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CIGARETTE LIGHTER WITH REVOLVING GAS TANK

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Fig. 1.

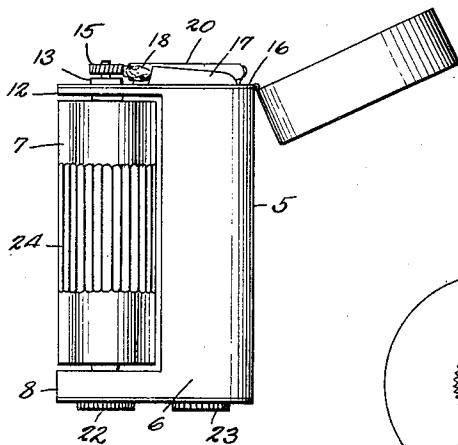


Fig. 2.

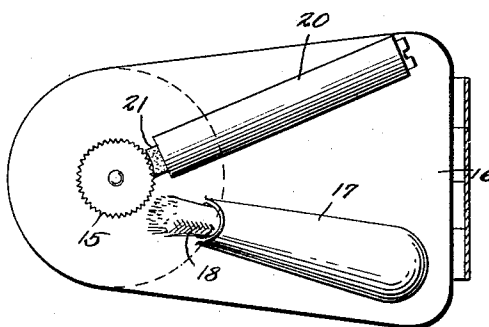
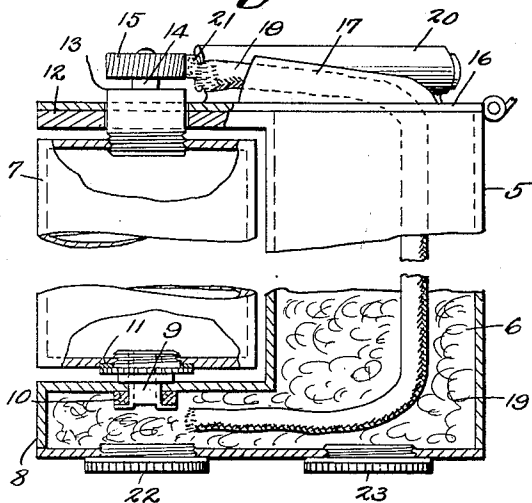


Fig. 3.



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CIGARETTE LIGHTER WITH REVOLVING
GAS TANK

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3 Claims. (Cl. 67-7.1)

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This invention relates to cigarette lighters and more particularly to that type of cigarette lighters wherein lighter fluid is contained in a tank which supplies the lighting fluid to the main tank of the lighter, thereby providing a cigarette lighter which will operate without the necessity of constantly refilling the main fluid tank of the device.

An important object of the invention is to provide a lighter of this character wherein a lighter fluid is maintained in a supply tank that communicates with the main lighter fluid tank of the device, the supply tank being rotatably mounted within bearings of the main tank, the uppermost bearing providing a support for the sparking wheel of the lighter, to the end that the supply tank affords a wide contact with the thumb of the hand, in rotating the supply tank and sparking wheel.

A still further object of the invention is to provide a cigarette lighter wherein a gas supply tank is constantly in communication with the main gas tank of the lighter to supply gas to the main gas tank, saturating the cotton which is packed in the main gas tank to be absorbed in the wick and carried to the sparking wheel to be ignited by the sparks therefrom.

With the foregoing and other objects in view which will appear as the description proceeds, the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claims, it being understood that changes may be made in the construction and arrangement of parts without departing from the spirit of the invention as claimed.

Referring to the drawing.

Figure 1 is a side elevational view of a cigarette light constructed in accordance with the invention.

Fig. 2 is a plan view thereof.

Fig. 3 is a side elevational view of the lighter on an enlarged scale, parts thereof being shown in section to illustrate the interior of the tanks and connections between the tanks.

Referring to the drawing in detail, the lighter includes a body portion indicated generally by the reference character 5, the body portion comprising the main lighting fluid tank 6 and an auxiliary lighting fluid tank 7, the main lighting fluid tank 6 having a hollow extension 8 which is formed with an opening in the upper surface thereof, through which the tube 9 extends, the tube 9 providing a bearing for the auxiliary lighter fluid supply tank 7. This tube 9 also establishes

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communication between the auxiliary lighter fluid supply tank 7 and the main lighting fluid tank 6. As shown, a gasket 10 is provided around the lower end of the tube 9, providing a fluid-tight connection between the tube 9 and extension 8. The upper end of the tube 9 is threaded into the lower end of the auxiliary lighter fluid tank 7 and is supplied with the gasket 11 providing a liquid-tight connection at this point.

