

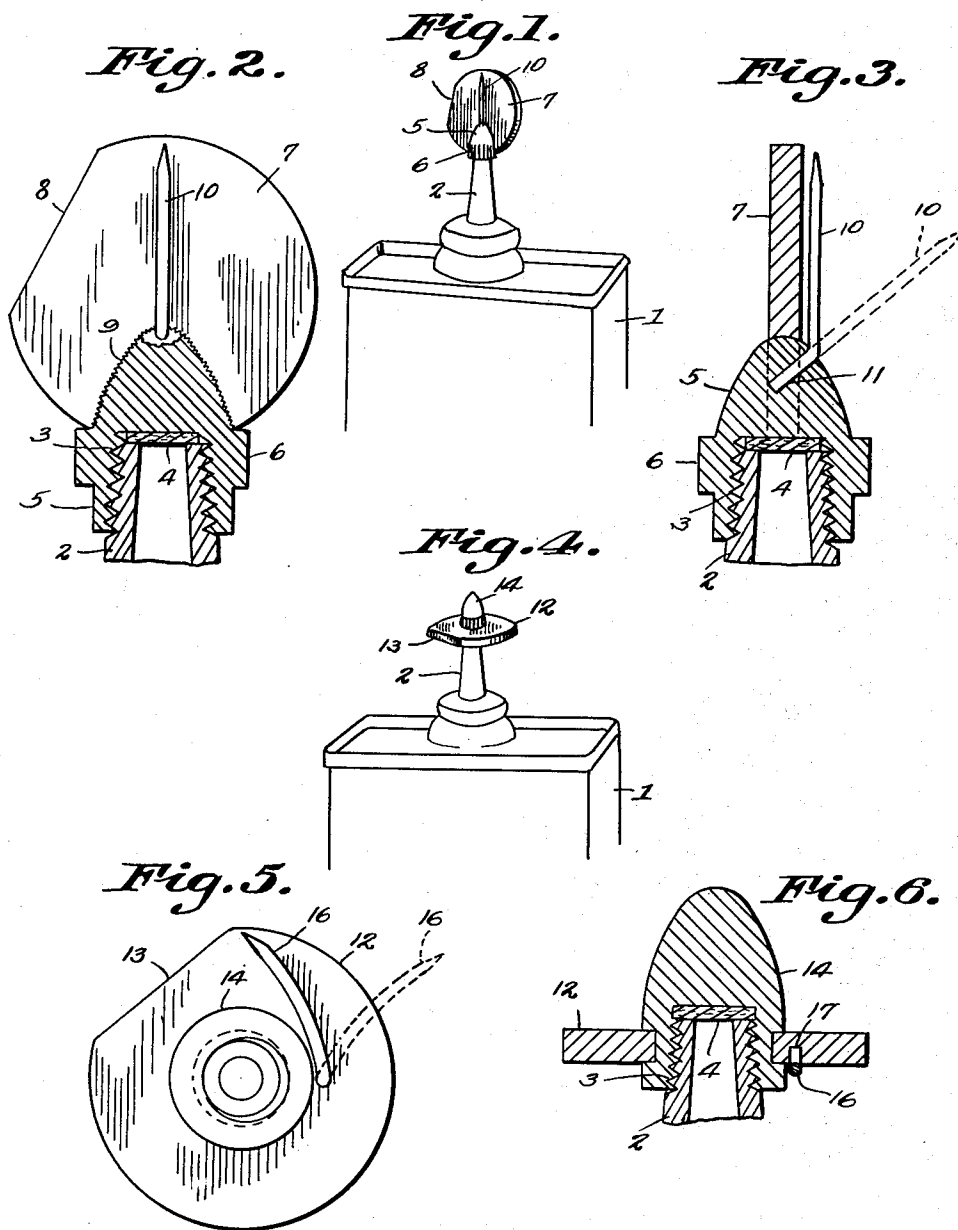
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SPOUT CAP FOR LIGHTER FUEL CONTAINERS

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SPOUT CAP FOR LIGHTER FUEL
CONTAINERS

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1 Claim. (Cl. 220—39)

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This invention relates to a cap construction for application to containers used to hold cigarette lighter fuel. One important object of the present invention is to provide a cap of the type described in which means is embodied for piercing the seal commonly provided upon the container discharge spout.

Yet another object is to provide, in a cap of the character stated, means applicable to the fuel cap of a cigarette lighter or the like, for opening and closing said fuel cap.

Still another object is to provide a spout cap construction wherein said last-named means not only serves to facilitate the opening and closing of a lighter fuel cap or plug, but also will facilitate the removal or replacement of the container spout cap.

