PATENT SPECIFICATION

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COMPLETE SPECIFICATION

Improvements in or relating to Electric Lighters for Cigars and the like

We, CASCO PRODUCTS CORPORATION, a Corporation organised under the laws of the State of Connecticut, United States of America, of 1333, Railroad Avenue, Bridgeport, Connecticut, 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 is for improvements in or relating to electric lighters for cigars and the like. The invention is concerned with electric lighters of the type in which an igniting unit is detachably received by a holding device for complete removal for use.

Usually in such devices the igniting unit is comparatively short and stubby, having at one end a heating element which is red hot when the igniting unit is removed from the holding device for use. With some devices, the heating element is in an exposed position on the end of the igniting device.

One previously proposed construction has a flat igniting unit composed of a flat body portion and a flat handle, the heating element reaching over substantially the whole of the body portion, and the handle being of substantially the same dimensions as the body portion transversely of the longitudinal axis of the latter. Another previously proposed construction has an igniting unit composed of a flat body portion and a wing shaped handle with faces which are not flat but are deeply grooved, the heating element reaching over a substantial part of the area of the flat body portion and the width of the handle from one wing extremity to the other transversely of the longitudinal axis of the body portion being substantially the same as the width of the body portion.

It is frequently desired that the igniting unit when brought to incandescence, should be passed from one person to another, as for instance by the driver or the occupant of the front seat of an automobile in which the cigar lighter is installed, to an occupant of the rear seat. It is an object of the present invention to provide an improved construction readily permitting the operation to be carried out without danger.

According to the primary feature of the present invention, there is provided, in or for a lighter of the type above described, an igniting unit comprising a cylindrical body portion having across one end a heating element adapted to be brought to incandescence for use, and at the other end a handle to be grasped by the user, which handle is flattened and has wings extending a substantial distance beyond the diameter of the adjacent body portion in opposite directions transversely of the axis of the body portion and having surfaces of substantial gripping area for easy engagement by two pairs of fingers simultaneously, one pair at each side of the axis of the igniting unit to provide for the transfer of the igniting unit from the hand of one person to another without necessitating finger contact with the body of the igniting unit. Hence the passer may still retain the igniting unit in his grasp while the receiver grips the free surface of the handle with his fingers, both grips being taken at a position remote from the heating element.

Conveniently the handle is connected to the body portion by a relatively long narrow neck.

According to another feature of the invention, the handle is of flattened elongated shape and is attached at the middle of its length to the cylindrical body portion in such manner that the longitudinal axis of the handle is substantially perpendicular to the longitudinal axis of the cylindrical body portion. Thus the handle is so disposed on the igniting unit and so shaped that a person grasping the same with the intention of passing it will grasp the handle on one side leaving the other side for the other person's fingers.

For a more complete understanding of the invention, there will now be described, by way of example only and with reference to the accompanying drawings, one constructional form of lighter embodying the present invention. It is to be understood, however, that the

[Price 1/-]

invention is not restricted to the precise constructional details set forth.

In these drawings:—

Figure 1 is a side view of the lighter partly in section;

Figure 2 is a front view of the igniting unit;

Figure 3 is a perspective view showing how the igniting unit may be held when lighting a cigarette, and

Figure 4 shows how two pairs of grasping fingers may simultaneously engage the handle of the igniting unit as when passing the same by one person to another.

Like reference numerals indicate like parts throughout the drawings.

The lighter illustrated is one in which there is a relatively short and stubby body portion 10, cylindrical in form, having across one end a heating element 11 including a coil of resistance wire 12, and having at the other end a knob by means of which the igniting unit is operated and carried to bring the resistance wire 12 to the end of a cigar or cigarette to ignite the same.

In such lighters, the igniting unit is supported by a holding device 13 in the form of a well which may be clamped to an instrument board 14, when used in an automobile, by a clamping member 15. Current is supplied to the resistance wire 12 when the igniting unit is in the holding device through the instrument board and through a wire 16 connected to a binding post 17 on the holding device 13.

