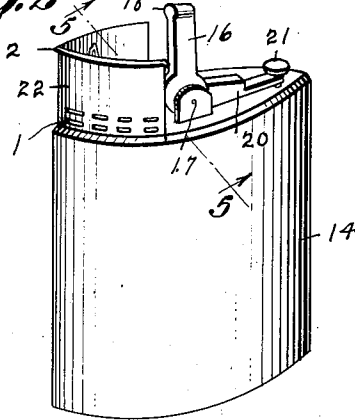


Fig. 3.

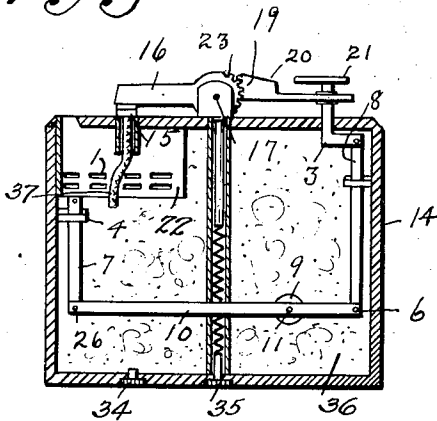


Fig. 4.

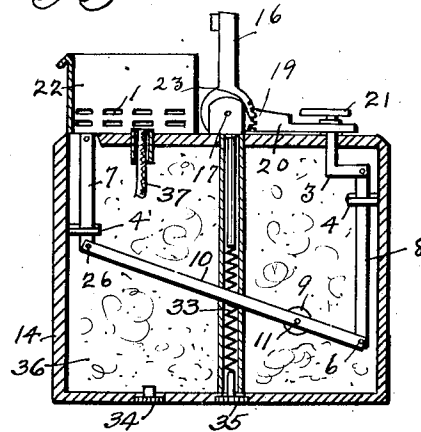
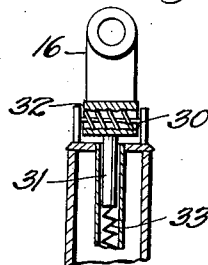


Fig. 5.



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CIGARETTE LIGHTER

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2 Claims. (Cl. 67—7.1)

This invention relates to improvements in cigarette and cigar lighters, and has for its object to provide a simple and efficient disappearing shield to protect the flame from wind, thereby increasing the scope and usefulness of the lighter.

As will be noted, the conformation of the lighter itself roughly resembles a well known make and is used only as a background to show the adaptability of my disappearing windshield. In this specific application of the shield its action may be termed automatic inasmuch as no manual operations are necessary to effect its use other than that required to ignite the wick, the normal function of ignition for this lighter being unchanged and inasmuch as the invention is concerned solely with the disappearing shield, only a perfunctory description of the wick igniting mechanism will be given, the purpose being to correlate its functions with those of the shield.

The invention consists of the novel construction and arrangements of the parts and combination of parts hereinafter more fully set forth in the following specification and pointed out in detail in the accompanying drawing:—

Figure I is a perspective view of a lighter having my invention applied thereto.

Figure II is a similar view to Figure I showing the protecting shield in the raised position.

Figure III is a vertical longitudinal section of Figure I.

Figure IV is a vertical longitudinal section of Figure II.

Figure V is a vertical sectional view taken on the line V—V of Figure II.

Referring to the accompanying drawing, forming part of this specification, and in which like reference numerals designate like parts throughout the several views thereof, 14 is a case made of metal, or other suitable material, and provided with the usual wick 37 which projects through the small cylinder 15. On top of the case 14 is mounted an arm 16 pivoted at 17 and having an aperture 18 in its end acting as a snuffer to extinguish the flame and when in its inactive position, as shown in Figure I, prevents evaporation of fuel from the end of the wick 37. The arm 16 is held down to its normal position, as shown in Figure I by the torsion spring 30 in Figure V. The inner end of the arm 16 is provided with teeth 23 which cooperate with the teeth 19 on the end of the arm 20. The said arm 20 is secured to the push rod 8, which latter has an offset 3 to permit a better leverage ratio and on its upper end is provided a finger rest 21. The lower end

of the push rod 8 is pivoted at 6 to the lever 10, which latter is pivoted at 11 to the case 14. The said pivots 11 having their ends resting in the bearings 9 which latter are secured to the opposite walls of the case 14 in any suitable manner. The opposite end of the lever 10 is pivoted at 26 to the rod 7 which extends through the guide 4 and carries the protecting shield 22 on its upper end. The said shield 22 is provided with air vents 1 near its lower end and has a beveled upper edge 2 which fits flush with the surface of the case 14 when in its normal position, which is within the case 14.

When the device is to be used the finger is placed on the rest 21 and pressed downwardly causing the arm 20 to be carried down and the lever 16 to move up in the position shown in Figure II. As the lever 16 leaves the cylinder 15 the striking wheel 32, Figure V, formed in the pivoted portion of the arm 16 will project a spark from the flint 31 in the direction of the now uncovered wick retaining cylinder 15, and simultaneously the shield 22 will be forced upwardly, through the medium of the levers heretofore described, and protect the flame from being blown out by the wind. The said flint 31 is held against the striking wheel 32 by the spring 33 as shown in Figures III and IV. The removable plug 35 permits access to the flint when required. The removable plug 34 also shown in Figures III and IV permits replenishment of fuel as required. Absorbent material is designated by the numeral 36. When the finger is removed from the finger rest 21 the parts will return to the position shown in Figure I, at the same time extinguishing the flame, and returning the shield to its normal position in the case 14.

It can be readily appreciated that the improvements described above are not confined to the type of lighter construction shown in the drawing but may be incorporated in many lighter designs with only minor modifications. I therefore do not desire to be limited to the specific application of my invention as disclosed in the drawing but rather to cover to the fullest extent in the appended claims such modifications as the design hereinbefore described might readily lend itself in its broader aspects.

Having thus described my invention, what I claim is,

1. In a lighter construction comprising a case, a wick, and a pressure actuated spring loaded means for igniting the said wick, the combination of a windshield vertically slidable in the said case and conforming thereto and protruding

above therefrom when in its shielding position, a lever and link system attached to the said windshield, a push rod pinned at its lower end to the lever and link system and forming part thereof
5 and the upper end of said push rod being topped by a finger rest, said finger rest being suitably attached to the spring loaded igniting means thereby coordinating the action of a rising shield protecting from the wind the said wick at the
10 time of ignition, the said windshield being returned to its inoperative position within the said case by the spring loaded igniting means when the said actuating pressure is removed.

2. In a pyrophoric lighter construction comprising a case, a wick, and means for igniting

the said wick, the combination of a windshield vertically slidable in and extensible above the said case and conforming thereto, said windshield being provided with air vents in its lower half, a suitable lever and link system one end of
5 said system being attached to the lower end of the said windshield the other end of the said lever and link system protruding through the top of the said case and being topped by a finger rest,
10 an offset provided in the said lever and link system to afford a maximum leverage ratio, and guides restricting play in the said lever and link system.

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