

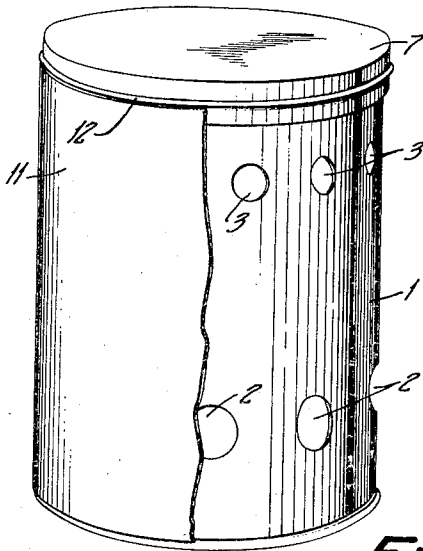
April 7, 1936.

C. A. SIMMONS

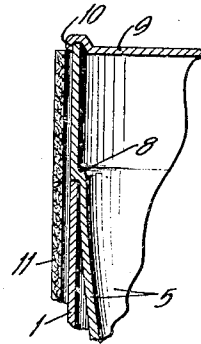
2,036,611

CONTAINER

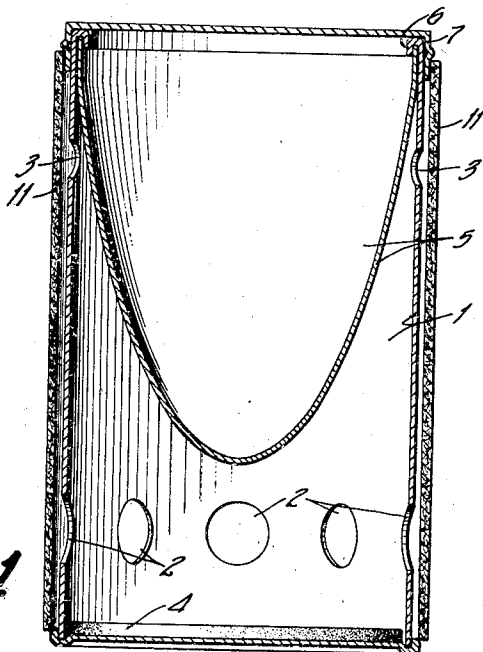
Filed Oct. 12, 1932



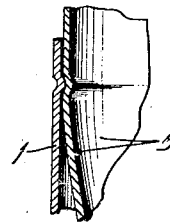
**FIG. 2**



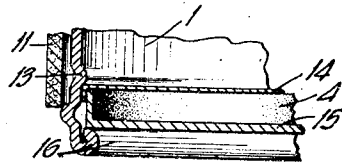
**FIG. 3**



**FIG. 1**



**FIG. 4**



**FIG. 5**

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## UNITED STATES PATENT OFFICE

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## CONTAINER

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Application October 12, 1932, Serial No. 637,381

5 Claims. (Cl. 126—262)

My invention relates to packages or containers and particularly to a device of this character adapted to hold a food or other substance, which it is desirable to serve or use in a hot or heated condition. It is particularly adapted for use as a package or container for the sale of coffee, tea, soup, beans and other food products which are preserved by sealing in a can. My package is provided with means whereby the contents of the can can readily be heated without the use of any other container or any heating means other than that forming part of the package itself.

The objects of my invention are to provide a package in which foods, drinks or other substances which it is desirable to serve or use in a heated condition may be sold and which will include as a part of the package a novel, self-contained heating device requiring only ignition to heat quickly the substance contained in the package. Another object is to provide a device of this character having a novel means for extinguishing the fire when the substance is heated to the desired point and which also provides a novel means for conveniently handling the heated package without danger of being burned. A further object is to provide a package of this character which is so cheap that it can be cast aside after having been used once.

