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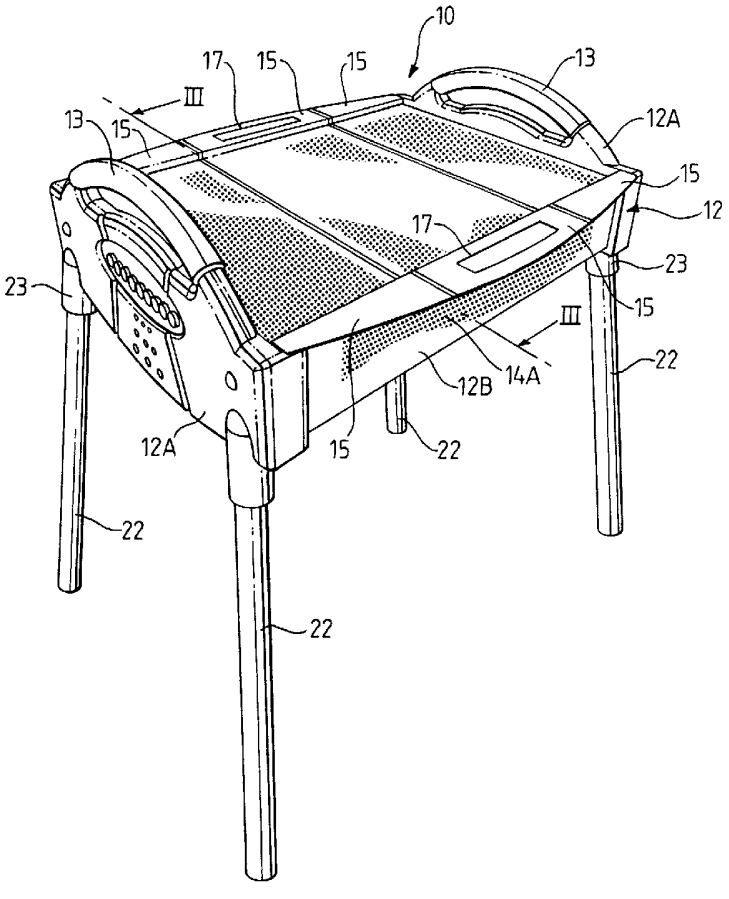
(54) Title: BARBECUE APPARATUS



(57) Abstract: An apparatus for barbecuing foodstuffs comprises a firebox (10) having a solid bottom plate (11) around which a perforated wall surround (12) upstands. The top of the firebox (10) has thereover three removable perforated "hot" plates (14). The firebox (10) is of parallelepiped shape and hollow, the wall surround (12) having two end walls (12A) and two side walls (12B). The perforations (14A) are provided in both side walls (12B). The three "hot" plates (14) are of similar shape and areal dimensions to extend between the side and end walls of the wall surround (12). The "hot" plates (14) are rectangular and have a downturned edge (21) along both longitudinal sides (20). The end of the "hot" plates (14) are cranked upwardly and outwardly to extend beyond the side walls (12B) of the firebox (10) for ease of removal, if required.

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BARBECUE APPARATUS

This invention relates to an apparatus for barbecuing foodstuffs. The apparatus is primarily, but not necessarily, for use in domestic situations relative to the amount of food to be cooked at one period, but lends itself to be adapted for use in a commercial situation whereby an increased amount of food can be cooked at any one time. A disadvantage of existing barbecue apparatus is that at least in a majority of cases, grills or grids of openwork are used over the firebox, the spacings between the bars of the openwork of grill or grid being such that flames pass up therebetween to burn the food on the grill or grid or small items of foodstuffs fall therebetween into the firebox.

An object of the present invention is to obviate or mitigate these disadvantages.

Accordingly, the present invention is an apparatus for barbecuing foodstuffs comprising a firebox having a solid bottom plate around which a perforated wall surround upstands, the top of the firebox having thereover a plurality of removable perforated 'hot' plates.

Preferably, the firebox is of parallelepiped shape and hollow with the wall surround having two end walls and two side walls. The perforations are beneficially provided in both side walls. The end walls are desirably of greater height than the side walls. The end walls may incorporate carrying handles. The bottom plate is ideally separate from the wall surround and the firebox beneficially has an understructure formed at each side wall and extending inwardly in the form of two channels or gutters, the bottom plate serving as a tray to hold solid fuel, engaging the inner side of each respective channel. The bottom plate has

beneficially an angular formation at each end to engage respectively with the inner side of each respective channel.

