

[54] **MODEL 2600 CAMPING STOVE DESIGN**

[75] Inventors: **Bernard E. Fick, Tulsa, Okla.; Kim Yamasaki, Lombard, Ill.**

[73] Assignee: **Brunswick Corporation, Skokie, Ill.**

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[51] Int. Cl. **F24c 5/20**

[58] Field of Search..... **126/38, 44, 215**

[56] **References Cited**

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Primary Examiner—Edward G. Favors

[57]

ABSTRACT

The invention is a portable camping stove having two burners. The burners are housed in separate casings, which casings are hinged together so that the burners fold face-to-face and the folded housing takes on the appearance of a briefcase. The top side of each casing is removable and comprises a drip pan for the burner. A pressure regulator is disposed within one of the burner casings and a flame control regulator is mounted on the front of each burner casing. A wind-screen for each burner folds to a stored position over each casing.

5 Claims, 6 Drawing Figures

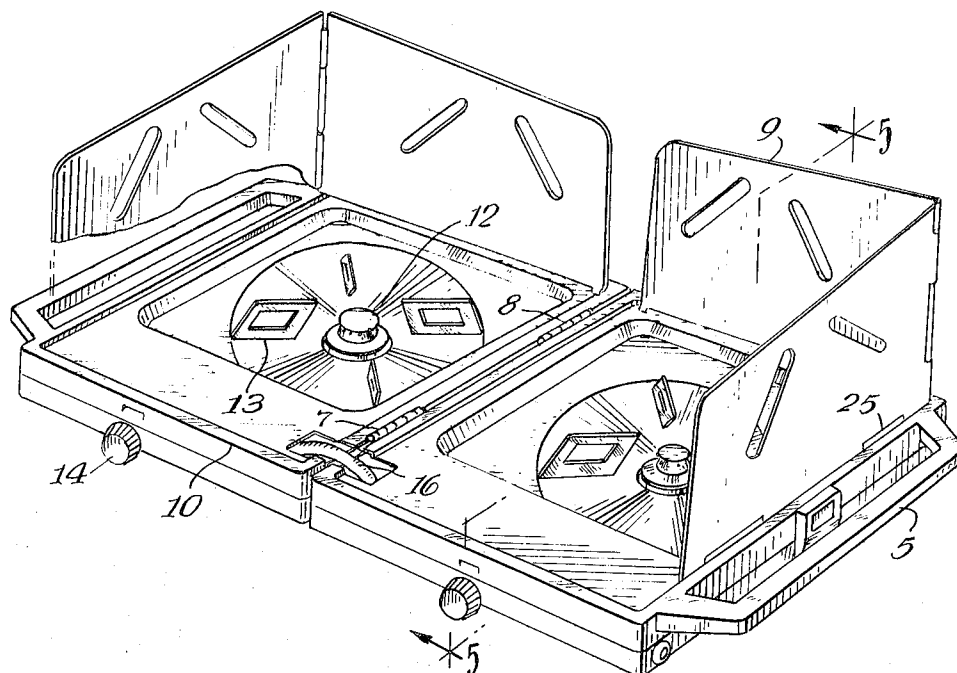


Fig. 1

