United States Patent [19]

Arrogante

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[54] **HEATING APPLIANCES**

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[21] Appl. No.: **410,586**

Related U.S. Application Data

[63] Continuation of Ser. No. 203,579, Dec. 1, 1971, abandoned.

[30] **Foreign Application Priority Data**

Dec. 3, 1970 Spain 163579

[52] **U.S. Cl.** ..... **312/245,** 126/85 R, 312/236

[51] **Int. Cl.** **A47b 67/02**

[58] **Field of Search** ..... 98/114; 237/79; 126/92 R, 126/92 B, 85 R; 220/4 R, 4 A, 4 B, 44 A; 312/251, 249, 245, 244, 302, 236

[56] **References Cited**

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[57] **ABSTRACT**

This invention provides a portable heating appliance comprising a hollow housing providing space within for storing a supply of gas therefor, and a heater screen at its front face, being the component parts of the appliance housed in such housing, and a cover for the housing comprising a panel portion and a tray portion, the panel portion and the tray portion each having peripheral flange portions and the construction and arrangement of the appliance being such that the housing and the cover can be secured together to mount the housing in an upright position for use or transportation of the appliance.

3 Claims, 9 Drawing Figures

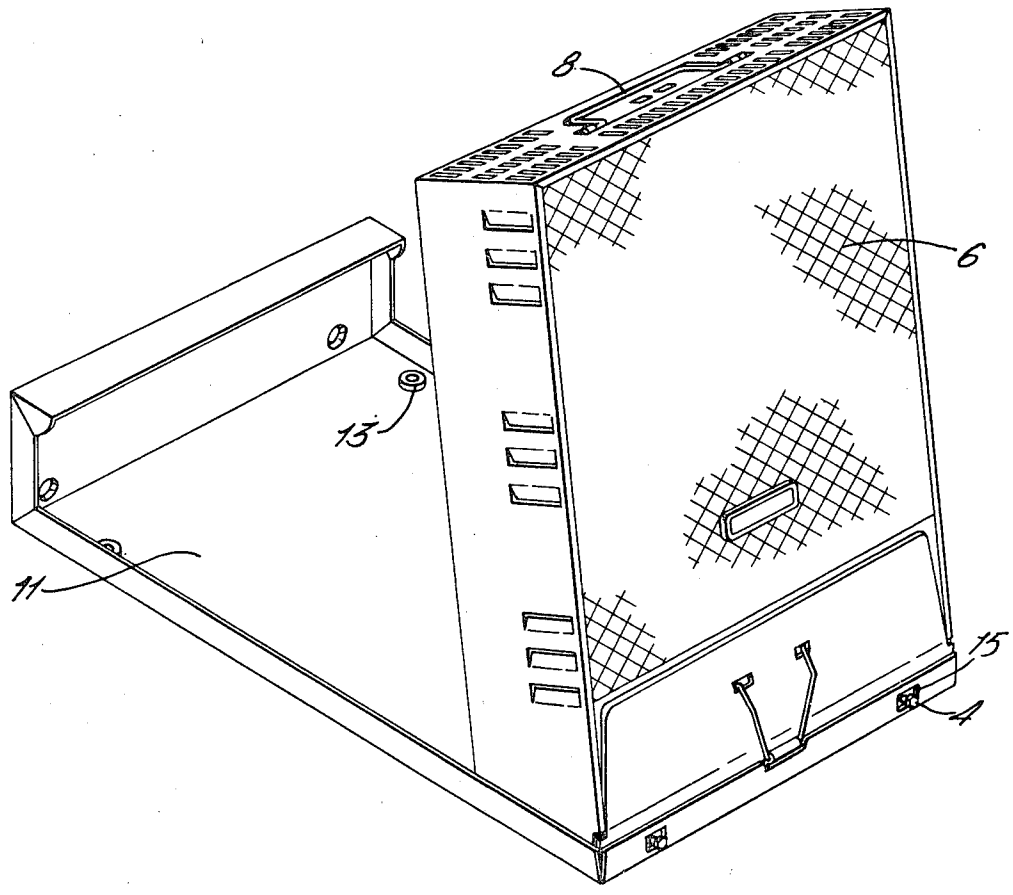


FIG. 1.