At the upper end of the body portion 5 is the arm 12, which is disposed directly over the extension 8 in spaced relation therewith, the arm 12 having an opening through which the bearing 13 of the auxiliary lighter fluid tank 7 extends. As shown, the post 14 rises from the bearing 13 and provides a shaft on which the sparking wheel 15 is secured, so that as the auxiliary lighter fluid tank 7 is rotated, the sparking wheel 15 will rotate therewith.

Formed on the plate 16 which constitutes the top of the lighter, is the tube 17 which communicates with the interior of the main lighter fluid tank 6, one end of the tube 17 being disposed adjacent to the sparking wheel 15. This tube 17 supports one end of the wick 18 which is positioned within the main lighter fluid tank 6 and encased in the cotton packing 19, which is saturated with the lighter fluid entering the tank 6 from the auxiliary lighter fluid tank 7. Thus it will be seen that the cotton packing 19 will be saturated with the lighter fluid which will be transferred to the wick. As the lighter fluid is used, additional lighter fluid will be supplied to the main lighter fluid tank through the tube 9, from said auxiliary lighter fluid tank, to the end that the lighter fluid, because of the supply from the auxiliary lighter fluid tank, will last appreciably longer than under ordinary conditions, wherein it is necessary to manually saturate the cotton packing with the lighter fluid. The reference character 20 indicates a flint tube which is secured to the plate 16, the flint tube accommodating the flint 21 which is urged into engagement with the sparking wheel 15 in the usual and well known manner.

In the bottom of the extension 8 is a fluid opening which is normally closed by means of the cap 22. The opening closed by the cap 22 is disposed directly opposite to one end of the tube 9, so that lighter fluid may be directed into the auxiliary lighter fluid tank through this opening. Another fluid cap 23 closes and opening in the bottom of the main lighter fluid tank 8 and lighter fluid may be directed into the tank 6,

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through this opening, saturating the cotton packing and wick 18.

As clearly shown by Fig. 1 of the drawing, the outer surface of the auxiliary lighter fluid tank 7 is formed with ribs 24 for engagement by the thumb of the hand holding the lighter, in rotating the auxiliary lighter tank and sparking wheel 15 rotated by the tank in order to supply the spark required in igniting the end of the wick 18 adjacent to the wheel.

Having thus described the invention, what is claimed is:

1. In a cigarette lighter, a body portion including a main lighter fluid tank, an auxiliary lighter fluid tank rotatably mounted on the body portion, said auxiliary lighter fluid tank being in communication with the main lighter fluid tank and adapted to supply lighter fluid to the main lighter fluid tank, a bearing extending from the auxiliary lighter fluid tank, a sparking wheel supported on said bearing rotating therewith, a flint cooperating with the sparking wheel in causing a spark as the auxiliary lighter fluid tank is rotated, and a wick extending into the main lighter fluid tank to be ignited by sparks from said sparking wheel.

2. In a cigarette lighter, a body portion including a main lighter fluid tank having a recess in one side thereof, an auxiliary rotatable lighter fluid tank mounted within the recess, the auxiliary lighter fluid tank being in communication with the main lighter fluid tank supplying lighter fluid to the main lighter fluid tank, a sparking

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wheel mounted on the auxiliary lighter fluid tank and being rotatable therewith, a flint cooperating with the sparking wheel causing a spark as the wheel rotates against the flint, and a wick extending into the main lighter fluid tank lit by sparks from the sparking wheel and flint.

3. In a cigarette lighter, a body portion including a main lighter fluid tank having a recess formed in the side thereof and extending throughout the major portion of the length of the main lighter fluid tank, an auxiliary rotatable lighter fluid tank of cylindrical formation, mounted within the recess with the periphery thereof resting in a plane with the outer surface of the main lighter fluid tank and engaged by the fingers of the operator in rotating the auxiliary lighter fluid tank, sparking means at one end of the main lighter fluid tank operated by rotation of the auxiliary lighter fluid tank, and a wick disposed within the main lighter fluid tank, one end of the wick extending through the top of the main tank and lit by sparks from the sparking means.

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REFERENCES CITED

The following references are of record in the file of this patent:

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Number	Country	Date
259,907	Switzerland	Feb. 15, 1949