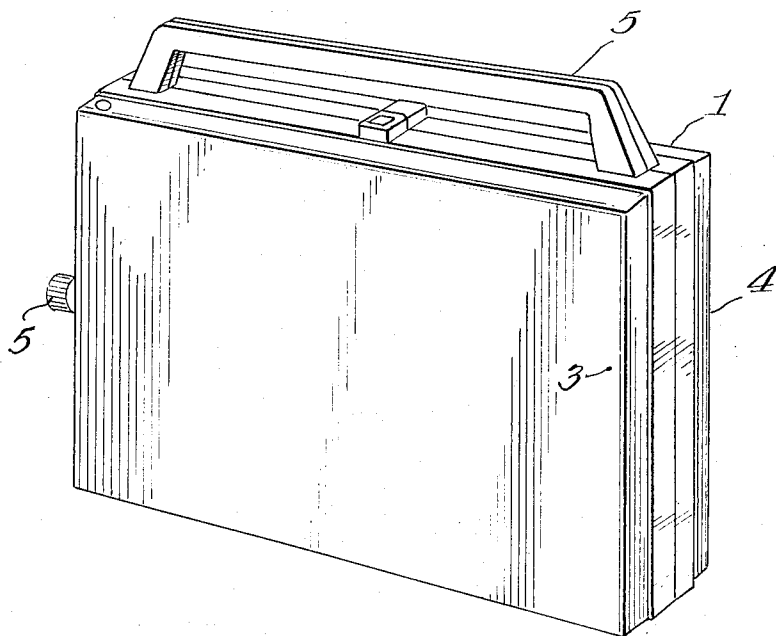


Fig. 2

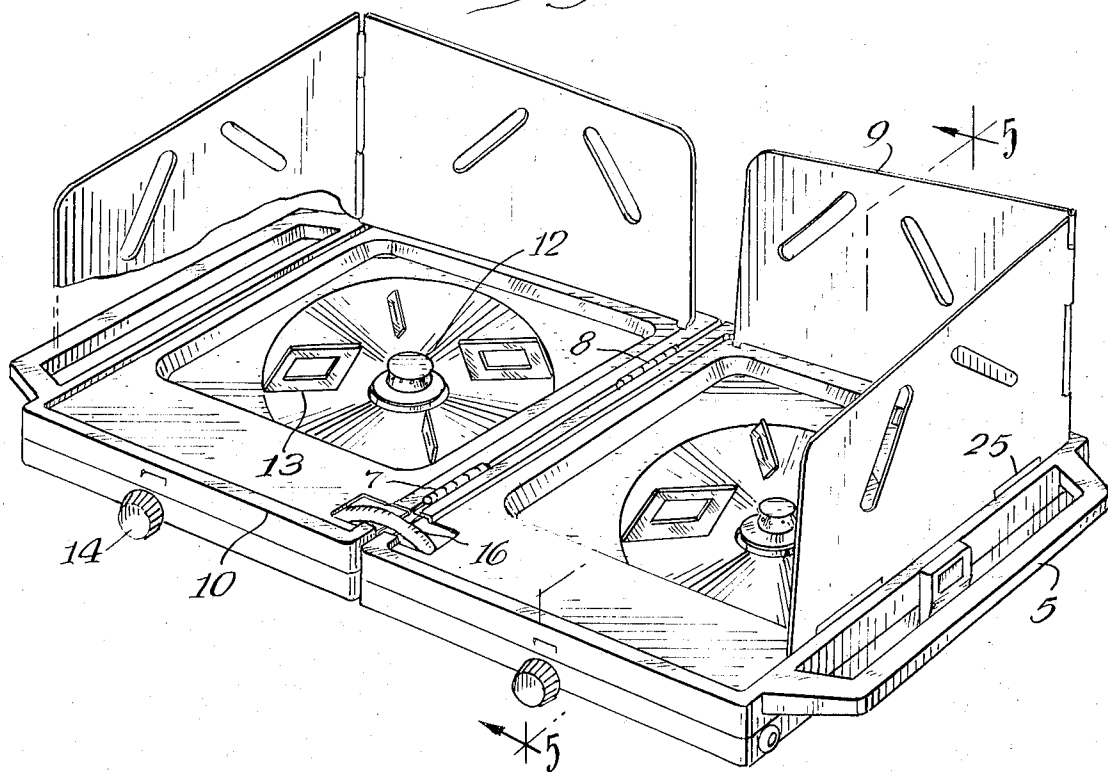


Fig. 3

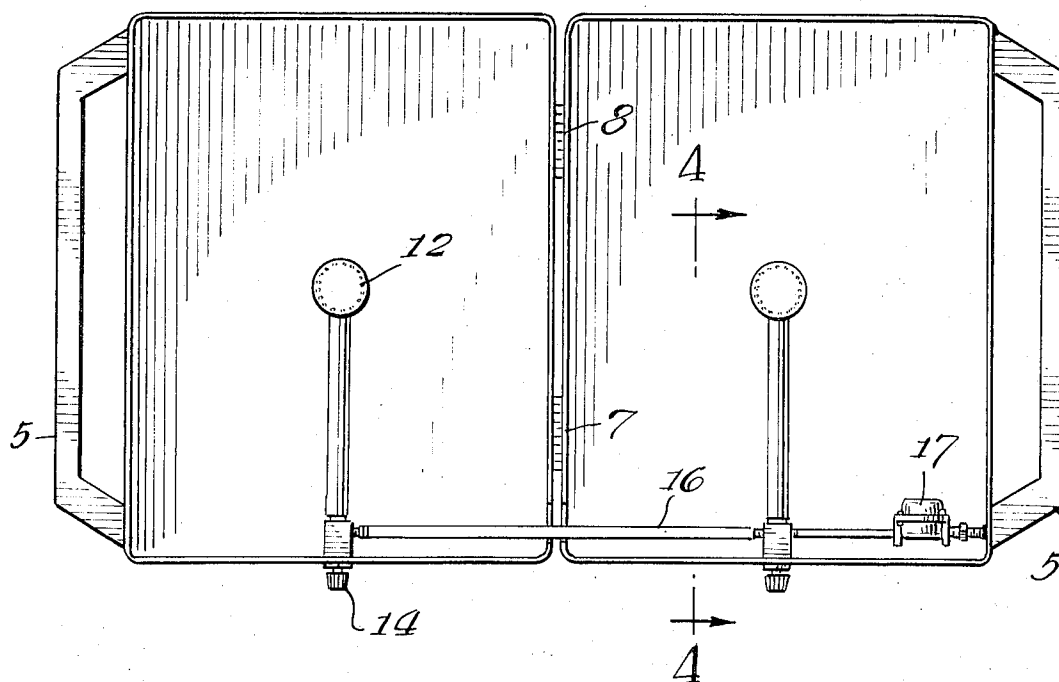


Fig. 4

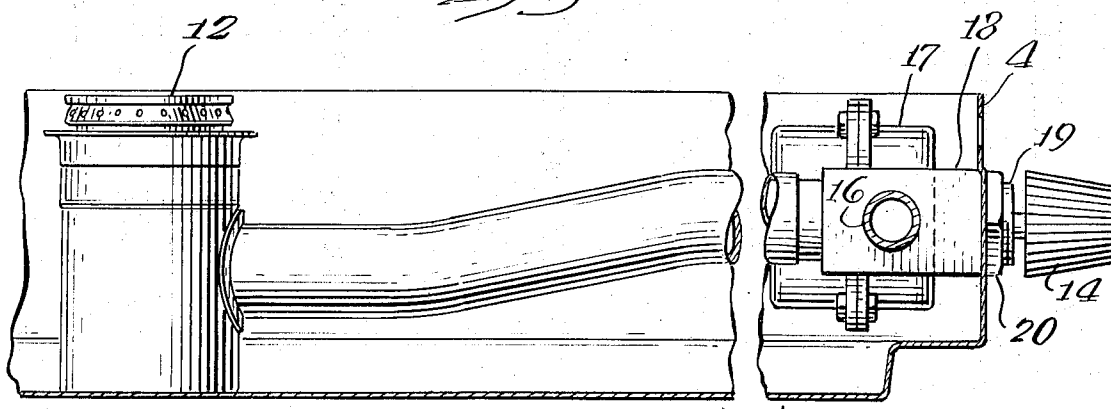


Fig. 5

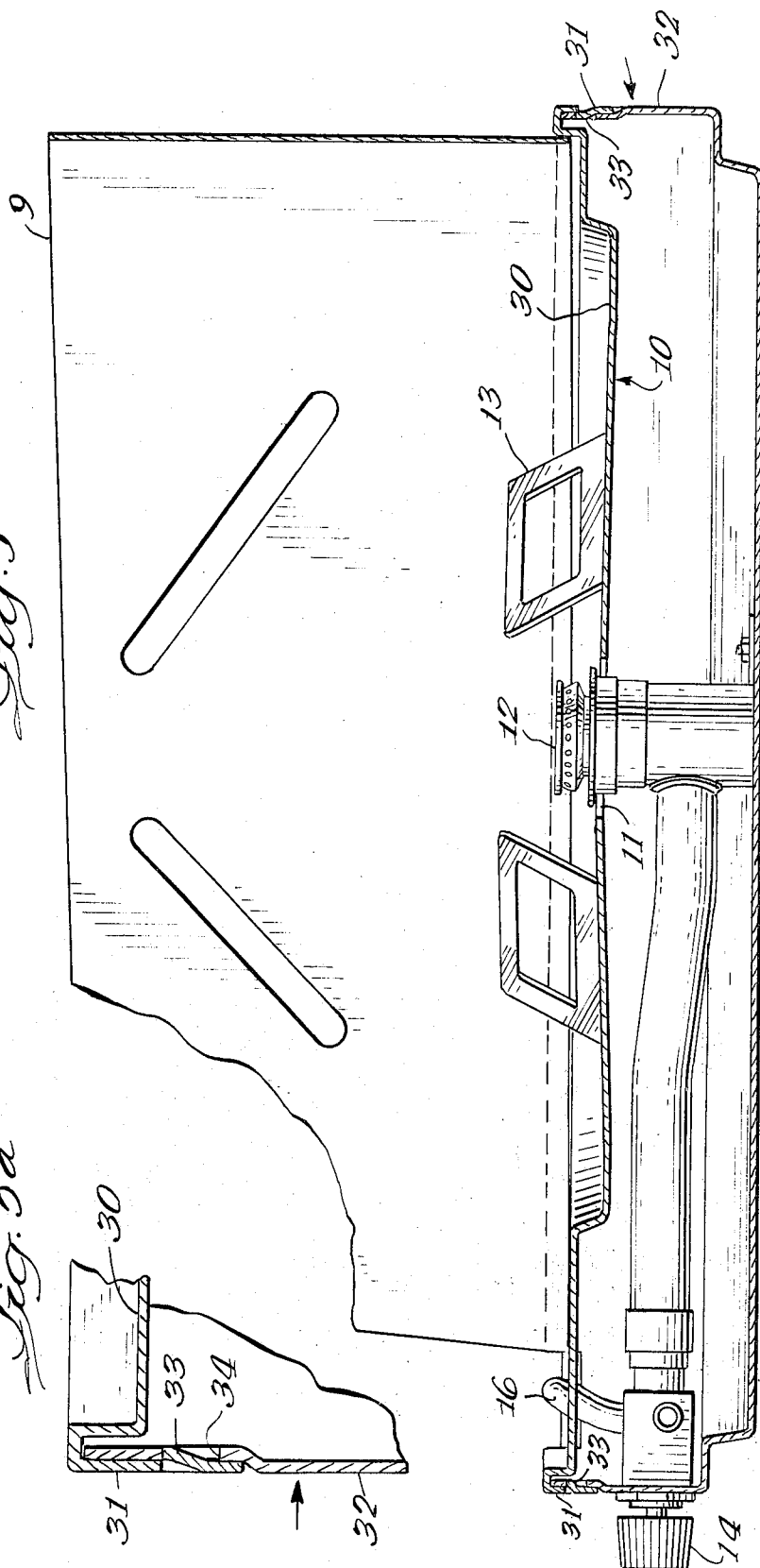
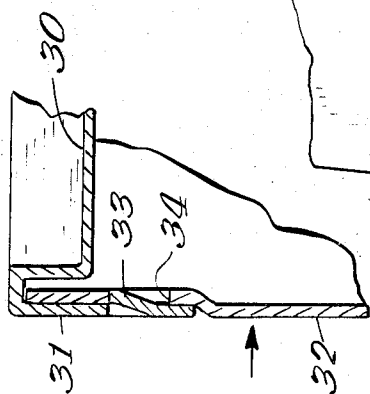


Fig. 5a



MODEL 2600 CAMPING STOVE DESIGN

BACKGROUND OF THE INVENTION

With the ever-expanding interest in camping and less formal summer travel, through the use of trailerable ten configurations and campers of other sorts, interest in portable propane cooking stoves has been stimulated. The stove described in the specification was designed and developed to be reliable, attractive, and easily converted between the folded and operating configurations.

A particular objective of the invention is to provide a compact stove which will be attractive and of such size and shape as to lend itself easily to packing in automobiles, campers and the like.

Another objective of the invention is to provide a stove which can be used with a typical high-pressure propane tank readily available on the market without the necessity of also purchasing a special regulator valve for such a tank.