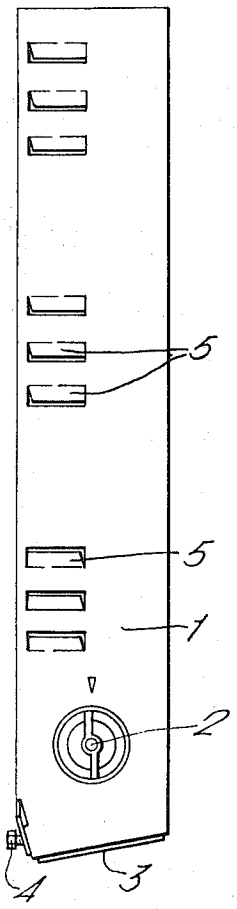


FIG. 2.

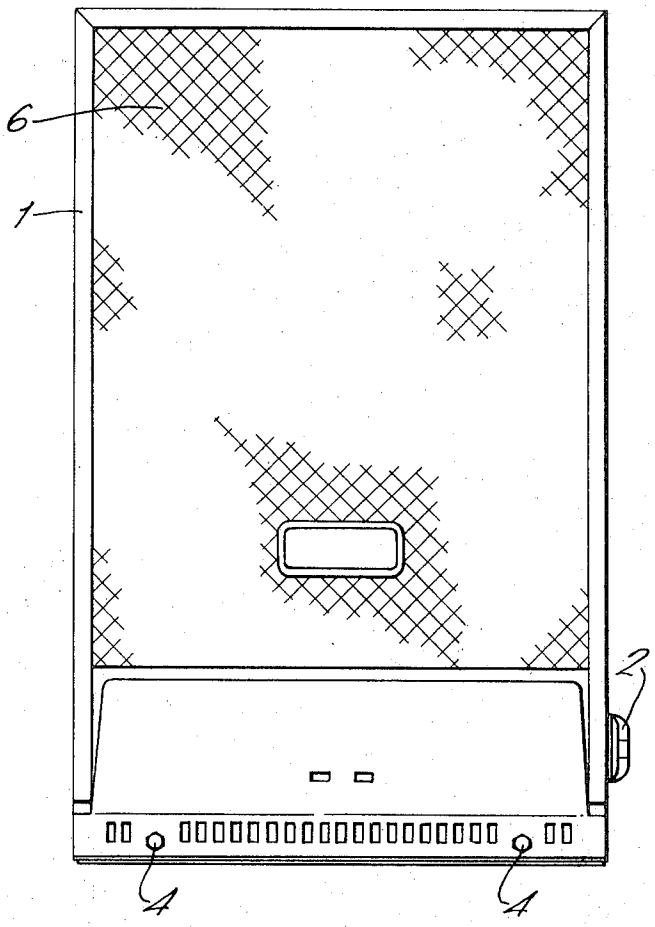


FIG. 3.

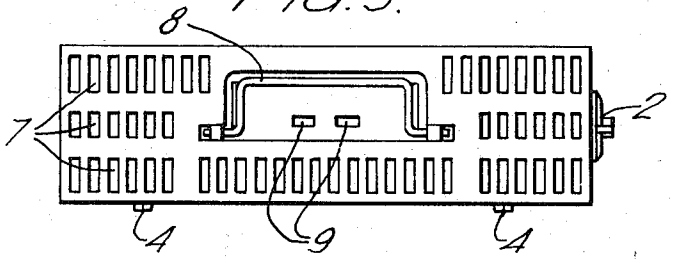


FIG. 4.

