

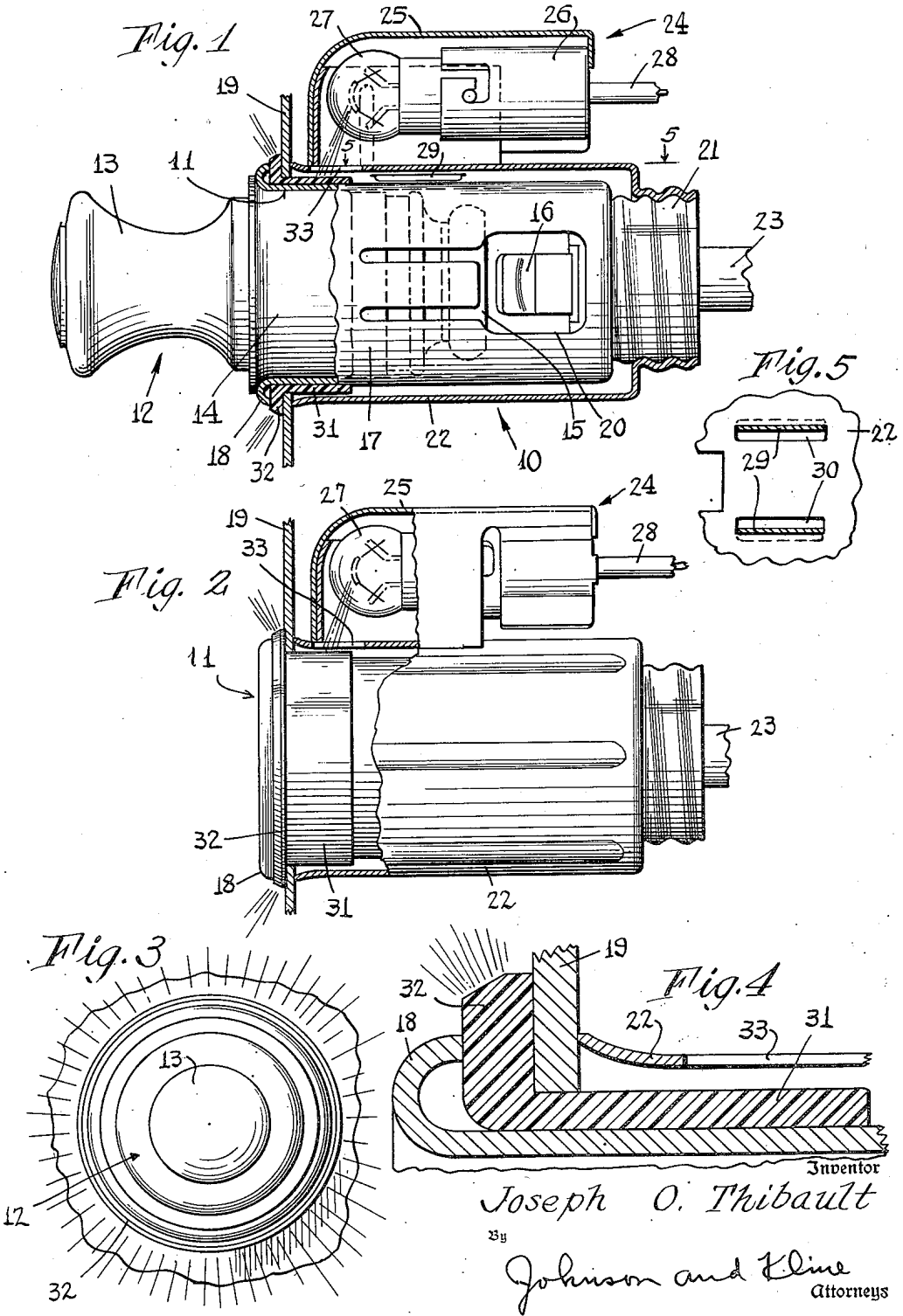
Feb. 1, 1955

J. O. THIBAUT

2,701,297

ILLUMINATED ELECTRIC CIGAR LIGHTER

Filed Dec. 27, 1950



Inventor
Joseph O. Thibault
By
Johnson and Kline
Attorneys

1

2

2,701,297

ILLUMINATED ELECTRIC CIGAR LIGHTER

Joseph O. Thibault, Bridgeport, Conn., assignor to Casco Products Corporation, Bridgeport, Conn., a corporation of Connecticut