A further objective of the invention is to provide a stove having a maximum cooking area with minimum overall size.

SUMMARY OF THE INVENTION

Briefly, the invention comprises a two-burner stove, each burner being housed in a rectangular casing. The casings are hinged together so that they may be folded with the burners face-to-face, and form a briefcase style carrying case for the stove. The top surface of each casing comprises a removable drip pan surrounding each burner and has mounted thereon means for supporting a working utensil above the burner head. A handle attached to one or both of said casings provides means for carrying the base. A fuel supply line extends from the exterior of one of said casings to one burner and thence through a flexible extension to the other casing and the second burner. A pressure regulator mounted within said first casing regulates the pressure of the fuel supply to the burners. A folding windscreen is provided for each burner, together with means for foldably attaching said screens to the associated burner casing. Flame regulator controls are mounted to each burner with control knobs extending to the exterior of the housing. A latch secures the burner casings together in the folded position.

Among the advantages of the invention are:

The stove is small and light in weight with a cooking area twice its folded size.

Grill is eliminated to ease maintenance and cleaning.

Drip pans are removable for ease in cleaning and accessibility to the stove interior.

A pressure regulator is incorporated within stove housing to facilitate hookup to a fuel supply.

A separate folding windscreen is provided for each burner.

A BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of the stove of the invention in the folded condition.

FIG. 2 is a perspective view of the stove of the invention in the opened condition and ready for use.

FIG. 3 is a plan view of the stove of the invention with the drip pans removed.

FIG. 4 is a side view of a burner suitable for use in the invention, taken along the line 4—4 of FIG. 3.