Preferably also, there are three ' hot' plates of similar shape and areal dimensions to extend between the side and end walls of the wall surround . The ' hot' plates are beneficially rectangular and have a downturned edge along both longitudinal sides. The ' hot' plates desirably extend beyond the side walls of the firebox for ease of removal. The extensions of the ' hot' plate located centrally of the three ' hot' plates is preferably provided with cut-outs to enable these extensions to serve as handles.

Preferably further, a support structure is provided for the firebox, the support structure comprising four supports, one adjacent to each corner. Each support is desirably a socket to receive the top end of a leg. When out-of-use, the legs are desirably detachable from the firebox then capable of being hung up on hooks or other supporting element(s) secured into a wall of, for example, a garage with the hooks or other element(s) being used to hang the firebox and legs with the ' hot' plates being separately supported by the firebox in the hanging position.

An embodiment of the present invention will now be described, by way of example, with reference to the accompanying drawings, in which:-

Fig. 1 is a perspective view of an apparatus for barbecuing foodstuffs according to the present invention, showing a firebox mounted on four legs;

Fig. 1A is a side elevational detail of a connection between a support and a leg to a larger scale;

Fig. 2 is a perspective view of the firebox supported on a table;

Fig.3 is a schematic cross-sectional view of the firebox on the line III – III of Fig. 1 with supports and handle being omitted; and

Fig. 4 is a side view of the apparatus in an out-of-use collapsed state hanging from hooks or other elements secured to a wall.

Referring to the drawings, an apparatus for barbecuing foodstuffs comprises a firebox 10 having a solid bottom plate 11 around which a perforated wall surround 12 upstands. The top of the firebox 10 has thereover a plurality, three in this embodiment, of removable perforated 'hot' plates 14. The firebox 10 is of parallelepiped shape and hollow, the wall surround 12 having two end walls 12A and two side walls 12B. Cosmetically, the perforations are provided in a wave pattern on the side walls 12B. The perforations 14A are provided in both side walls 12B. The end walls 12A are of a greater height than the side walls 12B and incorporate carrying handles 13.

The firebox 10 has an understructure at each end side wall 12B and extending inwardly in the form of two side channels or gutters 18. The bottom plate 11 serves as a tray to hold solid fuel and ash created when the fuel is burnt, the ends of the tray engaging the inner side of the respective channel 18. The bottom plate 11 has an angular formation 19 at each side to engage respectively with the inner side of each respective channel 18. An upturned end 11A is provided at each end of the plate 11. A hole 11B is provided in each end 11A.

The three 'hot' plates 14 are of similar shape and areal dimensions to extend between the side and end walls of the wall surround 12. The 'hot' plates 14 are rectangular and have a downturned edge 21 along both longitudinal sides 20. The end of the 'hot' plates 14 are cranked upwardly and outwardly to extend beyond the side walls 12B of the firebox 10 for ease of removal, if required.

The extensions 15 of the 'hot' plate 14 located centrally of the three 'hot' plates 14 is provided with cut-outs 17 to enable these extensions to serve as handles.

A support structure is provided for the firebox 10. The support structure comprises four supports 23, one at each corner. Each support 23 is a socket to receive the top end of a leg 22. Securement means for each leg 22 includes at its upper end a spring-biased button 24 to engage in an aperture 26 provided in a respective support 23 (Fig. 1A). A ramp 26A

from the open end of the socket towards the aperture 26 is provided to assist location of the button 24 into the aperture 26. When out-of-use, the legs 22 are detached from the firebox with the firebox then being capable of being hung up on hooks or other supporting element(s) 28 secured into a wall 30 of, for example, a garage with the hooks or other element(s) 28 being used to hang the firebox 10 and legs 22 with the plates 14 being separately supported.

In a modification, the firebox can be used without any legs fitted and resting instead on its supports 23 above a picnic table 27 or other suitable table top. A second firebox or more (not shown) may be provided placed next to the first firebox in series to provide a barbecue of whatever length is required.

In use, with the firebox erected and its top open, an amount of charcoal or other barbecue fuel is placed in the firebox 10 and lit. When ready for use, the 'hot' plates 14 are placed over the firebox 10 as shown in the drawings, the top of the end walls 12A keeping the 'hot' plates 14 in tight abutment. The cranked ends of the 'hot' plates 14 allow the 'hot' plates 14 to be recessed into the firebox 10 with the longitudinal downturned edges 21 to assist in preventing heat distortion of the 'hot' plates. The cranking provides a wall against which a lifter can be pushed to assist in lifting food articles from the plates 14 and also prevents foodstuffs such as sausages rolling off the plates 14. The 'hot' plates 14 and perforated sides 12B give an even heat for cooking the food and virtually eliminate "flare ups" . Also, the 'hot' plates 14 prevent small foodstuffs such as mushrooms and prawns from dropping into the firebox. The 'hot' plates 14, using oven gloves or the like, can be removed to add fuel, or to interchange hotter 'hot' plates for colder 'hot' plates should this be required if the heated area of 'hot' plates is reduced.