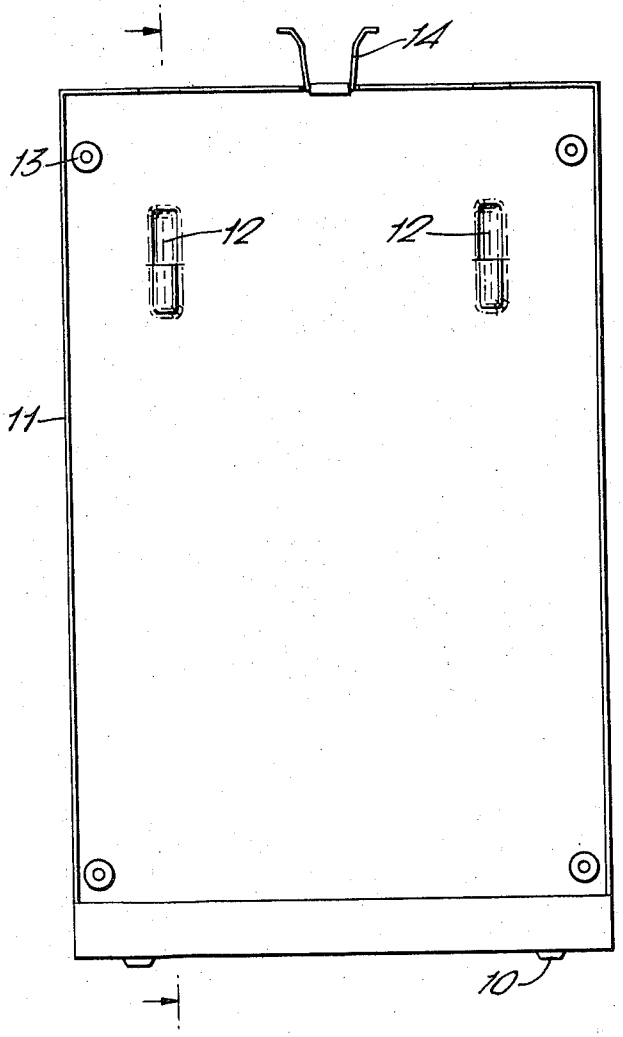


FIG. 6.

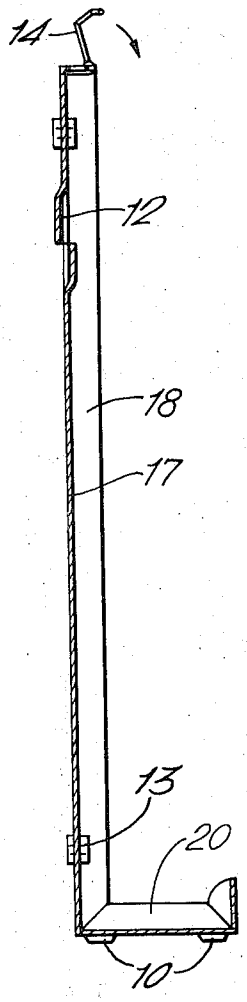
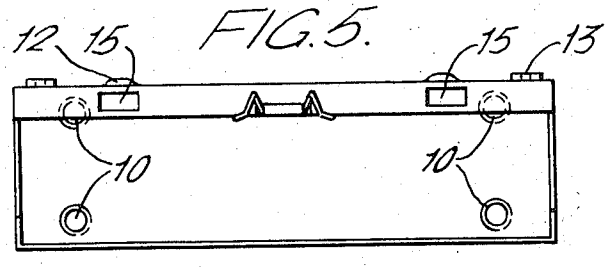


FIG. 5.



