

## PATENT SPECIFICATION



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COMPLETE SPECIFICATION.

### Improvements in or relating to Cigar and like Lighters.

We, ART METAL WORKS, INC., a corporation organized under the laws of the State of New Jersey, United States of America, of 46-50, Center Street, Newark, State of New Jersey, United States of America, Assignees of LOUIS VINCENT ARONSON, a citizen of the United States of America, residing at 50, Center Street, Newark, New Jersey, United States of America, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to cigar and like lighters and more particularly to means for shielding the flame of the lighter against draughts of air.

One object of the present invention is the provision of a highly efficient lighter windshield arrangement of simple construction and of pleasing appearance.

A cigar or like lighter is already known in which a slidable windshield is adapted to entirely surround the lighter casing and is further adapted, when required, to be moved into a position to surround substantially entirely the wick portion of the lighter to assist ignition and prevent extinguishing of the flame by wind or draught.

According to the present invention the windshield comprises a resilient member having a pair of oppositely disposed side plate portions for embracing the receptacle therebetween, such portions having flanged edges engaging grooves in the receptacle as a result of the resiliency and being extended to form flame shielding means.

Further and more specific objects, features and advantages will more clearly appear from the detailed description given below taken in connection with the accompanying drawings which form a part of this specification and which illustrate an embodiment of the present invention.

In the drawings—

Fig. 1 is a perspective view indicating the manner of operation of a lighter embodying the windshield construction of

the present invention;

Fig. 2 is a top or plan view of the same device;

Figs 3 and 4 respectively are sectional views taken substantially along the lines 3-3 and 4-4 of Figs. 1 and 2 respectively;

Fig. 5 is a perspective view of the windshield comprising one example of the invention, as removed from the lighter.

In the drawings the invention is shown as applied to one very well known form of lighter construction, but it will be appreciated that the invention is adaptable for use in connection with many of the other forms of cigar and like lighters.

A lighter wick is indicated at 9 extending through a suitable wick tube from the lighter fuel receptacle 10. Suitable pyrophoric lighting mechanism is indicated at the top of the fuel receptacle 11 for igniting the wick. This mechanism in the example shown comprises a sparking wheel 12 associated with a snuffer cap 13, which is operated together with the sparking wheel by a finger piece 14, through the intervention of suitable well known rack and pinion means such, for example, as shown and described in specification No. 291,695.

A slidable windshield member is indicated at 15 and comprises a pair of side plates having inwardly turned flanged edges as at 16 and 17 for slidably engaging suitable vertical grooves as at 18 and 19 formed in the side walls of the fuel receptacle 10. The side walls, as shown in the drawings, comprise a substantially oval tubular member forming the body of the fuel receptacle, the grooves 18 and 19 being struck inwardly whereby inexpensive means are provided integral with the side walls for slidably engaging the windshield flanges.

If desired the top of the fuel receptacle may be provided with a somewhat overhanging flange or beaded portion 20, which flange may be suitably cut away where it is embraced by the windshield, except at a point indicated at 21. The portion 21 may thereby serve as a stop means engaging the upper end 22 of the flanged edge 16. It will be noted that

an area of the windshield at 23 may be conveniently cut away so as to render the flame readily accessible to air through a lower relatively small opening and permitting the insertion of a cigarette, cigar or the like as at 24 to a position directly within the flame. Furthermore, this cut-away portion is advantageously located at the side of the lighter so that the stop means 22 at the lower edge of the cut-away portion is provided without additional and without the necessity of adding any cumbersome stop means to limit the upward movement of the windshield.

The windshield member 15 is conveniently made of flexible sheet metal or other resilient material whereby its side plates closely embrace and substantially fit the edge of the fuel receptacle and engage the same with sufficient friction to retain the windshield either in its operative upper position as shown in Fig. 1, or in an inactive position.

It will be understood that when it is not desired to use the windshield, the same may be slid downwardly until the lower flanged edges 25 of the fuel receptacle are engaged by the lower edge 26 of the windshield. The flanged edge of the fuel receptacle thereby serves as a stop means limiting the downward movement of the windshield.

