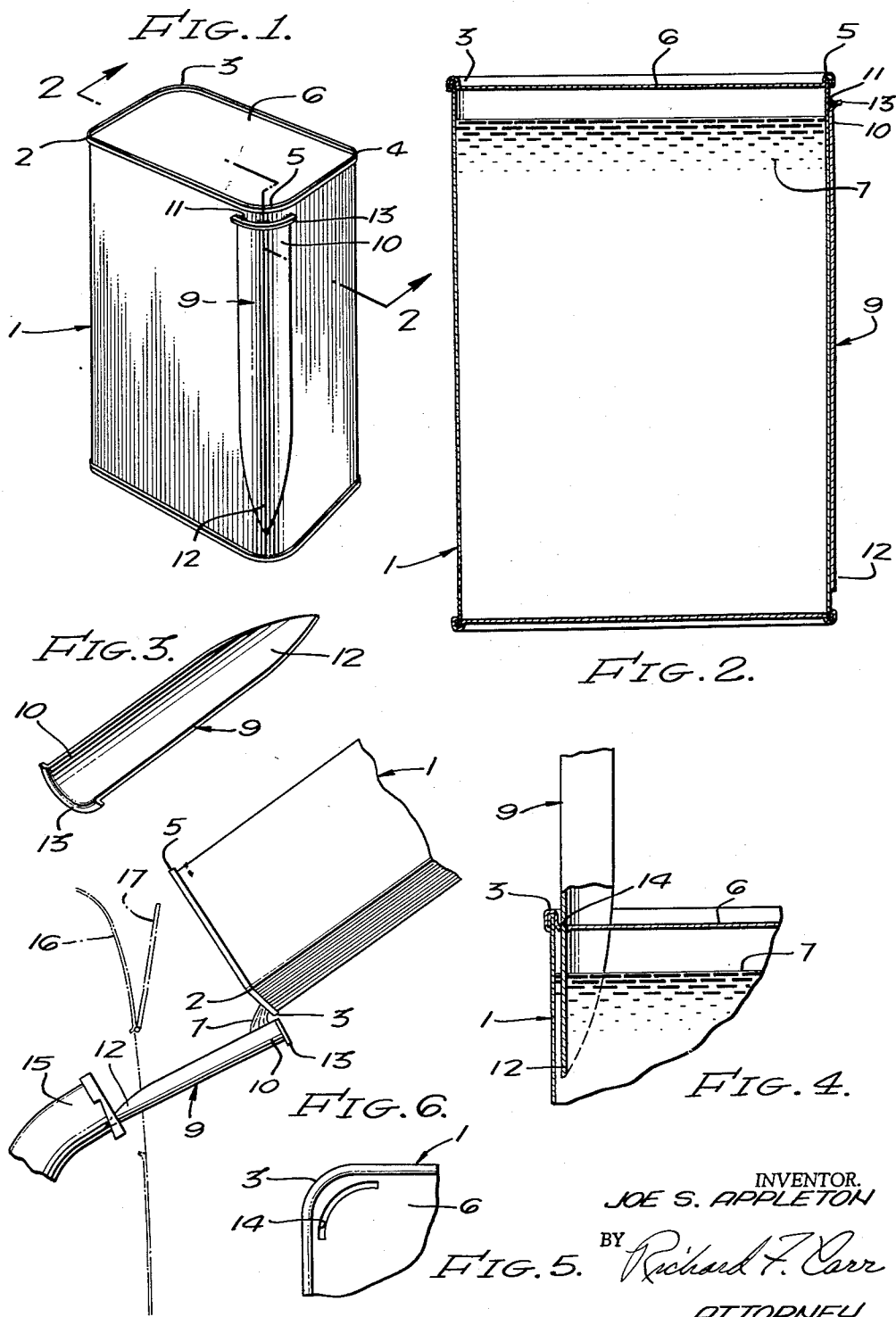


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PORTABLE FUEL SUPPLY
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PORTABLE FUEL SUPPLY

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2 Claims. (Cl. 141—343)

This invention pertains to a fuel supply and more particularly to a supply of fuel readily handled and stored as a source for emergency use.

