April 15, 1941. S. A. OWEN ET AL 2,238,503

CIGARETTE LIGHT EXTINGUISHER

Filed June 19, 1939

Fig. 1.

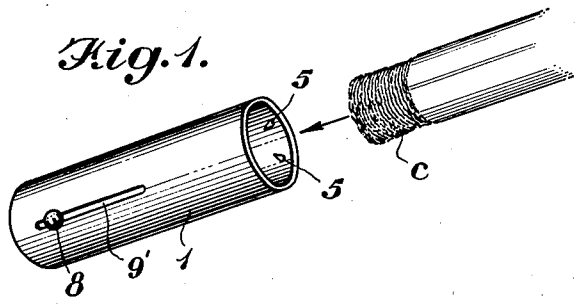


Fig. 2.

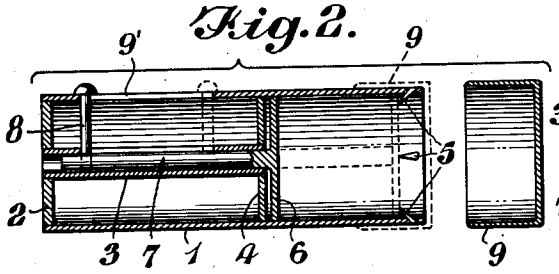
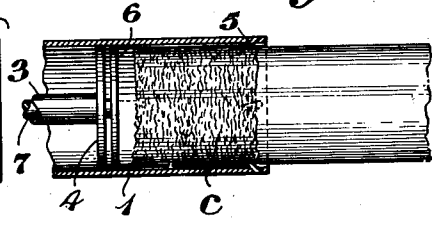


Fig. 3.



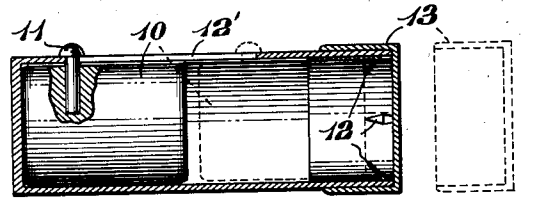


Fig. 4.

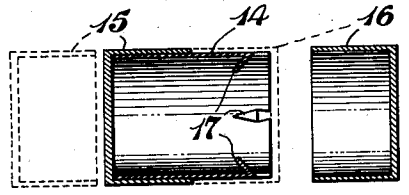


Fig. 5.

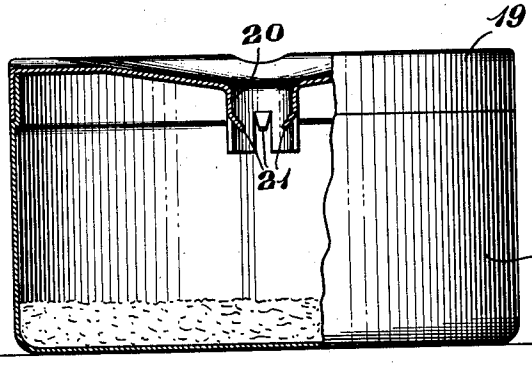


Fig. 6.

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Patented Apr. 15, 1941 2,238,503

UNITED STATES PATENT OFFICE

2,238,503

CIGARETTE LIGHT EXTINGUISHER

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Application June 19, 1939, Serial No. 279,932

5 Claims. (Cl. 131—235)

This invention relates to cigarette light extinguisher, and the primary object thereof is to provide a simple and economical device which enables the light to be easily, quickly and effectively extinguished.

A further object of the invention is to provide an extinguisher, which can be incorporated in a structure adapted either for pocket or table use, and in the latter aspect more particularly with an ash tray.

Still further, the invention aims to provide an extinguisher for pocket use, which has means for ejecting the ashes and cigarette fragments re-resultant from extinguishment.

The invention has still further and other objects, which will be later set forth and of themselves manifested in the course of the following.

In the drawing:

Fig. 1 is a perspective view of the invention adapted for pocket use, showing the lighted end of a cigarette being inserted in the device in the act of extinguishment,

Fig. 2 is a longitudinal sectional view showing the cover applied in dotted lines, and removed in full lines,

Fig. 3 is a like fragmentary view showing the lighted end of the cigarette in the act of extinguishment,

Fig. 4 is a view similar to Fig. 2, but broken away, of a modified form of the invention partly broken away, the cover shown applied in full lines and removed in dotted lines,

Fig. 5 is a like view of a still further modified form of the invention, wherein the device has both ends removable, and

Fig. 6 is a view in side elevation, partly broken away and in section, of the invention incorporated in an ash tray.

