Oct. 23, 1923. 1,471,793

E. ISRAEL

CARBIDE CONTAINER

Filed Feb. 16, 1923

Fig. 1.

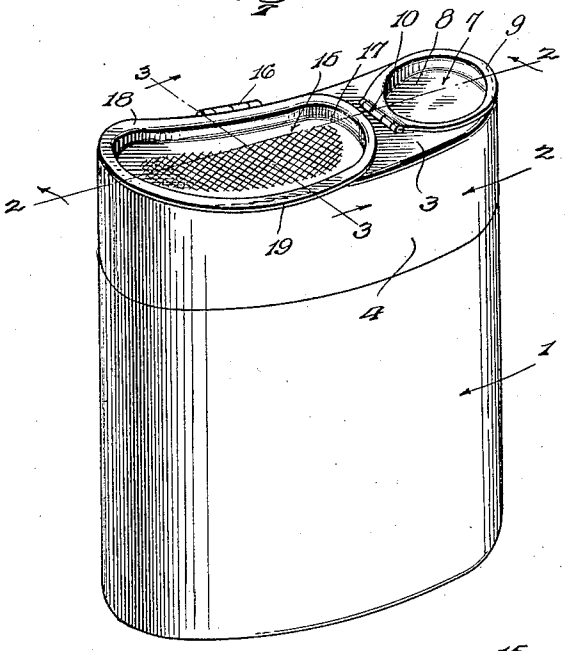
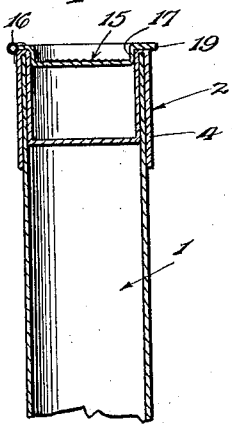


Fig. 3.



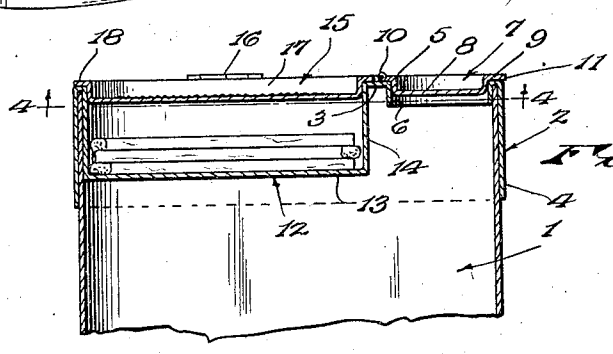
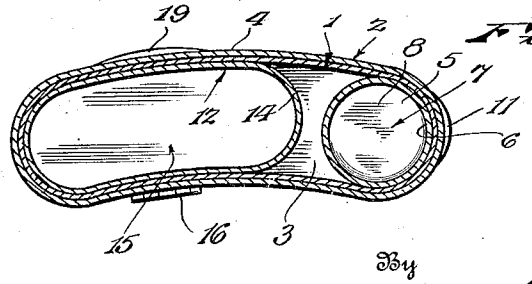


Fig. 2.

Fig. 4



Inventor

Eli Israel.

By Lacey & Lacey, Attorneys

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UNITED STATES PATENT OFFICE.

ELI ISRAEL, OF WILKES-BARRE, PENNSYLVANIA.

CARBIDE CONTAINER.

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To all whom it may concern:

Be it known that I, ELI ISRAEL, a citizen of the United States, residing at Wilkes-Barre, in the county of Luzerne and State of Pennsylvania, have invented certain new and useful Improvements in Carbide Containers, of which the following is a specification.

This invention relates to improvements in containers, and more particularly to an improved calcium carbide container for use by miners in carrying their daily supply of carbide for their lamps. Various types of containers have been designed for this purpose but have been, for one reason or another, unsatisfactory in use. In some types of such containers the body of the container is open at its top and a closure is slidably mounted therein. However, the closure in this particular type of container is not supported in a substantial manner and is liable to be carelessly manipulated with the result that the contents of the container are liable to be wasted. Also with other types of containers waste is liable to occur. It is therefore one of the primary objects of the present invention to provide a carbide container of the class mentioned which may be conveniently filled and which will embody a closure so constructed that waste of carbide will not be occasioned when the carbide is being discharged from the container into the reservoir of the lamp. With this end in view, the invention contemplates providing a carbide container the body of which is open at its top and provided with a removable closure upon the removal of which carbide may be quickly and conveniently introduced into the said body, the closure having a smaller pouring opening fitted with an independent lid through which the carbide may be discharged from the container in a stream sufficiently small to insure against waste of the carbide when pouring the same into the reservoir of the lamp.

