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2,457,053

CIGARETTE LIGHTER

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Fig. 1.

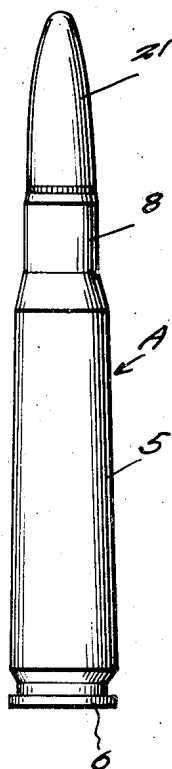


Fig. 2.

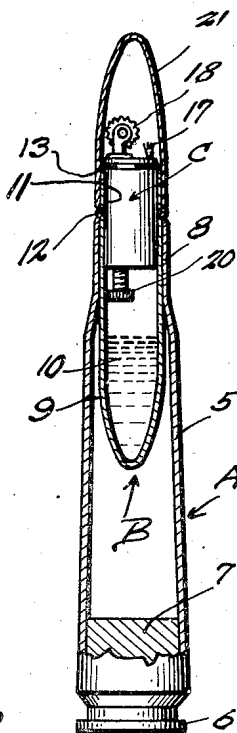
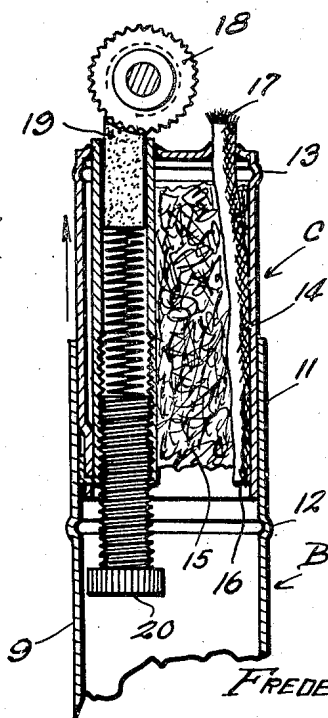


Fig. 3.



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# UNITED STATES PATENT OFFICE

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## CIGARETTE LIGHTER

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1 Claim. (Cl. 67-4.1)

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This invention relates to certain structural improvements and refinements embodied in what is believed to be a distinct and therefore novel cigarette lighter.

More particularly, the invention relates to shower sparking pyrophoric lighters and includes a friction thumb wheel and coating wick which is fed fuel from a fuel-wetted wad, a wick carrying the fuel to the point of ignition by capillary attraction. In carrying out the requirements of the present invention, I have adopted more or less conventional parts, the same being assembled in a unique manner to produce the aforementioned refinements and attending desirable results.

In carrying out my aims, I have in mind the provision of what may be called a table-type cigarette lighter, that is, one which is usable in the home, the same being characterized by a base-equipped casing fashioned from a 50 calibre machine gun shell, there being fitted into the upper neck portion an especially constructed insert, the upper end of the insert constituting an adapter sleeve for the pyrophoric lighter unit, and the bottom or lower portion of said insert depending into the case or shell and constituting a receptacle for the pool of lighter fluid, the aforementioned lighter unit being open at its bottom so that occasional inverting of the lighter will serve to soak the absorbent cotton or other wad in said lighter unit, the latter serving to close the adapter sleeve as well as the receptacle when it is anchored removably in said sleeve.

Other objects, features and advantages of the invention will become more readily apparent from the following description and the accompanying illustrative drawings.

In the drawings, wherein like numerals are employed to designate like parts throughout the views:

Figure 1 is an elevational view of a cigarette lighter constructed in accordance with this invention, the closing cap being in place.

Figure 2 is a view primarily in section, but with certain parts in elevation, showing the complete structural assemblage of the parts.

Figure 3 is an exaggerated sectional and elevational view showing the so-called adapter neck on the insert and the lighter unit, the latter being slid partly out, the position it would take in the course of removal or replacement as the case may be.