Application December 27, 1950, Serial No. 202,930

5 Claims. (Cl. 240—2)

This invention relates to electric cigar lighters of the type used in automobiles and the like, and more particularly to cigar lighters of the removable igniting unit type.

The invention is concerned with improvements in the illuminated cigar lighter described and claimed in the copending application of Joseph H. Cone, Serial No. 198,677, entitled "Illuminated Cigar Lighter."

In this copending application there is shown a cigar lighter having a holding device presenting a well or recess in which an igniting unit is carried. Illuminating means are provided on the holding device, to light up both the well or recess thereof and also a front portion adjacent the knob of the igniting unit. This illuminating means is connected with the lighting system of the automobile so as to be operative automatically whenever the lights of the car are turned on, and by such organization increased safety is had in the use of the cigar lighter by a driver at night, due to the visibility of the lighter. This is obviously of particular importance when the cigar lighter is to be used while traveling at high speeds such as are now allowed on parkways and the like.

In the referred to copending application of Joseph H. Cone an area of the holding device at the top of the igniting unit knob was illuminated, thereby to indicate to the user the location of the knob.

According to the present invention novel means are provided whereby substantially the entire front portion of the holding device is illuminated, not only an area at the top of the knob. The illuminated area thus extends completely around the knob, clearly defining the same in the dark.

Accordingly an object of the invention is to provide an improved illuminated cigar lighter of the general type set forth above, wherein in addition to the well or recess being clearly illuminated whenever the igniting unit is removed therefrom, a clear definition of the igniting unit knob is had by illumination extending around the knob when the igniting unit is in place on the holder.

Another object of the invention is to provide an improved illuminated cigar lighter according to the foregoing, in which the illumination of the knob and well is accomplished from a single light source carried at the rear of the panel on which the holding device is mounted.

Still another object of the invention is to provide an improved illuminated cigar lighter as above set forth, which is simple and economical in construction and reliable in operation at all times.

Other features and advantages will hereinafter appear. In the accompanying drawings:

Figure 1 is a side view, partly in elevation and partly in vertical section, of the improved cigar lighter of the present invention, the igniting unit being shown in place on the holding device.

Fig. 2 is a view like Fig. 1, but with the igniting unit removed and with more of the holding device shown in elevation.

Fig. 3 is a front view of the lighter shown in Fig. 1.

Fig. 4 is an enlarged detail in vertical section, taken through the front uppermost portion of the holding device.

Fig. 5 is a fragmentary view, partly plan and partly horizontal section, taken on line 5—5 of Fig. 1.

As shown, the improved illuminated cigar lighter of this invention comprises a holding device generally designated by the numeral 10, having a front opening 11

to receive a removable igniting unit which is designated generally by the numeral 12.

The igniting unit 12 includes a knob 13 mounted on a body portion 14, the latter carrying at its inner end a heating element 15 adapted to be energized through bimetallic spring clips 16 of the holding device whenever the igniting unit is moved inwardly or to the right from the position shown in Fig. 1.

The holding device 10 comprises a tubular shell 17 having an outturned flange 18 at its front, for disposition at the front of a panel 19 on which the holding device is mounted. The shell 17 has a plurality of openings 20 in its side walls (one being shown in Fig. 1) and carries at its rear a threaded cup 21 on which is screwed a clamping sleeve 22 arranged to engage the back of the panel 19 to clamp the holding device securely thereto.

Current is brought to the bimetallic clips 16 through a lead wire 23 in the usual manner, the return circuit being completed through the shell 17 and panel 19.