In proceeding in accordance with the invention, wherein for pocket use, a cylinder 1 is provided, of suitable optional size for the purpose, which has a closed end 2 permanently affixed thereto, formed with a concentric opening wherein one end of a guide tube 3, is likewise permanently secured. Preferably, a disk 4, which tightly fits within the cylinder is employed to support the opposite end of the tube, the latter end extending through the disk and connected thereto in any suitable rigid manner.

The opposite end of the cylinder is provided with a series of cutters or prongs 5, having V-shaped ends which project into the cylinder and are inclined inwardly toward the longitudinal axis of the cigarette. An ash ejecting plunger is employed, which includes a disk-like head 6, and a rod 7, the latter slidable within the guide tube 3. For the purpose of manipulating the plunger, a headed pin 8, is employed which operates through a longitudinal slot 9, provided therefor in the cylinder, and is secured to rod 7, by friction, or otherwise. A cap or cover 9, fits over the extinguishing end of the cylinder, for a purpose now set forth.

In operation, the lighted end C, is inserted in the open end of the cylinder to the point, depicted in Fig. 3, in which the lighted tip lies completely within the cylinder, whereupon the cylinder is rotated relative to the cigarette, or vice versa, sufficiently to remove the lighted end, the plunger occupying the full line position of Fig. 2. The cigarette is then withdrawn and cap 9, applied to the cylinder to smother the fire; the ashes being thus trapped between the plunger and cap. The ashes may be permitted to remain in the cylinder, or after smothering ejected therefrom, upon removal of the cap and movement of the plunger to the dotted line position of Fig. 2.

In the optional form illustrated in Fig. 4, the ejecting plunger 10 may be of solid or one piece cylindrical construction, closed throughout and equipped with a finger engaging pin 11, operating in slot 12', as described in the foregoing.

Fig. 5 discloses the simplest and the most economical construction, devoid of the ejecting feature, and wherein a short open-ended cylinder 14, is employed closed at its ends by caps 15 and 16, which abut at their inner ends when in applied position. By providing for the removal of both caps, a more thorough and easier cleaning of the parts is afforded. In this form, the prongs 17, may be struck-out of the cylinder, thus further contributing to economy.

In Fig. 6, the invention is incorporated in an ash tray, which may be of any type, but here shown as of the closed drum-like type 18, having a dished removable cover 19. The center of the cover is formed with an integral cylinder 20, open at both ends, and with the lower of the latter formed with struck-out cutters or prongs 21. The operation in all forms is identical to that set forth in connection with Figs. 1 and 2.

By virtue of the described inclination of the cutters, it will be seen that insertion of the cigarette end into the cylinder is facilitated.

From the foregoing, it will be apparent that the invention provides an effective extinguisher, attended with safety in operation, and moreover one which can be economically produced; in the

instance of Fig. 5, in particular, as a novelty for gratis distribution in advertising.

The invention, also is susceptible of being variously modified, within the spirit and scope of the appended claims.

What is claimed is:

1. A cigarette extinguisher including a cylinder closed at one end and open at its opposite end and having a longitudinal slot, cutting means adjacent the open end, a guide tube in the cylinder connected at one end thereto, a disk in the cylinder connected to the opposite end of the tube, a plunger in front of the disk having a rod connected thereto which is slidable in the tube, a member connected to the rod and extending through the slot for manual engagement, and a removable cap for the open end of the cylinder.

2. A cigarette light extinguisher including a cylinder having a closed end and an open end, rigid cutting means carried by the cylinder and disposed rearwardly of the open end of the cylinder and projecting into the same, ash ejecting means in the cylinder composed of a plunger having a solid front face, and a pin connected to the plunger and extending through a longitudinal slot provided therefor in the cylinder, whereby to be operable exteriorly of the latter, said slot being of such length so that when the plunger is moved to the limit of its ejecting movement the front face of the latter will lie in approximately the plane of the front of the cutting means.

3. A cigarette light extinguisher including a cylinder having an open end and of an equal internal diameter which is but slightly greater than that of a cigarette so that the cylinder interior forms a guide for the cigarette upon insertion of the latter into the open end of the cylinder, and a series of independent stub-like blade cutters rigidly carried by the cylinder and spaced from the longitudinal axis of the cylinder and located rearwardly of said open end thereof, said cutters extending toward one another in a cone-like formation, the least diameter of the series of cutters being remotest from the open end of the cylinder, whereby to bite into and cut-off the lighted end of the cigarette by and upon relative turning movement between the cylinder and cigarette.

4. A cigarette light extinguisher in accordance with claim 3, wherein the opposite end of the cylinder is also open and wherein there is a removable cap for closing each of said ends of the cylinder.

5. A cigarette light extinguisher in accordance with claim 3, wherein the cutters are struck inwardly from the edge of said open end of the cylinder, wherein the oposite end of the cylinder is also open and wherein there is a removable cap for closing each of said ends of the cylinder.

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