Oct. 19, 1943. S. T. HOWARD 2,331,913

FIRE UNIT CARRYING CASE AND HEATER

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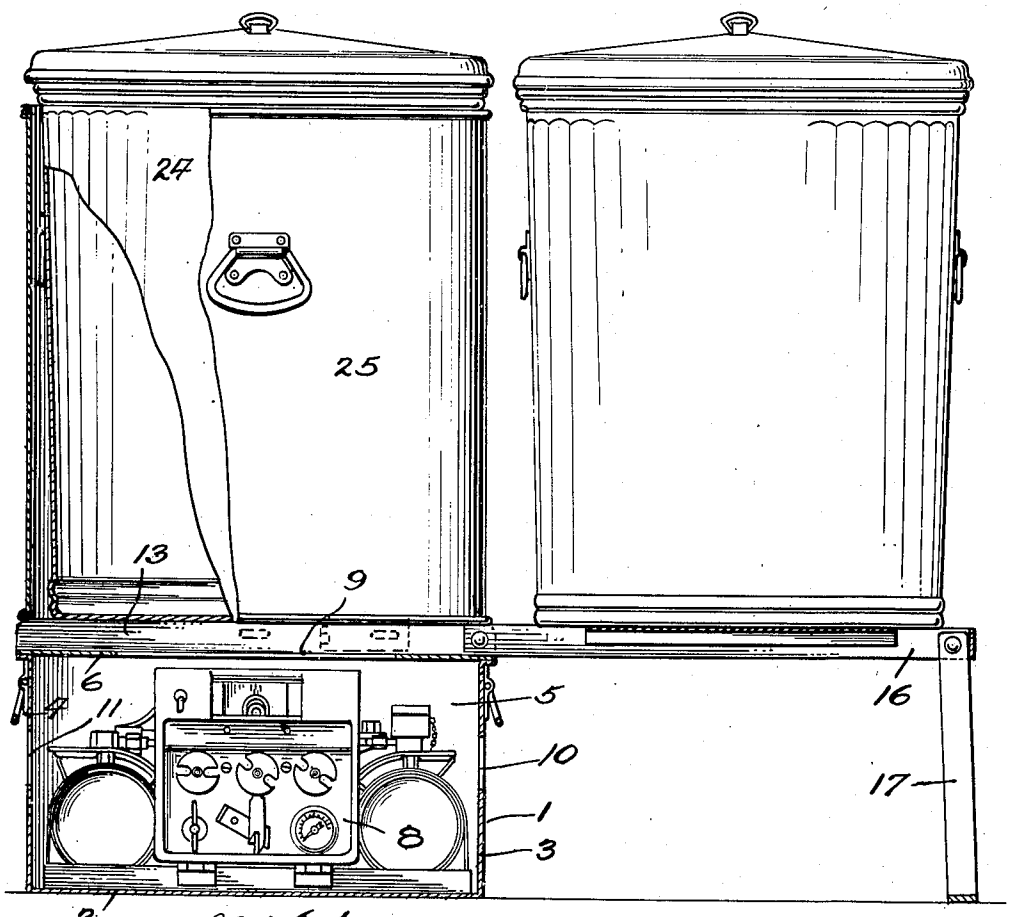


Fig. 1.

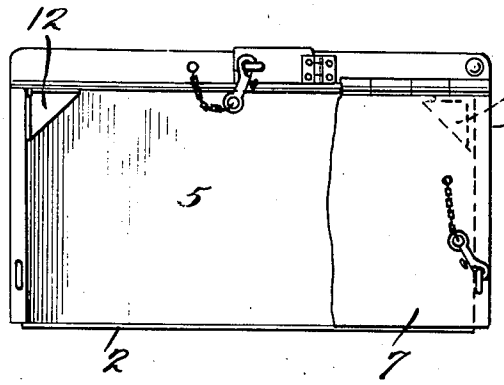


Fig. 2.