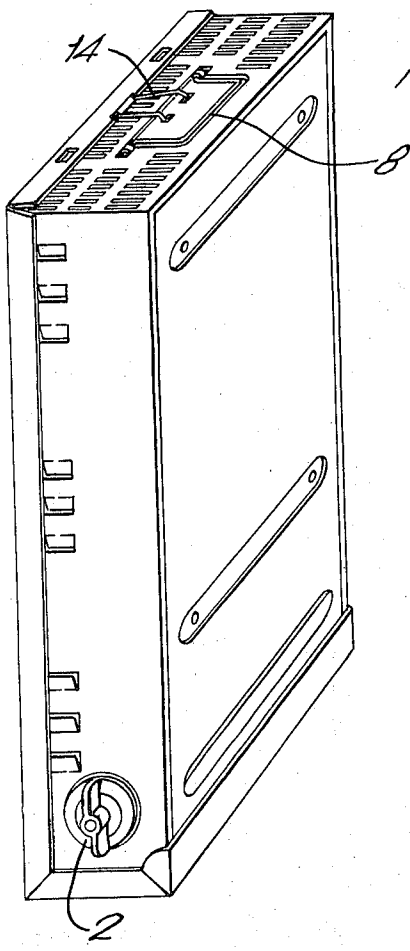
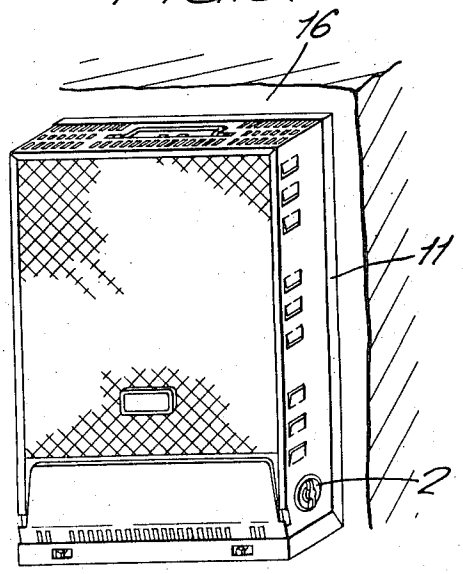


FIG. 7.

FIG. 8.