Running out of fuel is an old problem which has confronted all operators of automobiles, boats or other equipment. Nearly everyone has at one time or other inadvertently neglected to fill a fuel tank when it should have been done, or has been caught with insufficient fuel in some area where additional supplies were not available. This is not only an inconvenience, but can be dangerous to the person forced to stop in an unsuitable location because of lack of a fuel supply.

Generally, it is not satisfactory to carry an extra container of fuel for use in emergencies. One reason is that such containers are bulky and difficult to store. A more important factor is that fuel cans are expensive and capable of leaking even when equipped with threaded caps over the pouring spout and the access opening to the interior of the can. Not only may such caps be inadvertently loosened, but also they are not fully liquid tight without provision of proper sealing members beneath the caps. Thus, it is unsafe to store such cans in any location where they might become tipped over and allow the fuel to run out. Additionally, these cans will allow a certain amount of evaporation of the fuel which causes odors in a confined area, and also over a period of time can result in loss of the entire fuel supply. Furthermore, with the pouring spouts provided in the usual gasoline can, it is impossible to pour the gasoline into the filler neck of a fuel tank of many present day automobiles. This is because the fender or other structure of the car projects outwardly beyond the concealed filler neck so that the pouring spout cannot be brought close to the inlet to the main fuel tank.

According to the provisions of this invention, a compact, sealed, safe container of fuel is provided which has an attached opener and a means for directing the fuel from the container to the tank which is to receive it.

Therefore, it is an object of this invention to provide a readily transportable, sealed, safe and economical fuel supply.

Another object of this invention is to provide a fuel storage arrangement which is compact and can be retained for indefinite periods of time and in any position.

A further object of this invention is to provide a fuel supply arrangement having an attached opener and pouring trough associated therewith.

Yet another object of this invention is to provide a fuel supply which is simple to use and by which fuel may be directed to inaccessible locations.

These and other objects will become apparent from the following detailed description taken in connection with the accompanying drawing in which:

Fig. 1 is a perspective view of the portable fuel supply device of this invention,

Fig. 2 is a sectional view taken along line 2—2 of Fig. 1 showing the interior of the container as well as the

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attached opener and pouring trough removably secured to the exterior of the container,

Fig. 3 is a perspective view of the combined opener and pouring trough after removal from the container,

Fig. 4 is a fragmentary sectional view illustrating the use of the opener in perforating one end of the fuel container,

Fig. 5 is a fragmentary plan view of the end of the container after having been perforated, and

Fig. 6 is an elevational view showing the use of the trough in directing fuel to an otherwise inaccessible filler neck of a gasoline tank.

The device of this invention includes a hollow container 1 generally of one or two gallon capacity. It preferably is made of light, corrosion resistant metal and conveniently is of substantially rectangular contour as shown, having rounded corners 2, 3, 4, and 5. At least one flat end wall 6 of the container is of such construction that it is capable of being perforated by a suitable sharp instrument for reasons that will be made more clear hereinafter. This container, which is very economical to produce, is entirely sealed, there being no removable cap or other access to the interior thereof.

Within container 1, as indicated in Fig. 2, there is provided a quantity of liquid hydrocarbon fuel 7 placed in the container before it is sealed as finally constructed. Where the container is to be used as a fuel supply for an automobile or boat, this liquid fuel will be gasoline. Obviously where another type vehicle or engine is to be used, the fuel may be of any desired nature. A space 8 is left above the fuel which allows for expansion thereof which may occur when the container and its contents become heated.

Detachably mounted on the exterior of container 1 is an elongated member 9. The top end 10 of this member is lightly soldered at 11 to the exterior of the container in such manner as to provide a joint which can be broken readily when desired, yet which will retain member 9 to the container in all normal handling. The opposite end 12 of member 9 tapers to a relatively sharp point as illustrated. Throughout its length member 9 defines a rounded substantially U-shaped contour which conveniently fits over one of the rounded corners of the container and preferably is substantially complementary thereto. As a result, member 9 projects only a very small distance from the periphery of container 1, and will not be inadvertently caught or pulled off.

