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2,494,322

LIGHTER SHIELD

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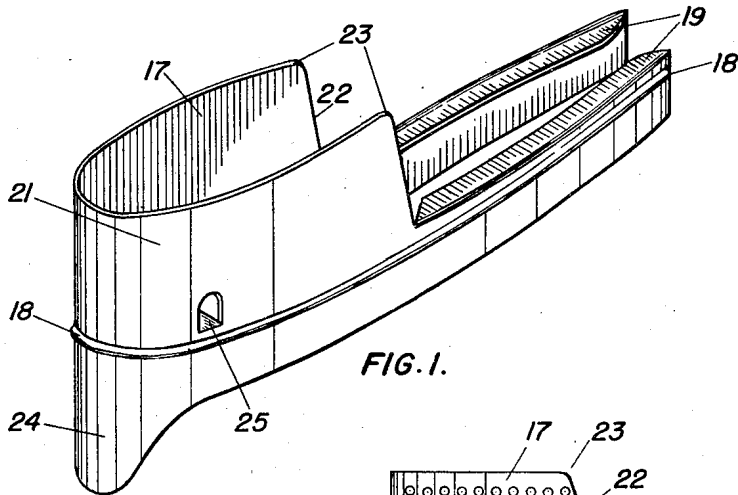


FIG. 1.

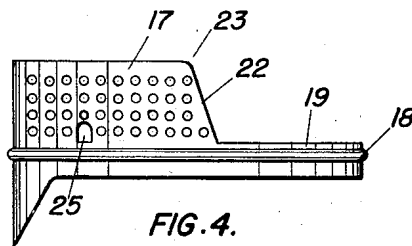


FIG. 4.

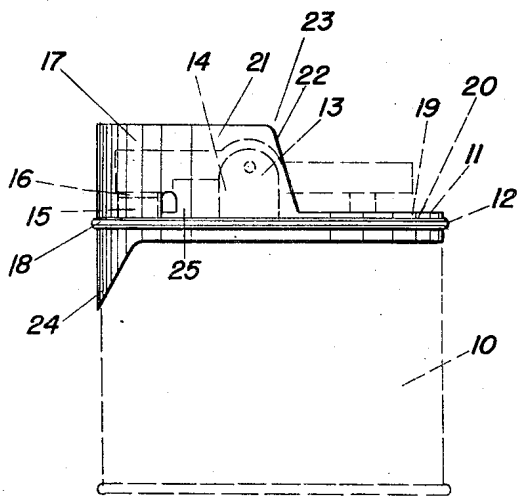


FIG. 2.

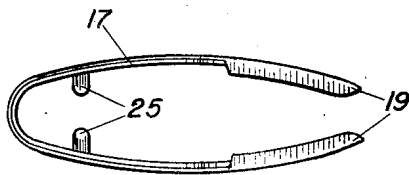


FIG. 3.

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LIGHTER SHIELD

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2 Claims. (Cl. 67-7.1)

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This invention relates to lighting equipment and more particularly to a windshield for the conventional lighters employing a pyrophoric and ignitable wick, and commonly used in the lighting of cigarettes and the like in place of matches.

The conventional lighter consists of a hollow casing in which liquid fuel is contained to supply a wick extending above it, and lit by a suitable pyrophoric aligned with its mechanical mechanism on a flat surface serving as the top of the lighter. The upper surface is conventionally made with a beaded edge and the mechanism is placed within the area of this surface so its parts will be away from the edge, while the wick tube with the wick in it is a space in front all by itself. The pyrophoric is adjacent to the wick tube but sufficiently spaced to allow the flame ignited by it to be lit without damage to the other parts of the lighter. The wick tube being open and exposed, is subject to have its flame distorted or blown out by the wind very easily. In this invention, a shield is provided that protects the flame against this action. However other shields have been employed heretofore on lighters, but their great objection is that they require the lighter to be modified in construction to permit their attachment and use with them. This invention provides a shield that can be effectively applied to any conventional lighter without detracting from its appearance or involving any appreciable inconvenience or cost.

It is therefore an object of this invention to provide a new and improved windshield for a lighter that will avoid one or more of the objections and disadvantages of the prior art.

Another object of the invention is to provide a new and improved windshield for a lighter that can be applied readily thereto and work effectively.