A miner equipped with an acetylene lamp is required to carry with him, in addition to a supply of matches, small repair parts, such, for example, as burner tips and the like, and if such parts are carried loose in the pockets of his clothing, they are liable to be lost or delay and inconvenience is liable to be experienced in locating them when required for use. Therefore, it is another important object of the present invention to provide the closure of the container with a compartment completely housed therewithin and provided with an independent lid and within which compartment matches, burner tips and other small articles, as referred to above, may be carried. The invention, in this respect, also contemplates providing a compartment for matches which will be substantially fluid tight so that there will be little likelihood of the matches becoming damp and unfit for use.

The compartment referred to above, however, serves another purpose of considerable importance. Ordinarily, carbide containers of this class, are made of light sheet metal and they are usually carried in the hip pocket. Also they are usually transversely of arcuate form so as to fit within the pocket without causing inconvenience, but because of the nature of the material from which they are formed, and their shape, their walls are liable to be sprung in particularly in the act of stooping or bending. In some types of such containers this causes a distortion of the top of the body so that the closure will not properly fit in place, and, ordinarily, where the container body is provided with a removable closure having a depending marginal flange fitting over the open top of the body, inward springing of the walls of the body establishes a space between the said walls and the depending flange of the cover through which the carbide may sift into the miner's pocket. It is, therefore, one of the primary and most important objects of the invention to so arrange the match compartment within the cover for the body of the container that when the cover is upon the body, the walls of the body will be firmly braced against inward springing and there will be no likelihood of the walls becoming distorted or of the carbide sifting from the container between the walls of the body and the depending flange of the cover. It is also an important object of the invention, in this connection, to so form the portion of the cover which surrounds the pouring opening therein that further reinforcement will be afforded the walls of the body of the container.

In the accompanying drawings:

Figure 1 is a perspective view of the container embodying the invention;

Figure 2 is a vertical transverse sectional view taken substantially on the line 2—2 of Figure 1 looking in the direction indicated by the arrows;

Figure 3 is a vertical front to rear sectional view through the container substantially on the line 3—3 of Figure 1 looking in the direction indicated by the arrows;

Figure 4 is a horizontal sectional view substantially on the line 4—4 of Figure 2 looking in an upward direction as indicated by the arrows.

The body of the container is indicated in general by the numeral 1 and this body is of substantially flat form, its opposite broader walls being, however, preferably curved transversely on concentric lines so as to adapt the body to fit snugly within the hip pocket and without causing inconvenience. In itself the body of the container is entirely open at its top, and removably fitted to the open top of the body is a cover or closure which is indicated by the numeral 2. The body and closure 2 are preferably formed from light sheet metal although any other material found suitable for the purpose may be employed. The cover 2 comprises a top 3 having a marginal depending flange 4 which is preferably relatively deep and which is adapted to fit down over and circumscribe the open upper end of the body 1 when the closure 2 is in place upon the body. In filling the body of the container, the closure 2 is bodily removed therefrom thus uncovering the entire open top of the said body and permitting of the ready introduction of the carbide into the body. However, in discharging the carbide from the container it is not desirable to have so large an area of the open top uncovered for under such conditions, unless extreme care is exercised the carbide is liable to be scattered and wasted as it is difficult to discharge it in small quantities from the body of the container and through the relatively small filler opening of the acetylene lamp. Therefore, the top 3 of the cover 2 is, in accordance with the present invention, formed with a pouring opening which is indicated by the numeral 5, this opening being preferably formed by stamping out a circular piece of the top 3 close to one end of the said top and thus forming a depending annular flange 6 which constitutes the wall of the opening. As stated, the opening 5 is located close to one end of the closure 2, and the flange 6 at one side is preferably substantially concentric to the flange 4 of the closure at said end thereof. In other words, the opposite broader walls of the body 1 of the container are, as stated, transversely curved on concentric lines, the narrower walls of said body are likewise transversely curved and merge with the said broader walls, the flange 4 of the closure 2 being similarly formed, and the annular flange 6 at that side which is next adjacent the end of the cover 2, is located close to and concentric to the inner side of the flange 4 of the closure. Then when the closure is fitted onto the body of the container, the upper edge portion of the wall of the body 1 will for a portion of its length fit snugly between the flange 4 of the closure and the flange 6 which surrounds the pouring opening 5, and will therefore be braced against any inward springing. A lid 7 is provided for normally closing the opening 5 and is preferably stamped or otherwise formed from sheet metal and comprises a dished body 8 of a diameter to fit snugly within the opening 5 and the surrounding flange 6 and provided with an outstanding circumscribing flange or rim 9 which is hinged to the top 3 of the closure 2, as at 10, at that side of the opening 5 which is remote from the end of the closure 2. The portion of the rim 9 opposite the hinged side of the lid 7 preferably projects slightly beyond the top 3 of the closure so as to provide a lip portion 11 which may be conveniently engaged by the finger for swinging the lid to open position.