The bottom plate 11 may be flat but beneficially is dished, as shown, to hold the ash and solid fuel unburnt residue, and the ends 11A are usable, when the tray is cold, as handles to lift the tray out of the surround for disposal of the ash and/or unburnt solid fuel to waste. The formations 19 allow for expansion of the tray on being heated relative to the

understructure, the loose connection between the formations and inner side of and web of the respective channels providing for this expansion and subsequent contraction, on cooling.

The firebox can built into a constructed barbecue area.

The firebox and other components of the apparatus are made from stainless steel and aluminium. A second or replacement bottom plate can be provided to fit into the firebox. Apart from the other advantage outlined above, the apparatus of this invention requires no tools and no fasteners (which may get lost), to be erected or collapsed and when usable with a support structure, is capable of collapsing into the size of a medium sized suitcase. The apparatus is readily assembled for use and vice versa for storage.

A smaller sized version of the firebox may be provided as a table heater to accept one ' hot' plate, the firebox having illuminable candles to keep the food warm, the ' hot' plate usable being the centrally handled ' hot' plate of the apparatus above described.

Although only three ' hot' plates 14 have been described above, two or more than three ' hot plates' may be provided.

The fuel used has been referred to as solid fuel but the fuel may equally be gas fuel supplied from a bottle provided necessary valves, piping and controls are used.

Variations and other modifications can be made without departing from the scope of the invention described above and as claimed hereinafter.

CLAIMS:

1. An apparatus for barbecuing foodstuffs comprises a firebox having a solid bottom plate around which a perforated wall surround upstands, the top of the firebox having thereover a plurality of removable perforated ' hot' plates.

2. An apparatus as claimed in Claim 1, wherein the firebox is of parallelepiped shape and hollow with the wall surround having two end walls and two side walls.

3. An apparatus as claimed in Claim 2, wherein the perforations are provided in both side walls.

4. An apparatus as claimed in Claim 2 or 3, wherein the end walls are of greater height than the side walls and incorporate carrying handles.

5. An apparatus as claimed in any one of the preceding Claims, wherein the bottom plate is separate from the wall surround and the firebox has an understructure formed at each side wall and extending inwardly in the form of two channels or gutters engaging the inner side of each respective channel.

6. An apparatus as claimed in Claim 5, wherein the bottom plate has an angular formation at each end to engage respectively with the inner side of each respective channel.

7. An apparatus as claimed in Claim , wherein three ' hot' plates are provided of similar shape and areal dimensions to extend between the side and end walls of the wall surround .

8. An apparatus as claimed in Claim 7, wherein the 'hot' plates are rectangular and have a downturned edge along both longitudinal sides.

9. An apparatus as claimed in Claim 7 or 8, wherein the 'hot' plates extend beyond the side walls of the firebox for ease of removal.

10. An apparatus as claimed in Claim 9, wherein the extensions of the 'hot' plate located centrally of the three 'hot' plates is provided with cut-outs to enable these extensions to serve as handles.

11. An apparatus as claimed in any one of the preceding Claims, wherein a support structure is provided for the firebox, the support structure comprising four supports, one adjacent to each corner.

12. An apparatus as claimed in Claim 11, wherein each support is a socket to receive the top end of a leg.

13. An apparatus as claimed in Claim 12 wherein securement means for each leg includes at its upper end a spring-biased button to engage in an aperture provided in a respective support.

14. An apparatus as claimed in any one of the preceding Claims, wherein the bottom plate is dished to hold solid fuel and, after use, to hold the ash and any solid fuel unburnt residue.