In use of the device, to supply the fuel from within container 1 to a desired location, member 9 is pulled upwardly to break the soldered joint 11 at upper end 10. After this, sharp end 12 is forced through end 6 of the container near one of the corners as seen in Fig. 4. This is accomplished easily by holding the sharp point against the surface of end wall 6 and tapping opposite end 10 of member 9 with the heel of the hand to drive the sharp point through the end wall. To facilitate this, flange 13 is bent outwardly as illustrated providing a broader surface to strike. This flange also assists in removing member 9 from the opening so provided. In this manner, when member 9 is withdrawn from the end wall it leaves an opening 14 through which the fuel may be removed from the container. If desired, an additional opening may be made at the opposite corner of wall 6 to provide a vent which allows escape of air during the pouring.

In most instances when using the fuel supply arrangement with present day automobiles, it is impossible to pour directly from the container into the filler neck of the fuel tank. This is because the filler neck is buried beneath the fender or other structure of the car. However, with the provisions of this invention, the fuel may be directed to the filler neck of the tank regardless of its location. This is accomplished by holding one end of

member 9 beneath container 1 and the other end of member 9 at the edge of filler neck 15 as shown in Fig. 6. The fuel from container 1 then is poured into member 9 which because of its rounded contour receives the fuel and acts as a trough conducting it to the filler neck without loss. This is despite the fender or other structure 16 of the car, and the access door 17 which pivots outwardly to allow the fuel tank to be opened. This device, therefore, provides an improved result wherein the fuel is easily directed to the desired location.

While member 9 is illustrated as being rounded in its contour it is obvious that other shapes could be used also. For example, if this member were made substantially V-shaped in cross section it would nevertheless provide a satisfactory pouring trough for transmitting the fuel to the tank. For such a modification the corners of the container preferably should be more nearly square to permit the trough member to lie close to the exterior of the container before use.

After the container 1 has been emptied of its fuel, thereby providing an emergency supply for the engine of the automobile, boat or other device where required, the container and pouring trough then are discarded. Once the end of the container has been punctured to remove the fuel it cannot be re-used. Of course, the container is a low cost item that is readily expendable in this nature.

Therefore, in utilizing the invention, a motorist will normally buy one or two sealed containers 1 which he places in an out-of-the-way location in his automobile. This may be a corner of the trunk where it does not interfere with use of the trunk for other purposes. It is possible to store the container in any attitude because there is no danger of leakage. Also, it will withstand considerable forces without sustaining damage. Thus, the container is entirely safe in its use, will not provide objectionable odors from loss of vapors and may be retained for an indefinite period of time for its emergency use.

The foregoing detailed description is to be clearly un-

derstood as given by way of illustration and example only, the spirit and scope of this invention being limited solely by the appended claims.

I claim:

- 5 1. A portable emergency fuel supply comprising a sealed metal container having a flat end wall capable of being perforated, said container having a substantially rectangular cross section, the sides of said container being interconnected at rounded corner portions, a liquid hydrocarbon fuel in said container filling a substantial portion thereof, and a member soldered to the exterior of said container, said member defining an elongated trough having a substantially U-shaped cross section receiving a corner of said container therein, said member further
- 10 having a pointed end for making an aperture through said end wall.
2. A portable fuel supply comprising a sealed metal container having a flat end wall capable of being perforated by a sharp instrument, the sides of said container
- 20 being interconnected at rounded corner portions extending from said end wall; a liquid fuel in said container occupying less space than the interior volume defined by said container; and an elongated member, said member having a substantially U-shaped contour receiving one of
- 25 said corners of said container therein, one end portion of said member being detachably soldered to the exterior of said container, one end of said member having a relatively sharp point for insertion through said end wall of said
- 30 container, the opposite end of said member having an outwardly turned flange for facilitating the manual insertion and removal of said point through said end wall.

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