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Fig. 3

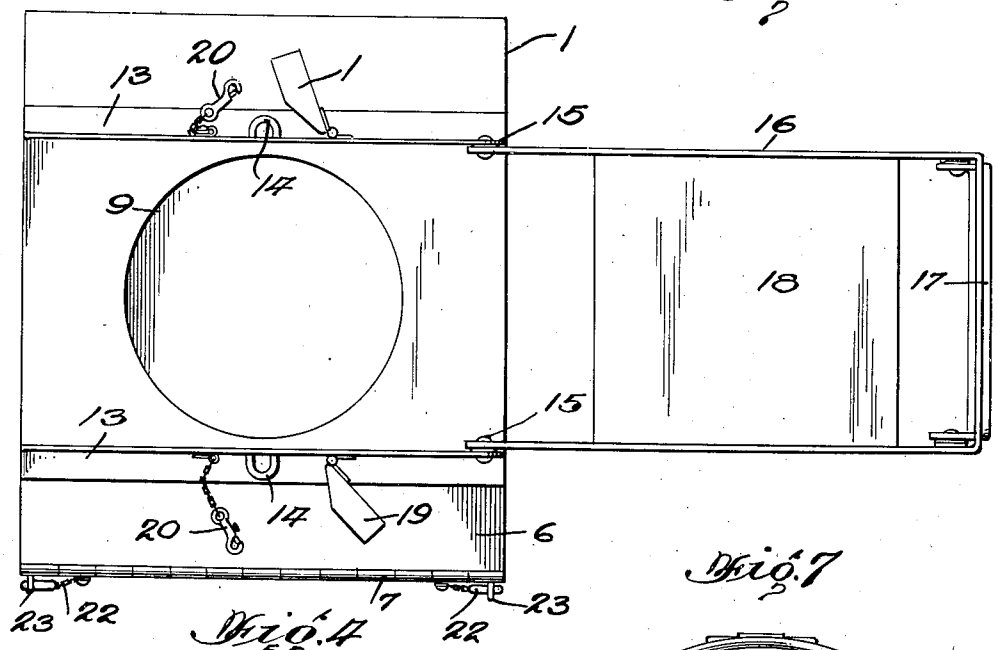


Fig. 7

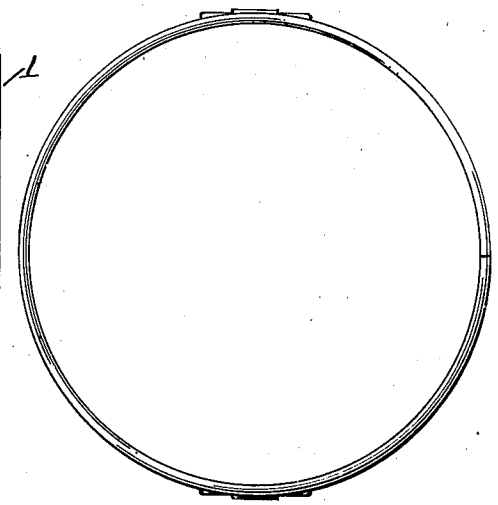
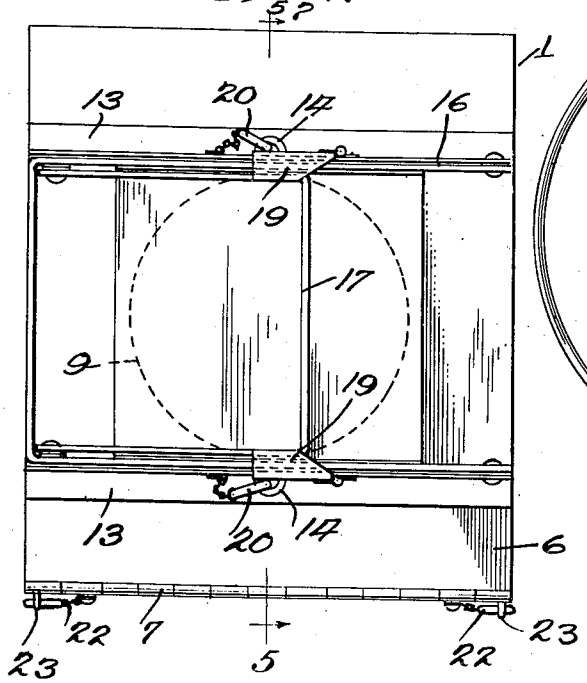