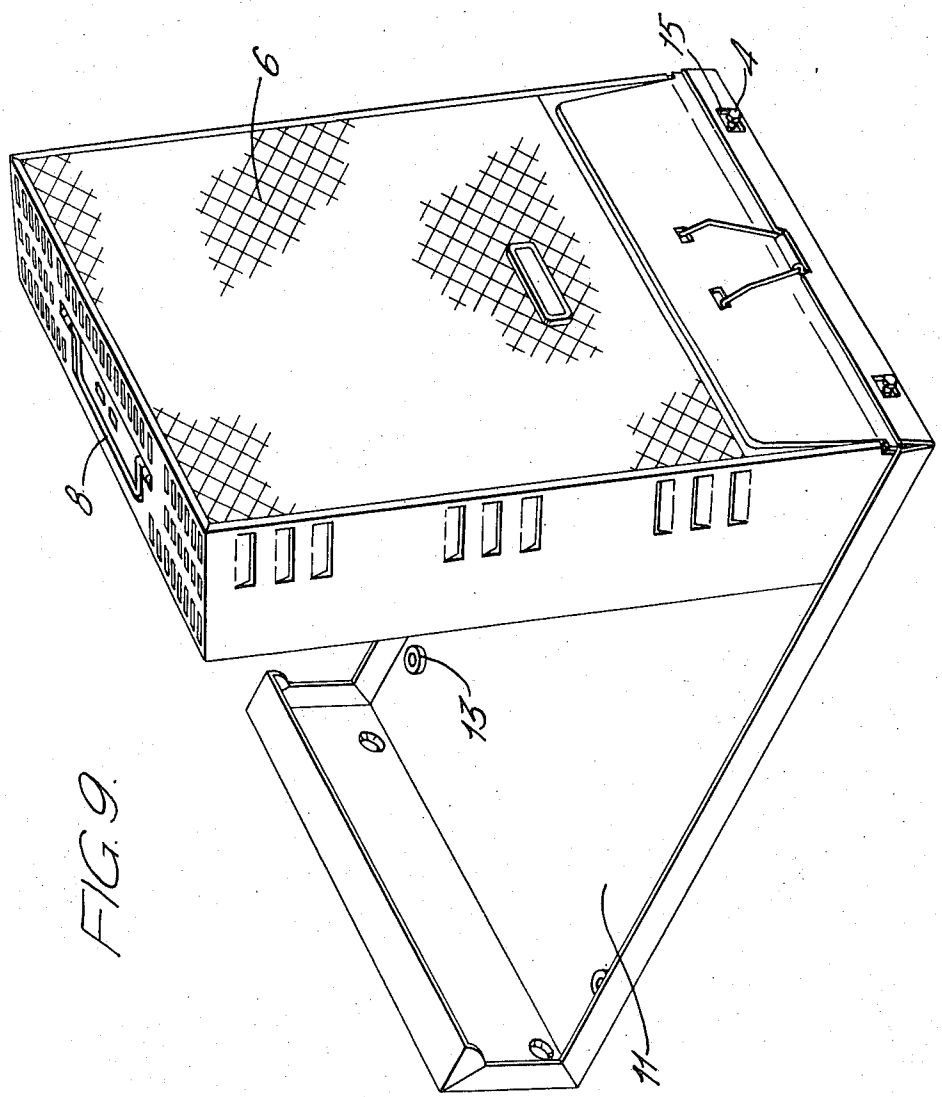


FIG. 9.

HEATING APPLIANCES

This is a continuation of application Ser. No. 203,579 filed Dec. 1, 1971, now abandoned.

This invention is concerned with improvements in or relating to heating appliances and is specially concerned with portable gas stoves.

Gas stoves which are of a size such that a supply of gas provided by a cylinder thereof can be stored within the confines of the gas stove have been previously proposed. These previously proposed gas stoves do however occupy a considerable space which, when the gas stove is not required for heating purposes, could be advantageously used for other purposes.

It is an object of the present invention to provide an improved portable heating appliance.

The present invention provides a portable heating appliance comprising a hollow housing in which component parts of the appliance are housed, and a cover for the housing comprising a panel portion and a tray portion, the panel portion and the tray portion each having peripheral flange portions and the construction and arrangement of the appliance being such that the housing and the cover can be secured together to mount the housing in an upright position for use or transportation of the appliance.

The term "component parts" is used herein to include heating elements, piping or other means for feeding a combustible fuel to burners provided in the housing, valve means, control devices and the like.

In a preferable embodiment this invention provides a portable heating appliance according to the above wherein the housing is substantially in the form of a shallow rectangular parallelipiped and the panel portion and the tray portion of the cover are each rectangular in shape, the panel portion being of dimensions such that it can enclose a front panel or a rear panel of the housing and the tray portion being of dimensions such that the housing can be placed in upright position in the tray portion.

Preferably a portable heating appliance according to the invention is a gas stove the housing thereof providing space within for storing a supply of gas therefor.

Preferably a heater screen is provided at the front face of the housing.

Preferably a top panel of the housing is provided with a plurality of air vents.

Preferably handle means is attached to said top panel of the housing.

Preferably yoke means is provided for securing the housing to the cover.

Preferably means is provided whereby the cover can be mounted on a wall for wall mounting of the housing.

There now follows a detailed description which is to be read with reference to the accompanying drawings of an appliance according to the invention; it is to be clearly understood that this appliance has been selected for description to illustrate the invention by way of example and not by way of limitation.

In the drawings:

FIG. 1 is a side view of a housing of an appliance according to the invention;

FIG. 2 is a front view of the housing;

FIG. 3 is a plan view of the housing;

FIG. 4 is a front view of a cover of the appliance;

FIG. 5 is a plan view of the cover;

FIG. 6 is a side view of the cover;

FIG. 7 is a perspective view of the appliance assembled for storage or transport;

FIG. 8 is a perspective view of the appliance mounted on a wall; and

FIG. 9 is a further perspective view of the appliance assembled for use.