Referring to Figure 2 and to the individual parts, by reference characters, the main parts are A, a hollow base, B, a hollow insert perma-

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nently mounted in said base, and C, an insertible and removable pyrophoric lighter unit which is fitted operatively in said insert.

The base A comprises, as before indicated, a 50 calibre or equivalent empty shell 5 having the usual cap-equipped end 6 at its bottom. Said bottom is preferably weighted, as at 7 (see Fig. 2), to facilitate maintaining the shell in an upright, self-standing position. The upper end of the shell is slightly tapered, as usual, and is formed into a neck or collar 8.

The so-called insert B comprises a single hollow part embodying, at its bottom, a receptacle 9, this providing a sump for the lighter fluid or fuel 10 and a portion 11 which may be properly described as an adapter sleeve. This is provided with an annular indentation or bulge 12 which forms a stop and which abuts the upper end of collar 8. There is a similar assembling and stop bead 13 on the upper end of the casing 14 of the insertible and removable pyrophoric lighter unit C and this also constitutes a shoulder and rests against the upper end of the adapter sleeve 11. As before indicated, the unit C is characterized by the shell 14 which is open at its bottom so as to receive fluid from the sump or well 9. The lighter fluid saturates the cotton wadding 15 which is wedged into the casing 14 and which surrounds and wets the wick 16. The wick is of the customary capillary type and its upper end 17 is located adjacent the usual thumb-type sparking wheel 18 coating with the spring pressed flint 19. The flint is mounted in the usual tubular sheath and adjusted by the finger screw 20. The entire lighter unit C fits telescopically and frictionally into the adapter sleeve 11 and the rib or bead 13 comes to rest against the outermost edge of said sleeve.

A suitable cap slips and fits telescopically over the neck 11 and "hoods" and covers the unit C, said cap being denoted at 21.

The lighter is operated as is customary, that is, by "flipping" the finger wheel 18 against the flint 19, this providing a shower of sparks, as is customary.

The novelty in this case would appear to reside in the insert B which is fitted and secured permanently in the neck portion 8 of the shell A, the lower portion of said insert being a receptacle 9 for the fuel 10 and this depending into the shell, the upper portion 11 protruding above the neck 8 and receiving the lighter unit C, the casing 14 of the lighter being open at its bottom to permit the wadding 15 to be flushed with the liquid fuel.

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A careful consideration of the foregoing description in conjunction with the invention as illustrated in the drawings will enable the reader to obtain a clear understanding and impression of the alleged features of merit and novelty sufficient to clarify the construction of the invention as hereinafter claimed.

Minor changes in shape, size, materials and rearrangement of parts may be resorted to in actual practice so long as no departure is made from the invention as claimed.

I claim:

A self-standing table-type pyrophoric lighter of the class described comprising a primary unit embodying a base and an integral, vertically elongated shell, said base being flat and weighted and adapted to sit in a position to prevent tilting of the shell under normal handling conditions, said shell being hollow and open at its top and provided at said top with a reduced cylindrical neck, an insert unit, the latter including a hollow shell protruding into said first-named shell and constituting a receptacle for lighter fluid, the upper portion of said insert projecting beyond said neck and having an outstanding annular head resting on the adjacent end of the neck, that portion beyond said head constituting an adapter sleeve for a separate, removable and insertable pyrophoric lighter unit, and a lighter unit fitted telescopically into said neck, said

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lighter unit including a casing, said casing being open at its bottom and containing the usual absorbent filler wad and wick, said wad being adapted to be doused with lighter fluid from said receptacle whenever necessary or desired, pyrophoric lighting means on said lighter unit, said casing having an outstanding bead, said bead resting on an adjacent end of said adapter sleeve, and a removable cap enclosing the adjacent portion of said lighter unit and fitted on said adapter sleeve, said first-named bead constituting a stop for the adjacent end of the cap.

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