FIGS. 5 and 5a show exploded cross-sectional views of a burner housing illustrating the structure and removability of the drip pan.

DETAILED EMBODIMENT OF THE INVENTION

Referring to FIG. 1, the case 1 for the stove is illustrated in the folded position. The case is comprised of a left burner casing 3 and a right burner casing 4, a carrying handle 5 and a latch 6 to hold the case in the folded position.

Referring to FIG. 2, the burner casings 3 and 4 of the case are hinged together along a common side by hinges 7 and 8, which permit the casings 3 and 4 to be folded upwardly and together face-to-face.

A windscreen 9 is provided along the back and down the outside of each burner. Preferably, each windscreen will be pivotally attached to its housing as by hinges 25 in a manner which permits its being folded flat onto the surface of the burner during storage.

The top surface of each housing 2 and 3 includes a drip pan 10 having an aperture 11 therein to accommodate the upwardly extending burner head 12. In the absence of a grill, suitable means, such as the trapezoidal brackets 13, must be provided on the surface of the drip pan 10 to support a cooking utensil above the burner head 12.

A burner flame control knob 14 for each burner extends outwardly from the front of each burner casing in the direction of the user. Rotation of the knob 14 in the conventional manner regulates the flame of the burner 12.

FIG. 3 shows the stove with the drip pans 10 removed. The burners 12 are supplied by a single fuel line 16 which may penetrate the casing 1 at any convenient point.

A particularly unique feature of the stove is the incorporation of a pressure regulator valve 17 within the casing 1. While the pressure regulator valve 17 may be one of a variety readily available on the market, its incorporation within the casing 1 ensures ease of connection and safe operating conditions over a broad range of fuel supply pressures.

As the fuel line 16 must pass from housing 3 to housing 4, and thus be subjected to bending in the process, care must be taken to eliminate any sharp edges which could abrade or cut the fuel line upon the closing of the case.

FIG. 4 is an illustration of a burner suitable for use with the stove of the invention. Such burners are well known to the art and do not comprise a part of this disclosure. The top of the burner 12 falls below the top edge 17 of its casing so that when the casings 3 and 4 are folded together, their edges may meet without interference between the burner heads. A fuel control valve 18, of a type commonly available upon the market, is provided for each burner 12. The valve 18 may be secured to the inside of its casing 4 by providing a threaded section 19 which extends through an aperture in the casing 4, and providing a lock-nut 20, which may be threaded thereon to draw the valve body tightly against the casing wall.

Referring to FIG. 5, the top surfaces of the burner casings form a drip pan 10 and support the brackets 13 for positioning a cooking utensil above the burners.

The top surface 10 of the casing is depressed over a rectangular center portion 30, but domes slightly to the

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burner aperture 11 so that spills will flow toward the periphery of the depressed portion 30.

A particular advantage of the invention lies in the ease with which the top surfaces of the casings, referred to herein as the drip pans 10, can be removed from the housing. The outer edges 31 of the drip pans 10 overlap the side walls 32 of the casings 3 and 4, and are provided with small locking catches 33 which engage receiving apertures 34 in the side walls 32. The drip pans 10 are removed simply by pressing inwardly, as indicated by the arrows in FIG. 5 until the side wall 32 clears the catch 33 permitting the drip pan to be lifted clear of the casing.

While we have shown and described only particular embodiments of the present invention, it will be obvious to those skilled in the art that the illustrations given and the terms used herein are by way of illustration and not of limitation, and that additional changes and modifications may be made without departing from the present invention in its broadest aspects. Therefore, it is the intention of the appended claims to cover all such changes and modifications as fall within the true spirit and scope of the present invention.

We claim:

1. A folding portable cook stove comprising:
a housing including two burner casings and means for hinging said burner casings so that they fold to-

gether top-to-top;

a burner mounted within said casings and means within said housing for controlling the supply of fuel to said burners including a pressure regulator mounted within one of said casings;

each of said burner casings having a body and a top portion, and means for removably attaching said top portion to said body, said top comprising a drip pan for the burner, and having attached thereto means for supporting a cooking utensil above the burner head.

2. The stove of claim 1 further including a folding windscreen for said stove, comprised of an upstanding panel along the back of each burner and an upstanding panel along the outside of each burner, and means for foldably attaching said panels to said housing.

3. The stove of claim 1 further including a fuel supply line connected to a first of said burners, and a flexible fuel line connecting the fuel supply from said first burner to the other of said burners.

4. The stove of claim 1 further including a single fuel supply line connecting said burners to a source of fuel.

5. The stove of claim 1 further including windscreen means foldably attached to said housing for shielding the back and the outsides of each burner from wind.

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