Fig. 4



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Fig. 5

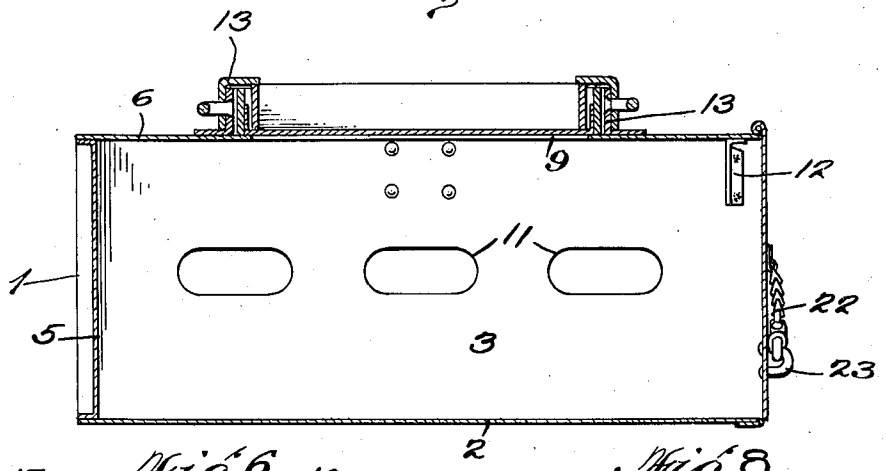


Fig. 6

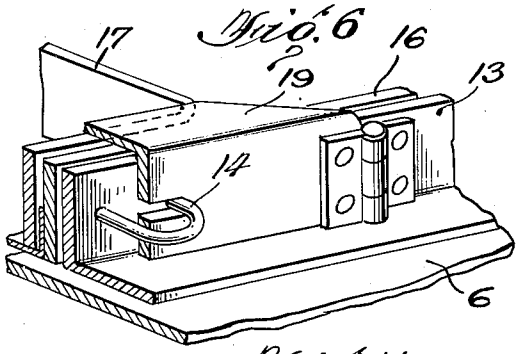
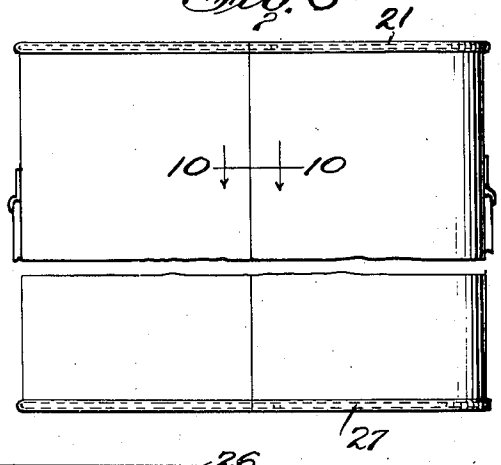
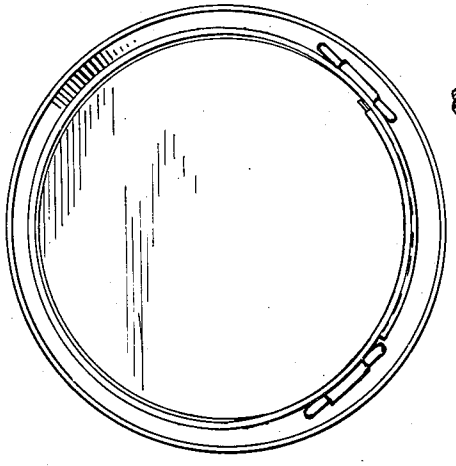


Fig. 11

Fig. 8





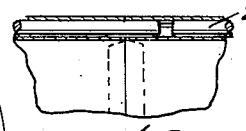
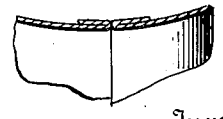


Fig. 9

Fig. 10



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Patented Oct. 19, 1943 2,331,913

UNITED STATES PATENT OFFICE

2,331,913

FIRE UNIT CARRYING CASE AND HEATER

Styles T. Howard, Jeffersonville, Ind.