The appliance shown in FIGS. 1 to 9 is a gas stove which comprises a housing 1 substantially in the form of a shallow rectangular parallelpiped the base 3 of which is inclined. On a lower portion of a side panel there is provided a control knob 2 and both side panels are provided with a plurality of vents to facilitate air circulation in the interior of the housing. Vents 7 are also provided in the upper panel of the housing to top panel there is also secured a handle 8 for carrying the appliance is pivotally secured to the top panel of the housing and two apertures 9 are provided in the top panel in apart relationship and centrally of the panel; the two apertures 9 are arranged to receive hook portions of yoke means 14 provided on a cover 11 of the appliance for the purpose hereinafter described.

The front panel of the housing of the appliance includes a lattice work screen 6 for protecting the heater element of the appliance, and the rear panel of the housing is closed.

The cover of the appliance comprises a panel portion 17 and a tray portion 20 each having peripheral flange portions, and each of rectangular shape, the panel portion being of dimensions such that it can enclose either one of the front and rear panels and the tray portion 20 being of such dimensions that the housing can be placed in upright position in the tray portion.

The cover 11 has narrow flange portions 18 which surround its outline and which on one of the short sides extends in a width slightly superior to the thickness of the stove body. On this tray portion 20 there are provided four symmetrical projections 10 which serve as supports for mounting the appliance on the floor in its vertical position when for example the appliance is being stored (see FIG. 7). On the upper surface of the cover there are also provided four rubber discs 13 for horizontal support of the appliance (see FIG. 9) and two slots 12 for mounting the appliance upon a wall (see FIG. 8). On the flange portion of the panel portion of the cover remote from the tray portion 17 the yoked hook 14 is mounted portions of which lodge inside the apertures 9 of the housing to assure the vertical position of same, both for storing and transport (see FIG. 7) and for hanging on a wall (see FIG. 8). This same flange portion has two orifices 15 into which are inserted bolts 4 at the base of the housing 1 (see FIG. 9) so that when it rests upon said inclined base it does not tip over.

To close the appliance, the base of the housing 1 is inserted into the tray portion of the cover 11 in such a way that the panel portion covers the front face of the housing and the free branches of the yoked hook 14 enter into the apertures 9 on the upper face of the body, this position thus being fixed (see FIG. 7).

If it is desired to hang the appliance on a wall, the operation is similar except that now the housing stands in the tray portion with its rear face covered by the cover 11.

What is claimed is:

1. A cabinet structure for a portable heating appliance comprising a housing and a cover, said housing having a front panel provided with a screened opening,

a substantially closed back panel and top and bottom panels, a pair of spaced apertures in said top panel, and a similarly spaced pair of apertures in the bottom portion of said front panel, said cover having a panel portion of substantially the same extent as said front and back panels of the housing and a tray portion at one end of said panel portion and of substantially the same extent as said top and bottom panels of the housing, narrow flanges on the sides of said panel portion and on the end thereof remote from said tray portion and narrow flanges on the sides and end of said tray portion, and yoke means on said end flanges of the panel portion for entering the apertures of said top panel when said panel portion of the cover closes the front panel of the housing for transportation of the appliance and for entering the apertures of said front panel when said panel portion supports the housing for use of the appliance.

2. A cabinet structure according to claim **1**, in which said housing front panel is shorter than said housing back panel and said housing bottom panel extends in an upwardly inclined direction from the bottom of said back panel to the bottom portion of said front panel, additional fastening means being provided on said bottom portion for cooperating with said cover panel portion end flange for holding said housing in place on said inclined bottom panel thereof.

3. A cabinet structure according to claim **1**, in which the position of said housing top panel apertures is such that said yoke will enter said apertures when said cover panel portion covers said housing back panel for hanging said appliance on a wall.

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