With the above described construction, a windshield of unusual efficiency is provided since, although the flame is accessible from one side for convenient use, the remaining sides are well shielded not only by the windshield, but by the adjacent snuffer cap 13 when in its substantially vertical raised position during use of the lighter. The cut-away area 23 being toward the user and being to a large extent filled by the object, such as a cigarette which is to be lighted, does not require further shielding means. Since the cut-away portion of the windshield permits access to the flame from the side, the user may hold the cigarette or the like in normal position while it is being lighted, but without any necessity for bringing the flame beneath the lighter's face. Therefore the flame is properly shielded without any inconvenience or danger to the user.

It will be observed that sufficient material is removed at the lower edge of the cut-away portion 23 to provide only for the desired stop means 22 and to permit access of sufficient air to provide for proper ignition at the wick. On the other hand, the upper portion of the cut-away area is larger to permit insertion of a cigarette or cigar.

If the lighter is to be used indoors or is used in the presence of draughts of

air only infrequently, the user may find it more convenient and more compact for carrying in his pocket if he slides the windshield down to its inactive position. In its inactive position the windshield closely embraces the fuel receptacle and since it conforms closely to the shape of the receptacle, substantially no additional space is required. The user may quickly apply the windshield to the lighter by pressing it against the edge of the fuel receptacle and moving it laterally towards the longitudinal axis of the latter until it snaps into position. In repairing or cleaning the lighter mechanism, the windshield may be either moved down to its inactive position, or may be removed entirely by a slight separation of its side plates.

While we have described our improvements in detail, we do not desire to be limited to such details, or to the particular constructions shown and described, since many changes and modifications may be made and the invention embodied in other forms without departing from the spirit and scope of the invention in its broader aspects. Hence we desire to cover all modifications and forms coming within the language or scope of any one or more of the appended claims.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:—

1. A cigar and like lighter having a fuel receptacle and a wick protruding therefrom, and provided with a windshield for said wick slidably mounted on the receptacle to be movable into and out of active position, in which the windshield comprises a resilient member having a pair of oppositely disposed side plate portions for embracing the receptacle therebetween, said portions having flanged edges engaging grooves in the receptacle as a result of the resiliency, and being extended to form flame shielding means.

2. A lighter according to claim 1, in which a portion of the shield member is cut away for access of a cigarette or the like, the lower edge of such cut-away portion providing stop means cooperating with a stop means on the receptacle.

3. A lighter according to claim 1, in which the windshield is made substantially channel-like in shape, and of resilient sheet metal, and is maintained in its shielding position by frictional engagement with the receptacle.

4. A lighter according to claim 1 or 2, in which the windshield has a stepped cut-away portion comprising a lower relatively small air admitting opening, and

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a higher and relatively larger opening for permitting access of a cigarette or the like to the wick.

5 A lighter according to any one of the preceding claims, in which the windshield is detachable from the lighter casing in response to spreading of the windshield side plate portions.

10 6. The combination with a pyrophoric lighter fuel casing, of a substantially U-shaped windshield vertically slidable on the exterior surface of said casing, said windshield being detachable from said casing when moved laterally from the longitudinal axis thereof, the casing surfaces at one side causing said windshield to spread when thus moved laterally.

20 7. The combination with a pyrophoric cigar and like lighter comprising a fuel casing, a wick protruding from the top wall of the casing and a pivoted snuffer-carrying member adapted to be held substantially in vertical position on said top wall when the wick is ignited, of a substantially U-shaped windshield adapted to extend above said top wall, said wind-

shield having a cut-away side section providing a passage at one side of the substantially vertical snuffer-carrying member whereby one end of a cigar or cigarette may be introduced into said flame, said windshield being vertically slidable on said casing and frictionally held in a desired position to which adjusted. 30

35 8. A cigarette, cigar or similar lighter provided with a windshield constructed and arranged substantially as hereinbefore described with reference to the accompanying drawings, and for the purpose specified. 40

Dated the 26th September, 1929,  
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[This Drawing is a reproduction of the Original on a reduced scale.]

