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WINDSHIELD FOR CIGARETTE LIGHTERS

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Fig. 1.

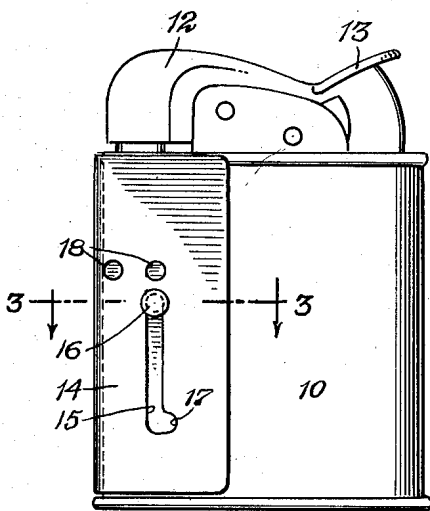


Fig. 2.

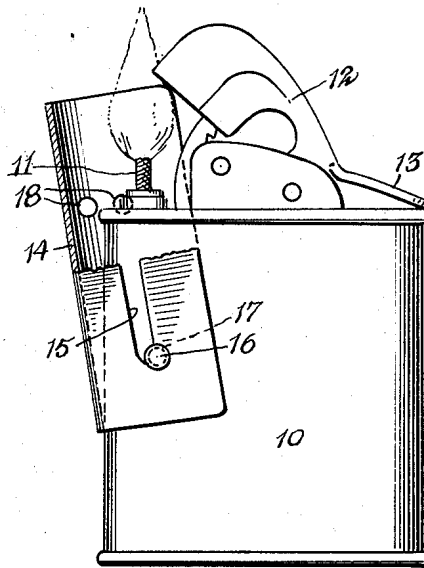


Fig. 3.

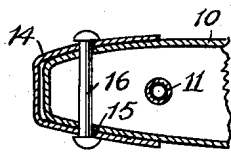
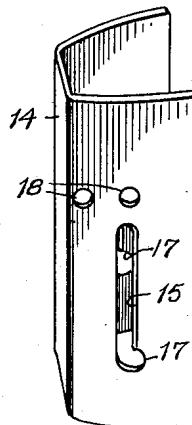


Fig. 4.



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WINDSHIELD FOR CIGARETTE LIGHTERS

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3 Claims. (Cl. 67-7.1)

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This invention relates to new and useful improvements in lighters for cigars and cigarettes and has for an object, the provision of a simple, efficient, durable, economical, easily operated windshield for such lighters.

In brief and general terms, the invention is adapted to be associated with a lighter in which a wick is disposed on the top surface thereof adjacent one edge. Preferably, the lighter is of the type in which by the depression of an arm, a flint mechanism is turned to throw a spark toward the wick at the same time that a cover is lifted from the wick to expose the same, and in which when the wick is covered, immediately the arm or depressable bar is released.

In lighters of this type, however efficient they may be in producing a flame from the wick by striking a spark from the flint, the endurance of the flame is exceedingly momentary when there is any wind blowing, and to that end, various attempts have been made heretofore to provide windshields which have taken the form of somewhat U-shaped plates disposed around three sides of the flame to protect it from the wind and enable it to function.

In the present invention, the windshield is in the form of a somewhat U-shaped plate which is attached to the outside of the lighter and embraces the end and side wall thereof on that side of the lighter which contains the wick. This windshield plate is slotted and, inset in the slot thereof, ride pins fixed to the side of the lighter. Normally, the windshield plate is disposed in a position so that its top edge is flush with the top surface of the lighter, but is so arranged that it can be lifted to project above the top surface and therefore surround the wick on three sides as desired. The windshield plate is provided with suitable ventilating holes which ventilate the flame when the plate is elevated and the curvature of the slot in the plate and its relation to the pin which rides in the slot is such that the windshield, when elevated, can be moved to one side or deflected to provide ample air passage up along the flame. After the windshield has been used, the plate may be moved back to normal position and then downwardly to be disposed in a manner embracing the end and sides of the lighter, so as to be out of the way when not in use.

This invention therefore, obviously may be applied to almost any type of lighter by merely applying a properly shaped plate to the outside of the lighter on the side where the wick is disposed and suitably slot it and relate the slot to a fixed pin on the lighter, to permit the plate to be moved

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up and down. This improvement therefore, is in the form of an attachment, it does not require any substantial alteration in the structure of the lighter itself and yet provides a very simple and efficient windshield.