Application June 4, 1941, Serial No. 396,577

1 Claim. (Cl. 126—9)

(Granted under the act of March 3, 1883, as amended April 30, 1928; 370 O. G. 757)

The invention described herein, if patented, may be manufactured and used by or for the Government for governmental purposes without the payment of any royalty thereon.

This invention relates to a fire unit carrying case provided with means for supporting receptacles for heating purposes, and particularly adapted to receive and effectively protect against injury during transportation, an extra fire unit issued with groups of portable ranges recently adopted by the Army.

Said carrying case with the burner therein, when desired, provides supporting means for receptacles such as G. I. cans for heating, for instance, water for washing and rinsing Army mess kits by troops. It will be understood that a wide range of uses may be made of the structure shown, including the heating of water in comparatively large quantities for culinary and sanitary purposes, to provide for the heating of living quarters with properly moistened air, and to provide a structure that is suitable at all times for one of the above uses and is not subject to limitation to any special form or capacity of burner, except as to one of a size that will enter the carrying case.

An object of this invention is to provide a simple, durable, and inexpensive structure adapted to inclose and fully protect from outside sources a fire unit from injury.

A further object in view is to provide a carrying case having an opening in its top and reinforcing members adjacent thereto on which a receptacle may rest over said opening, in which cooking or heating may be accomplished with the burner in its transportation position in the carrying case.

A further object in view being to provide means whereby the opening in the top of the case may be closed during transportation by an extension nested on the top of the case operating in the dual capacity of a closure for said opening or a support in its extended position on which a receptacle that has been formerly heated over the carrying case may rest.

A further object is to provide a carrying case for a fire unit adapted, when desired, to be operated as a heating means for a tent or barracks without removing the fire unit from the carrying case, it being necessary only to swing the pivotally mounted extension with its closure for the top of the carrying case to one side and, if preferred, a pan with water in it, resting over the opening in the case, to provide properly moistened heated air for the purpose desired.

A further object of this invention being, in addition to providing ample protection against injury to a fire unit for transportation purposes, to also provide for the use of the fire unit within the carrying case should it be in an exposed position, against interference with the operation of the fire unit by the elements on which practically any form of heating or cooking may be performed when an emergency arises and only a single fire unit is available.

The above and further objects will appear in the following specification and be further pointed out in the appended claim.

A preferred embodiment of this invention is shown and described, but it will be understood that changes in the form and minor details of construction may be resorted to without departing from the spirit of the invention.

Similar numerals indicating corresponding parts in all the figures of the drawings in which:

Fig. 1 is an elevation partly in section of my improved carrying case, showing a fire unit therein and a G. I. can arranged on top of the carrying case, and a second G. I. can arranged on the extension.

Fig. 2 is a front elevation with part of the front door of the case broken away.

Fig. 3 is a plan view of the carrying case with the supporting rack extended.

Fig. 4 is a similar view with the supporting rack folded and nested on the top of the carrying case.

Fig. 5 is a vertical section on line 5—5 of Fig. 4.

Fig. 6 is an enlarged detail perspective of one of the latches for locking the extension rack and the rack support in their nested positions on top of the carrying case.

Fig. 7 is a plan view of a semi-collapsible shield adapted to encircle a receptacle being heated to confine the heat from the heating unit adjacent to and in contact with the said receptacle.

Fig. 8 is a side elevation of the shield.

Fig. 9 is a detail elevation partly in section of the upper edge of the shield, showing the lapping of the bead wire for maintaining of abutting edges of the shield together when in use.