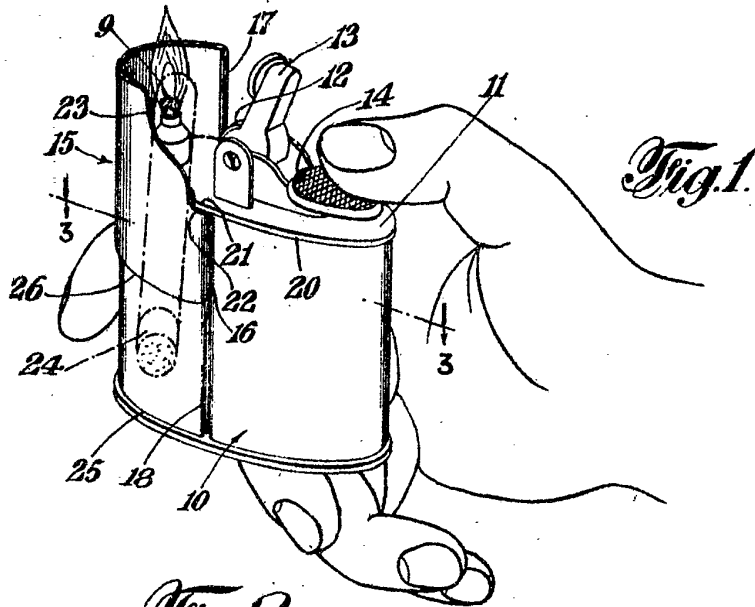


Fig. 1.

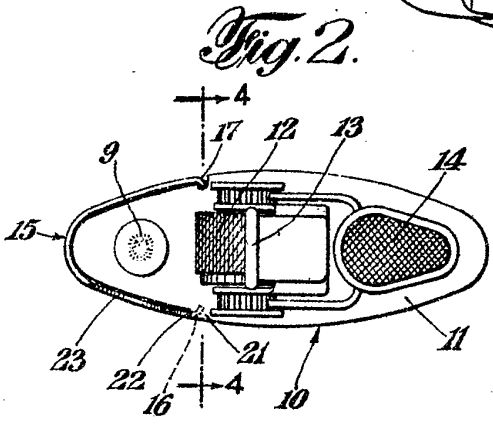


Fig. 2.

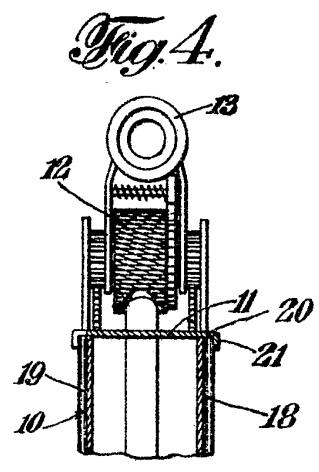


Fig. 4.

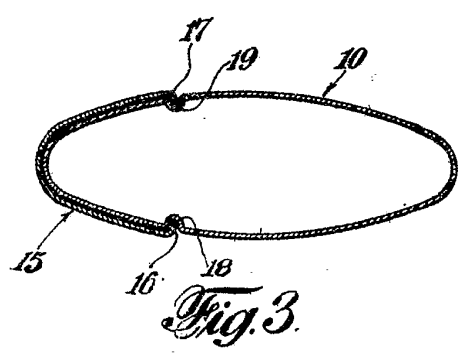


Fig. 3.

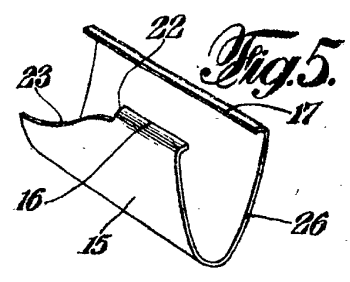


Fig. 5.