Dec. 27, 1955 B. E. SMOLEN 2,728,483

CLOSURE SCREW FOR CIGARETTE LIGHTERS

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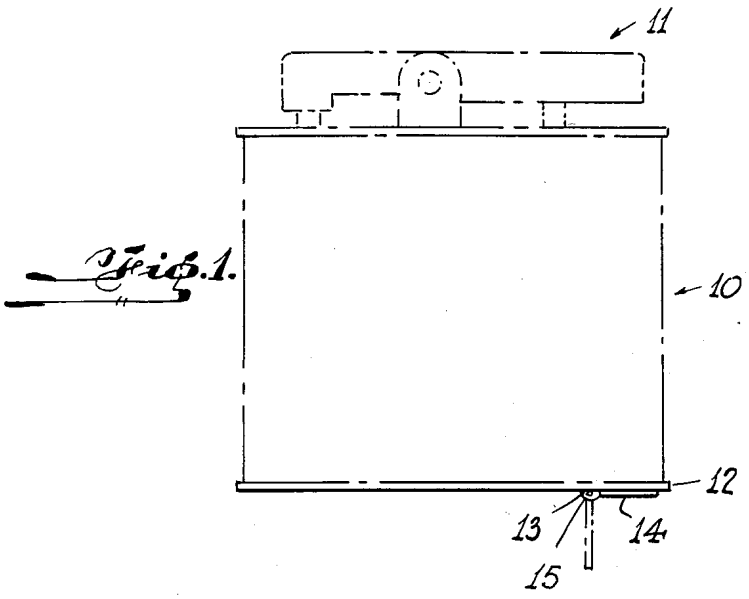

Fig. 1.

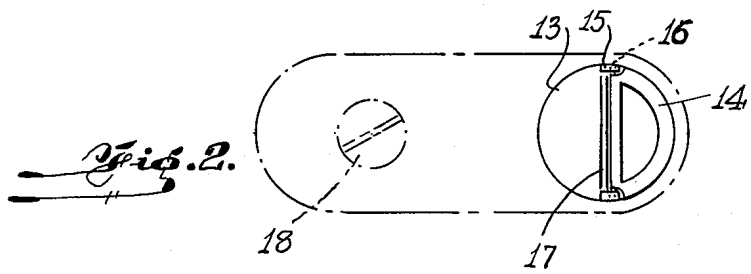

Fig. 2.

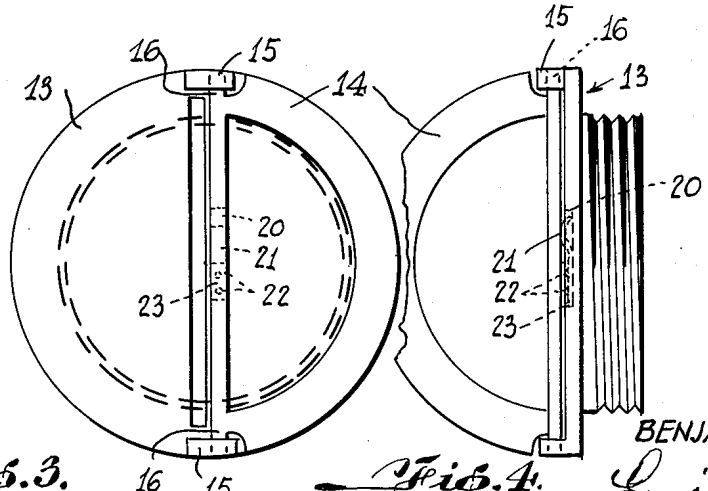

Fig. 3.

Fig. 4.

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CLOSURE SCREW FOR CIGARETTE LIGHTERS

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1 Claim. (Cl. 220—39)

This invention relates broadly to containers such as those possessed by cigarette lighters and it has more specific reference to closure screws for such containers.

Cigarette lighters conventionally have, among other things, a compartment for a flint and a compartment for fluid. Each of these compartments is closed by a closure screw. Since these screws must be removed frequently to permit access to the respective compartments, for the obvious purpose of either inserting a new flint or adding additional fluid, closure screws are provided, having a diametrically extending slit into which either the edge of a coin or a screw driver may be inserted to facilitate the removal of the screw or its re-insertion. However, a coin or a screw driver are not always handy and at times not even available.

To overcome such an eventuality, it is the principal object of the present invention to provide a closure screw for a container such as that of a cigarette lighter, which eliminates the use of a coin or a screw driver, by providing the screw head with a handle by which it may be turned.

It is a further object of the present invention to provide a closure screw for a container such as that of a cigarette lighter, the closure screw being provided with a handle, which lies against the head of the screw when in its inoperative position.