My invention, therefore, includes the novel elements, the combinations and arrangements thereof described below and illustrated in the accompanying drawing in which

Fig. 1 is a vertical sectional view through one form of my container;

Fig. 2 is a perspective view of my container with certain parts thereof broken away to show the construction;

Fig. 3 is a fragmentary vertical sectional view of a modified construction;

Fig. 4 is a fragmentary vertical section similar to Fig. 3 showing a modified construction; and

Fig. 5 is a fragmentary vertical section showing a modification.

Referring to the drawing, 1 represents a cup-like receptacle, preferably of tin, the sides of which are provided with perforations 2 spaced somewhat above the bottom and perforations 3 spaced somewhat below the top. In the bottom of the container is a disk 4 of some form of solid fuel, such, for example, as that sold under the well known trade name of Sterno.

Nested within the can or cup-like receptacle 1 is a second cup-like receptacle 5 secured to the cup 1 at the top by spinning over a portion 6 of the outside cup. The inner cup is preferably of

the shape shown in Fig. 1 and is spaced from the outer cup, except where they are fastened together, to permit flames from the combustion of the solid fuel 4 to come in contact with substantially the whole of its exterior.

The food or other substance to be heated is contained in the inner cup 5, and where it is not necessary to hermetically seal the inner cup in order to preserve the contents a simple easily removable cover 7 may be slipped over the upper end, as shown in Figs. 1 and 2.

Where it is necessary or desirable that the inner receptacle 5 be hermetically sealed to preserve the contents, I prefer to extend the sides of the inner cup 5 somewhat above the upper edge of the outer cup 1, as shown in Fig. 3. Here the inner cup is provided with a struck-out portion 8, which is adapted to rest upon the upper rim of the outer cup 1 and limit the distance which the inner cup extends into the outer. On this type of container a top 9 may be spun over and soldered to the inner cup, as shown at 10, so that it is hermetically sealed in a manner well understood in the canning art.

Surrounding the outer cup 1 is a tube of heat insulating material 11, which may be thick paper, boxboard or other preferably flexible material of sufficient width to permit the heated can 1 to be grasped and lifted without burning the hand. The heat insulating tube is slipped over the outer can during the assembling operation and may be retained in position by the cover which in the form illustrated in Fig. 2 is provided with a bead 12. In this manner a compact unit is provided, the tube being readily withdrawable from the can to render the same operative after the cover has necessarily been removed by the consumer.

One of the many uses to which my container is adapted is for coffee or tea. For example, a small bag of tea or a small bag of coffee may be placed in the inner receptacle 5 together with several lumps of sugar and a small container of evaporated milk. In such a case it is probably not necessary or desirable to hermetically seal the top of the can and a cover, such as shown at 7, in Figs. 1 and 2 may be employed. Such a package would be very convenient for soldiers, motorists, fishermen, etc. and one or two cups of hot coffee may be prepared in about three minutes. All that is necessary is to remove the cover 7, withdraw the heat insulating outside element by pulling it vertically off the can, take out the sugar and cream, leaving the coffee or tea bag therein and add water. The fuel is then ignited by means of a match thrust through one

of the openings 2 and the contents will be brought to the boiling point in about three minutes.

To extinguish the blaze, the heat insulating tube 11 is merely slipped down over the outer can to its original position as shown in Figs. 1 and 2. This substantially seals the perforations and, shutting off the supply of air to the fuel, causes the flame to be extinguished. Thereafter by grasping the heat insulating tube firmly and thus pressing it slightly against the can, it is possible to pick up and handle the heated container without danger of burning. In other words, the heat insulating container has two functions, one to extinguish the blaze, and the other to form a convenient holder for the heated receptacle. By means of this holder the device may be used as a cup if desired.

Where it is desirable in order to preserve the contents of the inner receptacle that it be hermetically sealed, the forms shown in Figs. 3 and 4 are preferably employed. These types of construction leave plenty of room between the top of the inner receptacle and the zone of connection between the two for the removal of the top of the inner one by means of the ordinary opener without destroying the unity of the structure.