A further object of the present invention is to provide a new and improved windshield for a lighter that will not only fit artistically on the lighter but will hold its position properly thereon and will protect the mechanism and other mechanical structure of the device from interference or damage, yet without being so permanently attached as to prevent facile removal wherever desirable for inspection or repair to do so.

Other objects will be observed as the device is further outlined.

For a better understanding of the invention, its principles and objects thereof, reference is made to the appended drawings. These draw-

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ings together with the following description outline a particular form of the invention by way of example, while the claims included therein emphasize the scope of the invention.

In the drawings:

Figure 1 is a view in perspective of a windshield embodying this invention;

Figure 2 is a side elevation of a lighter in dotted outline with the windshield mentioned above, attached thereto;

Figure 3 is a plan view of Figure 2;

Figure 4 is an elevational view of a modified form of the windshield.

Similar reference characters pertain to the same parts in all the figures.

In the drawings, a lighter casing 10 has a cap 11 beaded over at the edges 12 mounted on it and forming a flat top surface for it. The mechanism 13 is of conventional form including a pyrophoric 14 arranged for frictional ignition in a conventional manner. A wick tube 15 with a wick 16 projecting through it is lit by the pyrophoric and is placed in front of the mechanism, towards the front of the lighter. This wick is supplied by a suitable liquid fuel contained in the casing for the purpose. Since the wick tube 15 and wick 16 are unprotected from the wind the light is easily blown out on a windy day. To prevent this, a windshield 17 made of a single stamping of flat material of suitable strong and flexible nature, is formed with a fluted lower edge portion 18 arranged to fit over tightly on the beaded edges 12, on the longitudinal sides of the casing 10. The edge portions 18 are flanged over on top to provide flat surfaces or lips 19 that can rest on the upper surface 20 of the cap while the remainder of the portions 18 encompass and bind underneath. The front half 21 of the windshield is enlarged to form a windguard. It extends above the mechanism 13 and around the wick tube 15. It rises from the portions 19 vertically with its edges 22 cut off at a slight angle and rounded at the corners 23 as indicated in Figure 1. This is to afford protection against the wind about the wick 16 and at the same time allow free access to the parts of the mechanism 13 operated manually by the user to ignite the wick. The shield 17 has a peak 24 formed at the front and extending under a relatively small front portion of the half 21. A clip 25 is punched out of the side of the half 21 and projected inwardly to engage the top surface of the casing and limit the downward movement of the front of the windshield on the casing. The rear portion of the shield is likewise limited by the lips 19 pro-

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vided thereon. The windshield, it will be noted, is given a U-form contour, which it resiliently retains. This facilitates its placement on the lighter casing as well as its removal. It is pushed on from the front and is preferably shorter than the top of the lighter so it will not project beyond it. If made of some attractive material like stainless steel it will improve the appearance of the lighter and quasi-integrally merge itself into its structure in a very inconspicuous manner. This form is inexpensive but it does its work effectively.

In the modified form indicated in Figure 4, the windshield 30 has the same contours as in Figure 1 but the material of which it is made is perforated, the perforations being relatively small and made without burrs. This form has an aesthetic appearance that appeals to some, without appreciably depreciating its effectiveness against the wind effects.

While but two general forms of the invention are shown in the drawings and described in the specifications, it is not desired to limit this application for patent to these particular forms or in any other way otherwise than limited by the scope of the claims, as it is appreciated that other forms could be made that would use the same principles and come within the scope of the appended claims.

Having thus described the invention, what is claimed is:

1. A windshield for attachment to a lighter over the entire upper shelf thereof and comprising a shield having front walls and side walls and

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being open at its top and bottom, said front walls being of a height and size to encompass and extend above the wick and pyrophoric portions of the lighter and having a spur portion extending downwardly along the front walls of the lighter, said side walls of the windshield being of less height than the front walls thereof and extending flexibly along the upper edges of the lighter's upper shelf and said front and side walls having a common beaded edge extending longitudinally thereof and being substantially flush with the upper shelf of the lighter.

2. A windshield as set forth in claim 1, the front walls of the windshield having integral clips adapted to limit said windshield on the upper shelf of the lighter, said front walls also having a series of perforations to admit air to the lighter's wick.

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