When the igniting unit is pushed inwardly of the holding device, the resistance wire 12 is energised by contact means well known in the art, and, after it has been energised sufficiently long to make the wire 12 incandescent, the igniting unit is removed for use.

The resistance wire 12 has sufficient mass to retain its heat long enough to permit several cigarettes to be lighted without returning the igniting unit to the holding device to be reheated.

The handle in the embodiment of the present invention herein illustrated, is provided with two opposite major surfaces 19 and 20, each of which is capable of having laid upon it simultaneously two fingers, or more properly, two thumbs or two fingers.

The thickness of the handle between the gripping surfaces 19 and 20 is such that two fingers, or a finger and a thumb, of one hand may conveniently grasp the surfaces 19 and 20 and hold between them the body of the handle.

In the form of the invention shown, the handle 18 is disposed at right angles to the axis of the body 10 of the lighter, and the handle is further so disposed as to extend in two directions from the axis of the body 10 a substantial distance beyond the diameter of the adjacent body portion, thereby producing opposite wing portions 21 and 22. As so arranged, when the igniting unit is to be taken from the holding device 13, it will very naturally be grasped by the user as shown in Figure 3, that is to say, by the thumb and forefinger of the user's hand engaging the opposite surfaces 19 and 20 of the wing 22, leaving the opposite surfaces 19 and 20 of the wing 21 free to be engaged by the forefinger and thumb of the hand of the person to whom it is desired to pass the igniting unit.

The handle 18 is preferably connected by a neck 23 to the body portion 10 of the igniting unit, and this neck 23 is preferably so long and of such reduced cross section that heating of the handle through the body of the igniting unit is reduced substantially, and danger of the person who grasps the handle being burned by inadvertently touching the igniting unit or the heating wire 12 thereof is reduced to a minimum since the wire 12 is remote from the handle.

By placing the handle 18 on the axis of the igniting unit so that portions project in opposite directions therefrom and so that a person grasping the handle would naturally grasp it on one side or the other of the axis, the tendency in passing the device from one person to another is to swing the igniting unit downwardly as shown in Figure 4, to a position where the reverse hand may easily grasp the exposed or unoccupied portion of the surface of the handle 18.

The handle 18 may be ornamented as desired. As shown, the surfaces 19 and 20 are substantially flat.

To move the igniting unit to energised position, it is customary for the operator to press in on the handle portion of the lighter, and, accordingly, the front surface 24 of the handle is made broad enough to be conveniently engaged by the user's finger or thumb, as shown in Figure 1. This front surface may be entirely flat or curved, as desired. As shown, it is curved in one direction, and the top surface 25 and bottom surface 26 are inclined so as to avoid sharp corners which might hurt the user's hand if the handle were accidentally struck.

It is to be understood that the invention is not restricted to the precise constructional details set forth.

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. In or for an electric lighter of the type described, an igniting unit comprising a cylindrical body portion having across one end a heating element adapted to be brought to incandescence for use, and at the other end a handle to be grasped by the user, which handle is flattened and has wings extending a substantial distance beyond the diameter of the adjacent body portion in opposite directions transversely of the axis of the body portion and having surfaces of substantial gripping area for easy engagement by two pairs of fingers simultaneously, one pair at each side of the axis of the igniting unit to provide for the transfer of the igniting unit from the hand of one person to another without necessitating finger contact with the body of the igniting unit.

2. A construction according to Claim 1, in which the handle is connected to the body portion by a relatively long narrow neck.

3. A construction according to Claim 1, in which the flat gripping surfaces of the wings lie in planes parallel with the longitudinal axis of the cylindrical body portion.

4. A construction according to any of the preceding claims, in which the handle is of flattened elongated shape and is attached at the middle of its length to the cylindrical body portion in such manner that the longitudinal axis of the handle is substantially perpendicular to the longitudinal axis of the cylindrical body portion.

5. The igniting unit for an electric lighter of the type described, as shown in the accompanying drawings.

Dated this 18th day of June, 1937.