The match compartment heretofore referred to is indicated in general by the numeral 12 and the said compartment comprises a bottom 13 and a surrounding wall 14. The compartment may be provided in any manner, as for example by being stamped from the top 3 of the closure and depends from said top and is completely housed within the enclosure. The sides and ends of the wall 14 of the compartment are concentric to the sides and ends of the flange 4 of the closure 2 and are located relatively close thereto so that only a narrow space separates the wall of the compartment from the said flange of the closure. The compartment 14 opens at its top through the top 3 of the closure and a lid 15 which is preferably formed from sheet metal, is hinged at one side, as at 16, to the top 3 of the said closure. The lid 15 preferably comprises a dished body 17 which is designed to seat snugly within the open top of the compartment 12, as clearly illustrated in Figures 2 and 3 of the drawings. By reference to Figure 4 of the drawings it will be observed that when the closure 2 is fitted onto the body of the container, the upper portions of the sides and ends of the wall of the body will fit snugly into the space between the flange 4 of the closure and the confronting walls 14 of the compartment 12 in the same manner that the upper edge portions of the walls of the body fit snugly in the space between the flange 6 and the flange 2. As a consequence of this construction, the closure 2 is not only more securely retained in place upon the body of the container but, as a very desirable feature, the walls and particularly the broader arcuate walls of the container body are firmly braced against inward springs so that any compressive force which might be

exerted against these walls in the act of the miner stooping or bending will not result in a distortion of the walls nor in an inward springing of the walls in a manner which would permit the carbide to sift out from the container through the space thus established between the wall of the body of the container and the flange of the closure 2. The lid 15 is preferably provided with an outstanding flange 18 which is designed to rest upon the upper side of the top 3 of the closure 2 in the closed position of the lid, and this flange at one portion projects outwardly beyond the edge of the said top 3 to provide a lip 19 which may be conveniently engaged for the purpose of swinging the lid to open position. As previously stated, the compartment 12 constitutes a receptacle for matches and small repair parts for the lamp, or in fact any other small articles which it may be necessary for the miner to carry with him.

Having thus described the invention, what is claimed as new is:

1. A container comprising a body having an open top, a closure for the said top of the body having a depending marginal flange designed to fit about the upper edge portions of the walls of the body, the closure having a pouring opening therein and provided with a flange surrounding said opening and, in the applied position of the closure, engaging the inner sides of the walls of the body at the open top thereof and relatively bracing said walls against inward displacement, and a closure for the said pouring opening.

2. A container comprising a body having an open top, a closure for the said top of the body having a depending marginal flange designed to fit about the upper edge portions of the walls of the body, a compartment forming a fixed part with the closure and depending within the same and having walls extending close to the inner side of the flange of the closure whereby to provide a space in which the upper edge portions of the walls of the body are snugly received when the closure is in place upon the open top of the body, and a closure for the compartment comprising a depressed body member designed to fit snugly within the top of the compartment and having a marginal flange provided with an outstanding lip projecting beyond the plane of the flange of the closure for engagement by the finger to effect movement of the compartment closure to open position.

3. A container comprising a body having an open top, a closure for the said top of the body having a depending marginal flange designed to fit about the upper edge portions of the walls of the body, the closure having a pouring opening therein and being provided with a depending flange surrounding the said opening and extending relatively close to the inner side of the closure flange in position to engage the inner sides of the upper portions of the walls of the body, and a closure for said opening having a lip projecting therefrom and beyond the plane of the said closure flange.

In testimony whereof I affix my signature.

ELI ISRAEL. [L. S.]