For the purpose of illuminating the interior of the shell 17 when the igniting unit 12 is removed from the holding device, an electric illuminating means 24 is provided, comprising a lamp housing 25 carrying a socket 26 in which an electric lamp 27 is mounted. Current for the lamp is brought through a lead wire 28, the return circuit for said current including the housing 25, clamping sleeve 22, and panel 19 as is well understood.

The housing 25 is partially tubular, having an open bottom disposed against the exterior of the sleeve 22, and the lower or bottom edge portions of the housing are provided with bent fingers 29, passing through slots 30, Figs. 1 and 5, in the clamping sleeve 22. Such mounting is described and claimed in detail in Patent No. 2,506,181 issued to Joseph O. Thibault on May 2, 1950, entitled "Illuminated Cigar Lighter."

It will be understood that light from the lamp 27 passes through the slots 30 into the interior of the clamping sleeve 22. The slots 30 are wider than the thickness of the fingers 29 to provide for such passage of light. From the interior of the clamping sleeve 22 light passes through the openings 20 in the shell 17, thereby to illuminate the interior of the shell when the igniting unit 13 is removed therefrom, as for use.

In accordance with the present invention novel improved means are provided to illuminate the knob 13 of the igniting unit 12 when the latter is in place on the holding device 10, such illuminating means defining the entire periphery of the knob by virtue of its being extended completely around the knob, and such illuminating means receiving light from the lamp 27.

Accordingly, as shown in Figs. 1, 2 and 4, I provide a bushing 31 around the shell 17 of the holding device, said bushing having an outwardly extending flange 32 arranged to engage the front of the panel 19, and the bushing passing completely through the panel and extending backwardly for a short distance along the holding device. The bushing 31 is made of a material having the property of piping light, that is, conducting light, particularly around corners, bends, etc. One such material which is suitable for this purpose is known to the trade as Lucite (methyl methacrylate resin).

As shown, the bushing 31 consists essentially of a cylindrical body portion having at its front end an outwardly extending flange 32. Preferably the said flange is engaged by the outturned flange 18 of the holding device, and extends beyond the flange 18 so as to have an annular portion which is readily visible to a user.

The exposed portion of the flange 32 is preferably roughened in some manner, as by sand blasting, molding with irregularities, etc. Also, the outer cylindrical surface of the bushing 31 is preferably provided with a high polish in order to admit light to the interior of the bushing, and in order to reflect such light within the bushing.

As shown in Figs. 1 and 2, the clamping sleeve 22 is provided with an aperture or light passage 33 within the area covered by the housing 25, and below and forwardly of the lamp 27. Light from the lamp will therefore strike the polished outer cylindrical surface of the bushing 31 and will be conducted by the bushing com-

3

pletely around the holding device 10, illuminating the flange 32 thereof and providing in effect a circle of light surrounding the knob 13. Accordingly the periphery of the knob 13 will be clearly defined, enabling a user to quickly locate the knob in the dark whenever he desires to use the cigar lighter.

Preferably all surfaces of the bushing 31 are provided with a high polish and finish except the exposed portion of the flange 32, extending beyond the flange 18 of the holding device, to provide for a maximum utilization of the light which strikes the bushing from the lamp 27.

It should be noted that light passing through the slots 30 in the clamping sleeve 22 and illuminating the interior of the clamping sleeve also functions to augment the illumination of the bushing 31, which is manifested in the flange 32 thereof.

The lighting of the bushing 31 is effected regardless of the rotative position of the clamping sleeve 22, as may be well understood, since most of the light passing to the bushing is directed through the opening 33 of the clamping sleeve, such opening remaining fixed with respect to the lamp 27 and being closely adjacent the cylindrical body of the bushing at all times regardless of the position of the sleeve.

The illuminating means of this invention is thus seen to be extremely effective, and simple and economical in construction, requiring only a single source of illumination to light up both the ring or flange 32 surrounding the knob 13 and also the well or recess of the holding device whenever the igniting unit is removed therefrom. Moreover, the construction is reliable in operation at all times.