The preferred form of the invention is illustrated in the drawings, of which:

Fig. 1 is a side elevation of the lighter showing the windshield attached thereto and lying in a normal inoperative position;

Fig. 2 is a similar view showing the windshield moved up and laterally deflected into operative position;

Fig. 3 is a horizontal section taken along the lines 3-3 of Fig. 1; and,

Fig. 4 is a perspective view of the windshield plate by itself.

Referring now merely to the specific form of the invention shown in the drawings which, it is understood, is only one form which the invention may assume, it is to be noted that I have shown a usual standard form of lighter having a body portion 10 on the top surface of which is disposed a wick 11 near one end of said surface. This wick is normally closed by a cap or cover 12 which is pivoted and operated by a finger-depressed plate or bar 13 in the usual manner. In order to provide this or any other standard form of lighter with a windshield which does not require any special or major alteration of the lighter body construction, I have provided a windshield plate 14 which, as shown in Figure 3, particularly is substantially U-shaped and conformed to the curvature of the side walls of the lighter body 10 on the side thereof where the wick 11 is disposed. At opposite faces of this windshield plate 14, are formed slots 15 and a headed pin or rivet 16 is fixed through the body of the lighter and has its headed ends projecting through said slot.

The bottom of each slot has an off-set portion 17. The windshield plate above the top of the slot is also provided with a plurality of air ventilating holes 18.

In view of the fact that the windshield plate is of a shape conformed to the shape of one side of the lighter and its height is substantially the same as that of the body of the lighter, it will assume the position shown in Figure 1, when not in use, so that it is not in the way and no parts of which project in any objectionable manner. In order to operate the plate to act as a windshield, it is merely necessary to move it up to the position shown in Figure 2, wherein the pin 16 will now ride in the lower end of the slot 15 and by reason

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of the off-set portion 17 in said slot may be slightly deflected as shown in Figure 2, to provide ample air passage around the wick with the air passing up around the wick through the ventilating openings 18.

After the windshield has been used, in order to render it inoperative and restore it to normal position, it is merely necessary to move it to the right from the position shown in Figure 2 and then press it down to the position shown in Figure 1.

It is thus obvious that I have provided a very simple, efficient, durable, economical and very easily operated attachment which provides an efficient windshield for practically any type of lighter without requiring any major alteration in the lighter construction.

While the invention has been described in detail and with respect to the preferred form shown in the drawings, it is not to be limited to such details and forms since many changes and modifications may be made in the invention without departing from the spirit and scope of the invention in its broadest aspects. Hence, it is intended to cover any and all forms and modifications of the invention which may come within the language or scope of any one or more of the appended claims.

What I claim as my invention is:

1. A windshield for lighters which comprises a somewhat U-shaped plate adapted to lie normally alongside the walls of the lighter on the side thereof adjacent the wick, said plate having a slot in its sides, and a pin on the lighter riding in said slot to permit the plate to be moved upwardly to extend above the top surface of the lighter around the wick to act as a windshield said slot provided with means to permit the upper end of the plate to be swung laterally a predetermined amount away from the wick when the plate is moved upwardly as specified.

2. A combination of a lighter having a body portion with projections on the opposite side walls near the end thereof where the wick is disposed, a windshield plate disposed in embracing relation to the walls of the lighter at this side thereof and lying normally along the outside of the said

walls, said plate having slots therein in which said projections ride to permit the plate to be moved up to act as a windshield around the wick and to lie normally around the lighter body when in inoperative position said slots provided with means to permit the upper end of the plate to be swung laterally a predetermined amount away from the wick when the plate is moved upwardly as specified.

3. In combination a lighter body having a pin extending therethrough from one side face to the other adjacent one end wall adjacent the end where a wick is disposed, the ends of the pin projecting beyond the walls of the body at each end thereof, a windshield plate shaped to conform to the end and side walls of the body and adapted to lie normally in embracing relation with respect thereto on the outside of said walls, said plate having a slot in each side to receive the ends of said pin, the height of the plate permitting it to lie with its upper and lower edges within the top and bottom edges of the lighter when in normal inoperative position, said plate when moved up adapted to project above the top of the lighter to be disposed around the wick of the lighter to act as a windshield, the bottom of the slot being off-set to permit the plate to be laterally deflected, and the plate above the slot having holes to permit air to pass through to ventilate the flame issuing from the wick.

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