Fig. 10 is a horizontal section on line 10—10 of Fig. 8, showing the abutting edges of the shield during use.

Fig. 11 is a plan view of a receptacle with the shield collapsed and placed within the receptacle during transportation.

Similar numerals indicate corresponding parts in all the figures of the drawings in which 1 indicates the body of the carrying case, consisting of a base plate 2, right and left side plates 3

and 4, respectively, rear plate 5, top plate 6, and front hinged door 7, constructed of sheet steel or any other suitable material.

A fire unit as shown at 8 is arranged in the carrier and is adapted in the form shown to snugly fit within the carrier. Arranged in the upper plate 6 of the carrier is an opening 9 and air circulation openings 10 and 11 in its side plates 3 and 4 respectively. Corner braces 12 at the upper front corners of the case are adapted to reinforce the joint between the upper plate 6 and the side members at the front portion of the case.

Top reinforcing angles 13 are arranged adjacent to opening 9 in the top of the case and mounted in approximately the center of said members 13, in their outer faces are loops 14.

Pivotally mounted at the ends of said members 13, at 15, is a rack 16 adapted to be folded over the top of the case within the members 13, or swung outwardly as an extension to the reinforcing members 13 for the reception of a container, and is supported in said outward extended position by a supporting rack. Mounted on the pivotally mounted rack 16 is a plate 18 adapted when the rack is folded down on top of the case to close the opening 9 in the top of the case.

With the parts nested a latch pivotally mounted on the member 13 is adapted to swing over and clamp the members in their folded and nested positions. Loop 14 passes through the latch and a captive snap 20 engages the loop outside of clasp 21.

Captive snaps 22 engages loops 23 passing through the front hinged door at its edges and maintains same in its closed position.

As shown in Fig. 1, a G. I. can 24 may be placed in position on reinforcing members 13 and heated, from which position it may be slipped over on the supporting rack 16 and a second G. I. can heated, two being ordinarily used, one for washing and the other for rinsing Army mess kits, or other food containers when required.

To facilitate the heating, a collapsible sleeve or shield is arranged around the receptacle being heated, which confines the heat from the burner adjacent to the receptacle, preventing dissipation of the heat after leaving the case. Said shield is preferably formed of sheet metal having reinforcing wires 26 at its extremities, the ends of which are adapted to enter sheet metal rolls 27 in the shield when same is in its extended position. For convenience in transporting said shields, the ends of the wires are disengaged from the metal rolls at the top and bottom of the shield, one of its edges pushed inwardly within the other to make a tubular member of less diameter than the interior of a G. I. can, into which it is inserted when not in use as shown in Fig. 11.

Having fully described my invention, what I claim and desire to secure by Letters Patent is:

A combined carrying case for a self-contained burner and support for a receptacle adapted to be superimposed thereon to be heated when a burner is operated within the case comprising, a body having base, side, rear and top walls rigidly connected and adapted to receive a self-contained burner, an opening arranged in the top plate of the case for the passage of heat from the enclosed burner into contact with a superimposed receptacle, angle iron reinforcing and supporting members arranged across the top plate of the carrying case adjacent to said opening, having flanges extending vertically from the top plate, adapted to support the superimposed receptacle thereon to be heated, a folding receptacle supporting rack having side arms pivotally mounted at their ends on said vertically extending flanges of the angle irons, said rack adapted to form a receptacle support at one side of the case when extended and nest when folded between the upwardly extending flanges of said angle iron supports, a plate extending between said side arms of the supporting rack adapted to reinforce said arms and cover the opening in the top plate of the carrying case when the rack is folded, and a rack pivotally mounted on the free end of the receptacle supporting rack adapted to support the outer free end of said receptacle supporting rack when in its extended position and nest between the arms of said receptacle supporting rack on top of the case when the parts are folded, adapted to provide a compact structure for purposes of transportation, said case having a hinged front wall adapted to permit the insertion of a self-contained burner into said case and access to the controls of the burner when being operated within the case for heating purposes.

STYLES T. HOWARD.