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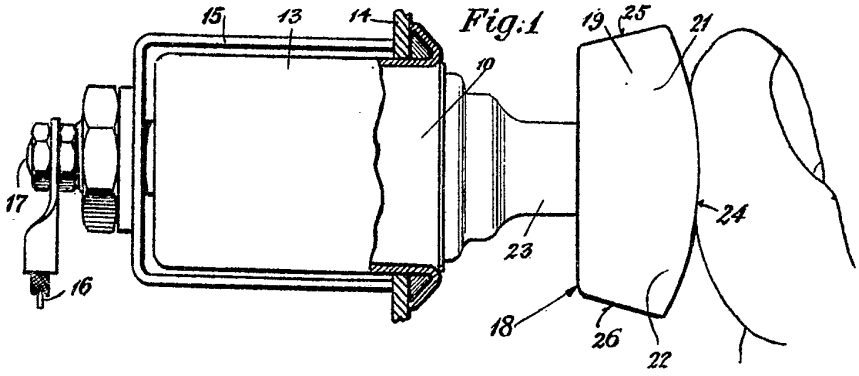

Fig. 1

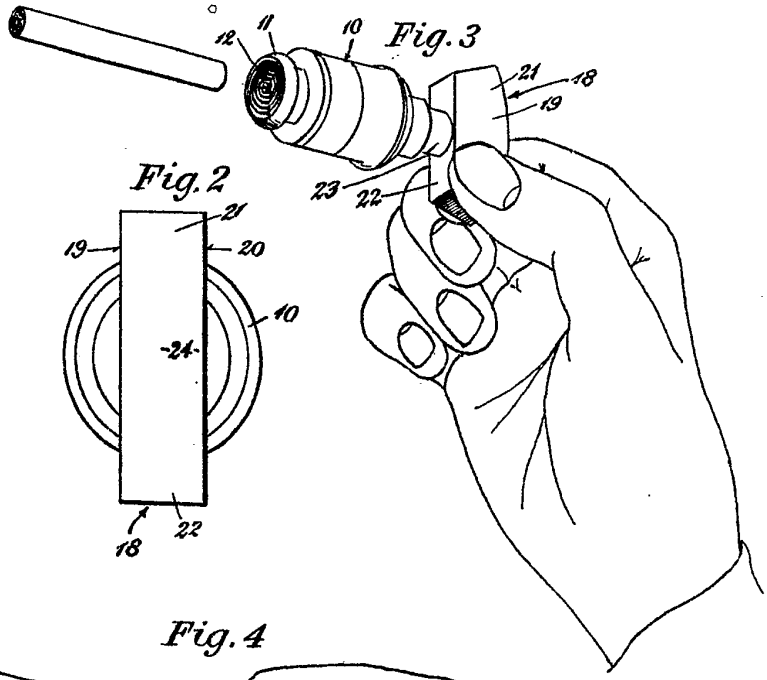

Fig. 3

Fig. 2

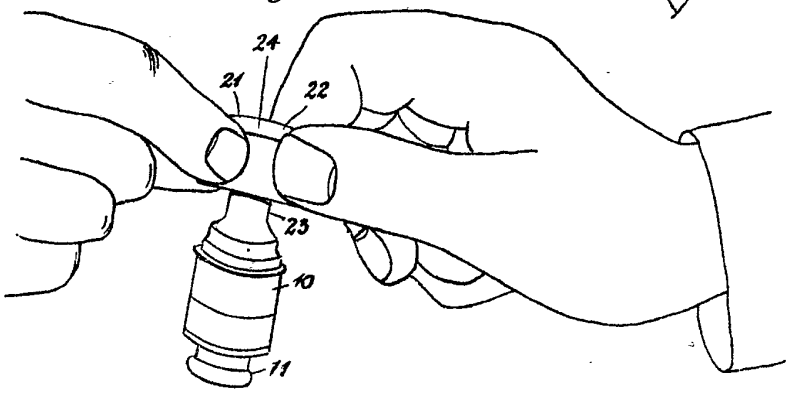

Fig. 4

Malby & Sons, Photo-Litho.