Where the fuel employed is of a more or less volatile character, evaporation thereof can be prevented either by coating it with a substance, such as paraffine, sealing it in a wrapper of air-proof material, such as cellophane, or incorporating the fuel in the device as shown in Fig. 5. Here, a bead 13 is rolled in the outer container 1 near the bottom thereof. A receptacle 15, cup-like in form, is provided within which the solid fuel 4 is deposited. A layer of cellophane 14 is extended to cover the open top of the receptacle 15, the edges thereof being permitted to lie without and adjacent the cylindrical side wall of the receptacle 15. The receptacle with its cellophane cover is then inserted through the open bottom of the container 1, the edges of the cellophane wedging between the inner surface of the container 1 and the side wall of the receptacle 15. The bead 13 limits the extent to which the fuel and receptacle therefor may be inserted within the container 1 and retains the same firmly in position when the bottom of the container is rolled over, as shown at 16, pressing the cellophane between the upper periphery of the receptacle and the bead 13. Hence, the fuel is securely held in an air-tight position at the base of the container 1 and the inflammable protective means therefor renders the fuel readily ignitable.

The package described above may, of course, be of any size whatever and the device obviously may be made so cheaply that it may be cast aside after use.

While I have described my invention in its preferred embodiments, it is to be understood that the words which I have used are words of description rather than of limitation and that changes within the purview of the appended claims may be made without departing from the true scope and spirit of my invention in its broader aspects.

What I claim is:

1. A container comprising means forming in the upper part thereof an enclosure adapted to

receive a substance to be heated, means forming in the lower part thereof a second enclosure adapted to receive a fuel for heating the contents of the upper enclosure, and a band of heat insulating material of sufficient width to be grasped by a user and extending laterally around said container but slidably removable therefrom.

2. A can-like container for a substance intended to be heated preparatory to use comprising a cup of thin sheet metal, a shell of thin sheet metal of somewhat greater depth than said cup laterally surrounding the same and having perforations for admitting air to support combustion therein, a fuel carrier in the lower portion of said shell; said cup being laterally spaced from said shell and having its sides directly exposed throughout the major portion of their extent from top to bottom to heat from the combustion of fuel in said shell; and a tubular element formed of low-heat-conductive material and of sufficient length to be grasped by the hand about said shell but slidably removable therefrom.

3. A can-like container for a substance intended to be heated preparatory to use comprising a cup of thin sheet metal open at the top to receive said substance, a shell of thin sheet metal of somewhat greater depth than said cup laterally surrounding the same and secured thereto near the top, a fuel carrier in the lower portion of said shell; said cup being laterally spaced from said shell, and said shell being perforated in spaced zones near the bottom and top thereof to provide a draft therethrough for the combustion of the fuel and to draw the hot gases of combustion upwardly between said shell and cup and about the sides of the latter; and a tubular element formed of low heat conductive material and of sufficient length to be grasped by the hand about said shell but slidably removable therefrom.

4. A container for a substance intended to be heated preparatory to use comprising a cup of thin sheet metal adapted to contain said substance, a shell of thin sheet metal having perforations therein and of somewhat greater depth than said cup secured thereto near the top and laterally surrounding the same, a fuel carrier in said shell below said cup, a lateral projection on the side of said shell, a closure for said cup projecting slightly beyond the sides of said shell, and a tube of heat insulating material surrounding said shell, and forming a holder therefor when hot, secured between said closure and said projection but slidably removable from said shell when said closure is removed.

5. The combination with a container comprising a can-like structure having a food compartment in the upper portion and a fuel compartment in the lower portion thereof, said fuel compartment having lateral openings adapted to admit air to support combustion of said fuel, of a tubular element of low-heat-conductive material surrounding said structure and of sufficient extent to be grasped by a user; said element being slidably removable from said container but flexible to such a degree that when grasped and slightly squeezed it will grip the container and permit the same to be lifted therewith.

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