By the provision of the present improved illuminating means a desirable increased degree of safety is provided for the driver who travels at high speeds and desires to obtain a light for his cigarette at night time without slowing down, for the reason that the knob 13 of the igniting unit is adequately illuminated to enable the driver to quickly locate the unit, and for the reason that the well of the holding device is adequately illuminated to enable the driver to quickly replace the igniting unit after use, all without requiring that he divert his eyes from the road for more than a small fraction of time.

Variations and modifications may be made within the scope of the claims and portions of the improvements may be used without others.

I claim:

1. In a cigar lighter, a holding device comprising a tubular shell having an igniting unit opening in its front portion; means including a tubular sleeve surrounding the shell, for mounting the latter on a panel through an aperture thereof, said sleeve and shell having side wall openings to admit light from outside the sleeve into the interior of the shell; a lamp housing mounted on the sleeve over a side wall opening thereof; an electric lamp in said housing for producing light to pass through said wall openings and into the interior of the shell; and a bushing on the shell, adapted to engage and pass through the panel, said bushing consisting of material having the property of piping light, and having an exposed annular portion surrounding the igniting unit opening of the shell, said sleeve having a light passage to enable light from the lamp to strike the said bushing whereby the annular portion thereof becomes illuminated and defines the igniting unit opening.

2. In a cigar lighter, a holding device comprising a tubular shell having an igniting unit opening in its front portion; means including a tubular sleeve surrounding the

4

shell, for mounting the latter on a panel through an aperture thereof, said sleeve and shell having side wall openings to admit light from outside the sleeve into the interior of the shell; a lamp housing mounted on the sleeve over a side wall opening thereof; an electric lamp in said housing for producing light to pass through said wall openings and into the interior of the shell; and a bushing on the shell, adapted to engage and pass through the panel, said bushing consisting of material having the property of piping light, and having an exposed annular outwardly extending flange surrounding the igniting unit opening of the shell, said sleeve having a light passage to enable light from the lamp to strike the said bushing whereby the flange thereof becomes illuminated and defines the igniting unit opening.

3. In a cigar lighter, a holding device comprising a tubular shell having an igniting unit opening in its front portion; means including a tubular sleeve surrounding the shell, for mounting the latter on a panel through an aperture thereof; a lamp housing mounted on the exterior of the sleeve; an electric lamp in said housing; and a bushing on the shell, adapted to engage and pass through the panel, said bushing consisting of material having the property of piping light, and having an exposed annular portion surrounding the igniting unit opening of the shell, said sleeve having a light passage to enable light from the lamp to strike the said bushing whereby the annular portion thereof becomes illuminated and defines the igniting unit opening.

4. In a cigar lighter, a holding device having an igniting unit opening in its front portion; means including a tubular rotatable clamping sleeve surrounding the holding device for mounting the latter on a panel through an aperture thereof; a lamp housing mounted on the exterior of the sleeve; an electric lamp in said housing; and a bushing on the holding device, adapted to engage and pass through the panel, said bushing consisting of material having the property of piping light, and having exposed portions extended around the igniting unit opening of the holding device, said sleeve having a light passage to enable light from the lamp to strike the said bushing whereby the exposed portions thereof become illuminated and define the igniting unit opening.

5. The combination of a panel having an aperture; a cigar lighter holding device having an igniting unit opening in its front portion; means including a tubular rotatable clamping sleeve surrounding the holding device for mounting the latter on the panel through the aperture thereof; a lamp housing mounted on the exterior of the sleeve; an electric lamp in said housing; and a bushing on the holding device, adapted to engage and pass through the panel, said bushing consisting of material having the property of piping light, and having exposed portions overlying the front of the panel and extended around the igniting unit opening of the holding device, said sleeve having a light passage to enable light from the lamp to strike the said bushing whereby the exposed portions thereof become illuminated and define the igniting unit opening.

References Cited in the file of this patent

UNITED STATES PATENTS

2,150,836	Lamb	Mar. 14, 1939
2,187,551	Zwack	Jan. 16, 1940
2,309,840	Gavert et al.	Feb. 2, 1943
2,506,181	Thibault	May 2, 1950