It is a further aim of the present invention to provide a closure screw of this character, having a handle which, when it is to be used, may be raised to an angle of substantially 90° with respect to its normal position.

A still further purpose of this invention resides in the provision of a closure screw having a handle which may be raised from its inoperative position by inserting a fingernail between the handle and the screw head over which it lies.

And yet another aim of the present invention lies in the provision of means associated with the handle which will prevent the handle from being inadvertently raised or lowered.

These and other meritorious aims and advantages are attained by the novel construction, combination and arrangement of few and simple parts, hereinafter described, and illustrated in the accompanying drawing, forming a material component of the present disclosure, and in which:

Figure 1 is a side elevational view of a conventional pocket size cigarette lighter, partly in dot and dash lines, showing a closure screw provided with the handle of the present invention, the solid lines showing the handle in inoperative position and the broke lines showing the same handle in extended or operative position.

Figure 2 is a bottom view of Figure 1, showing the handle of the present invention in inoperative position.

Figure 3 is a detail view of the head of a closure screw showing the handle of the present invention in inoperative position, the view being drawn to an enlarged scale.

Figure 4 is a side elevational view of the illustration

shown in Figure 3, showing the handle in operative position.

Referring in greater detail to the drawing, the numeral **10** illustrates in general a conventional pocket size cigarette lighter having a conventional operating lever **11** and a bottom **12**. Since the cigarette lighter is not a part of the present invention, and since the present invention may be used with equal effectiveness in connection with other containers, the drawing shows a lighter in dot and dash lines and no reference will be made to any detailed construction.

The cigarette lighter **10** has two conventional chambers, one for flint and the other for fluid. Each of these chambers (not shown in the drawing) is closed by a screw. The screw closing the fluid containing chamber has a head **13**.

The present invention comprises a handle **14**, here illustrated as comprising an arcuately curved piece of material such as metal or any other suitable and desirable material. Screw head **13** is provided substantially centrally thereof with a groove **17**, extending diametrically across slightly less than the width of the said screw head. Near the ends of the said slot **17** a pair of oppositely arranged bearings **15** are provided at opposed edges of the screw head **13**. Each of the said bearings has an opening therein, the said openings being positioned adjacent slot **17** and in alignment with each other. The free ends of the arcuately curved handle **14** are joined by a transversely extending bearing pin **16**, each of the ends of which enters into an opening in bearings **15**, so that the handle **14** is pivotally mounted upon the screw head **13**.

Between the bearing pin **16** and the screw head **13** there is formed a groove **20** in which is retained by rivets **22** or otherwise a spring which comprises a flat portion **23** and a bowed portion **21** for a purpose which will hereinafter become more fully apparent. As illustrated in Figures 2 and 3 of the drawings, the outer edge of handle **14** corresponds in width to the outer edge of screw head **13** so that, in its inoperative position, the edge of screw **13** upon which the handle **14** lies, will be completely obscured thereby.

The device is used in the following manner: When it is desired to remove the screw from the fluid-containing chamber of the cigarette lighter, or from any other container in connection with which it is used, the user inserts his fingernail between the outer edge of the screw head **13** and the outer edge of the handle **14**, which is readily accomplished, since the handle is spaced slightly from the screw head. In this manner, the handle is readily raised into its extended position, as illustrated in Figures 1 and 4. When completely extended, the position of the handle will be maintained by the bowed portion **21** of the spring member and, when it is desired to restore the handle to its inoperative position, the handle is manually pressed against the screw head and will retain its inoperative position through the action of the flat portion **23** of the spring. Slot **17**, which is the conventional slot centrally located upon conventional screw heads, serves no purpose in this invention, but is illustrated in the drawings merely to show a conventional screw head, in connection with which the handle of the present invention may be used.

There has thus been shown and described a closure screw for cigarette lighters in the preferred form of its embodiment, but it is to be understood that this disclosure is to be regarded as illustrative and descriptive only and not as limitative or restrictive to the exact details shown, applicant reserving the right to make changes such as modification of shape, size, material to be used and others, which may come within the scope of the

appended claim, without thereby departing either from the spirit or the scope of the appended claim.

Having thus described the invention, what is claimed as new and desired to secure by Letters Patent is:

The combination with a closure screw having a stem, a screw head and a slot extending diametrically across part of the screw head; of an arcuately curved handle having two ends, an integral bearing pin extending transversely across said handle ends forming a base for said handle, a pair of bearings in opposite sides of the screw head adjacent its slot and in alignment with each other, said bearing pin extending outwardly beyond said handle ends forming a pair of oppositely disposed extensions, each of said extensions entering in one of said bearings whereby said handle is pivotally mounted upon the screw head, a groove in the screw head between said bearing pin and the screw head, and said groove provided with spring means retaining said handle in either of its adjusted positions.

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