Still another object is to provide a spout cap construction wherein the seal perforating means, will be initially mounted in a shielded location wherein it will be shielded by the second-named means, will be swiftly adjustable to an exposed position in which it can be used to break the spout cap seal, and will thereafter be capable of being easily broken off completely from the spout cap and discarded.

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, herein-after more fully described and pointed out in the claim, 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 drawings,

Fig. 1 is a fragmentary perspective view of a lighter fuel container with a spout cap formed in accordance with the present invention applied thereto.

Fig. 2 is an enlarged vertical section through the container spout and cap.

Fig. 3 is a vertical section taken at right angles to Fig. 2, the dotted lines indicating an operative position of a seal perforating needle.

Fig. 4 is a view similar to Fig. 1 and showing a modified form of the invention.

Fig. 5 is a bottom plan view of the spout cap of Fig. 4, the dotted lines indicating an operative position of the perforating needle.

Fig. 6 is a vertical section through the spout cap of Figs. 4 and 5.

Referring to the drawings in detail, 1 is a conventional lighter fuel container, having the

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upstanding spout 2 exteriorly threaded at its upper end as at 3.

Sealing the discharge end of the spout 2 is a seal 4, generally formed of thin or soft metal material, so as to be perforable by a sharp object when the container is to be initially used.

Threaded upon the upper end of the spout 2 is a spout cap 5, which may be provided with a collar 6 circumferentially corrugated as readily seen from Fig. 1, for convenience in rotation of the cap when the cap is to be removed from or replaced upon the spout 2.

In accordance with the present invention, I provide, in the form of the invention seen in Figs. 1-3, an upstanding fin 7 here shown as being circular in outer configuration, and having a portion of its marginal area cut away along a straight line 8 extending chordally of the fin. The fin is embedded or otherwise fixedly secured to the spout cap 5, and may be fluted as at 9 to provide a strong permanent bond between the fin and cap.

As readily seen from Figs. 1-3, the fin 7 is mounted upon the spout cap 5 so as to extend upwardly from the spout cap in a vertical plane.

As a result, the fin 7 comprises a finger-receiving grip that assists in rotating the spout cap, when the spout cap is being removed from or replaced upon the spout, this being desirable where the spout cap is secured in tight threaded engagement upon the spout.

As seen from the drawings, the invention includes the provision of a perforating needle 10, the base 11 of which is embedded in the spout cap 5, immediately adjacent one face of the fin 7 and oblique to the plane of the fin. From this obliquely disposed base, the perforating needle is extended upwardly in parallelism and in close spaced relation to the fin 7, so as to be protectively shielded by the fin.

When it is desired to use the fuel for the first time, the spout cap is removed, the fin 7 being readily grasped to facilitate said removal, and after removal of the cap, the perforating needle 10 is bent outwardly to the dotted line position of Fig. 3, in which position it is in coaxial alignment with its obliquely disposed base. The needle is then used to perforate the seal 4, after which the needle is broken off and discarded. The needle is broken off at that point at which the bend is formed therein (see Fig. 3). Considering the fin 7, this is used in the manner of a screw driver, for the purpose of removing the fuel plug, not shown, of an ordinary cigarette lighter. In other words, said plugs are always

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formed with a kerf, into which the straight edge 8 of the fin is insertible, the fin being then rotated so as to rotate with it the fuel plug of the lighter.

In the form of the invention seen in Fig. 4, the fuel container 1 has the conventional spout 2. In this instance, however, a different spout cap and fin construction is provided, the fin 12 being circular and having a straight edge 13 as in the first form of the invention. However, the fin 10 is in this instance horizontally disposed, and is formed with a central opening through which is extended the spout cap 14, having the annular groove 15 engaged with the fin as readily seen from Fig. 6.

As may be noted from Fig. 5, the perforating needle 16 again, is normally located in a plane parallel to the fin, the base 17 of the perforating needle being embedded in the fin as seen from Fig. 6. Initially, the perforating needle is protectively shielded by the fin as in the first form of the invention. However, when the needle is to be used, it is bent outwardly to the dotted line position of Fig. 5, and is used to perforate seal 4. Thereafter, it is broken off at the base and discarded.

As in the first form of the invention, the fin 12

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not only constitutes a fuel plug rotating means, but also, facilitates rotation of the spout cap.

What is claimed is:

A closure for the discharge spout of a lighter fluid container comprising a body having a socket adapted to receive the discharge end of the discharge spout of a lighter fluid container, a substantially circular guard carried by the body and extending outwardly therefrom, and a spout end perforating pin carried by the body and lying adjacent and within the perimeter of the guard and adapted to be turned outwardly and away from said guard during the perforating of the end of the spout.

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