15. An apparatus substantially as hereinbefore described with reference to the accompanying drawings.

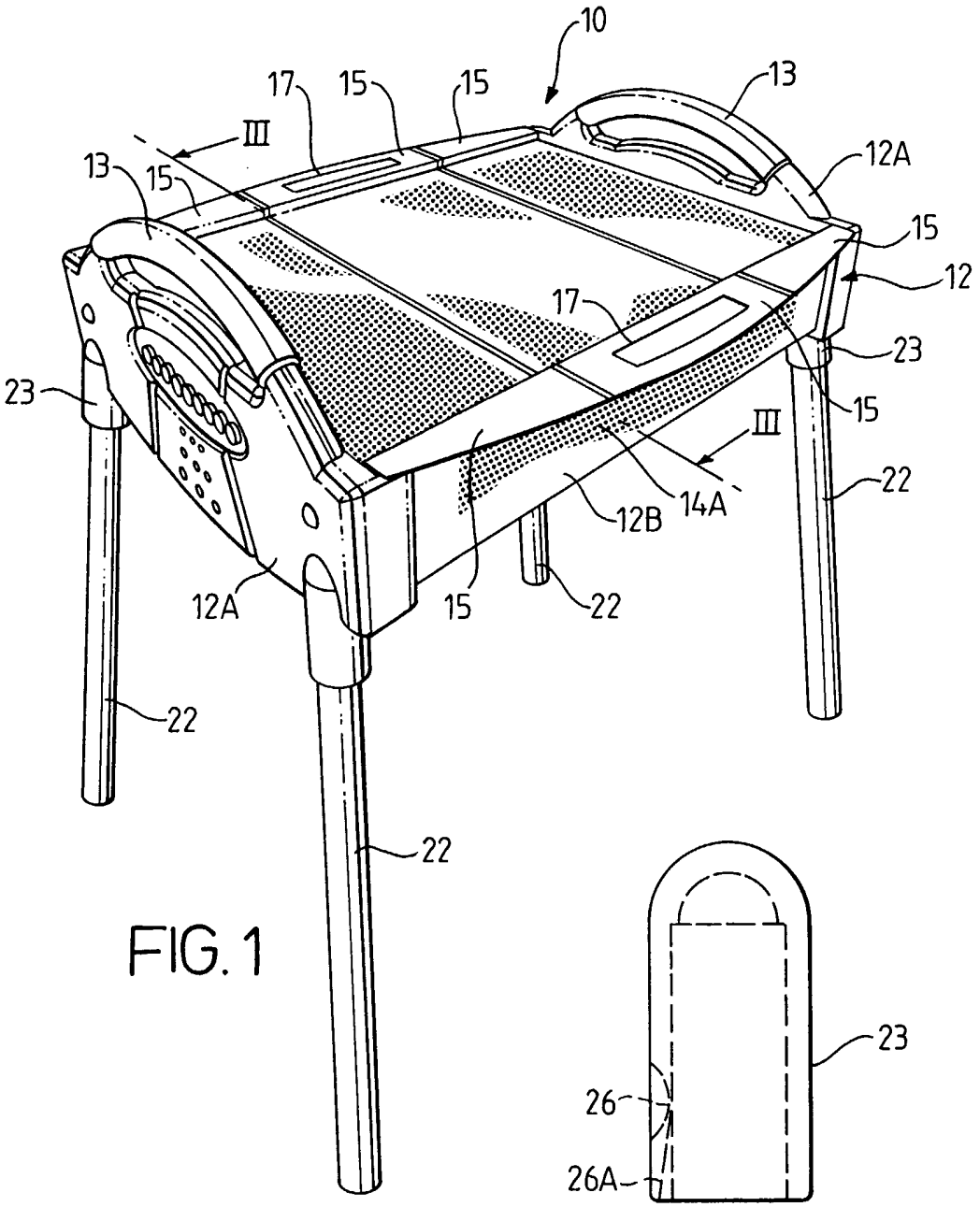
10
17
15
15
13
III
13
15
12A
15
12
17
23
23
15
III
22
14A
12B
12A
15
22
22
22

FIG. 1

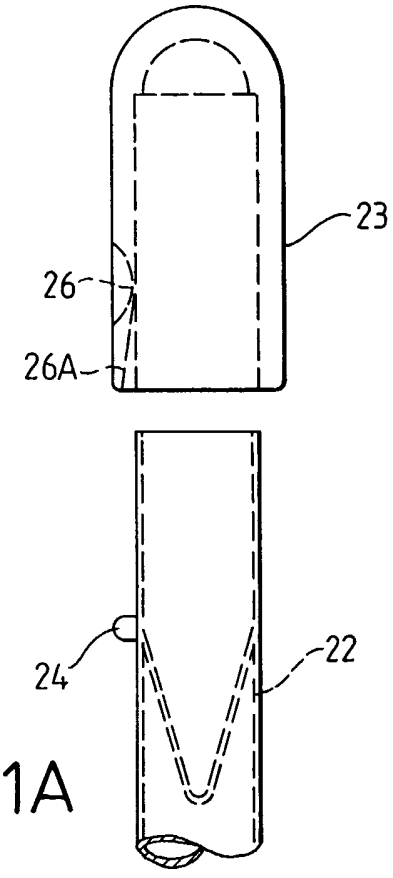
23
26
26A
24
22

FIG. 1A

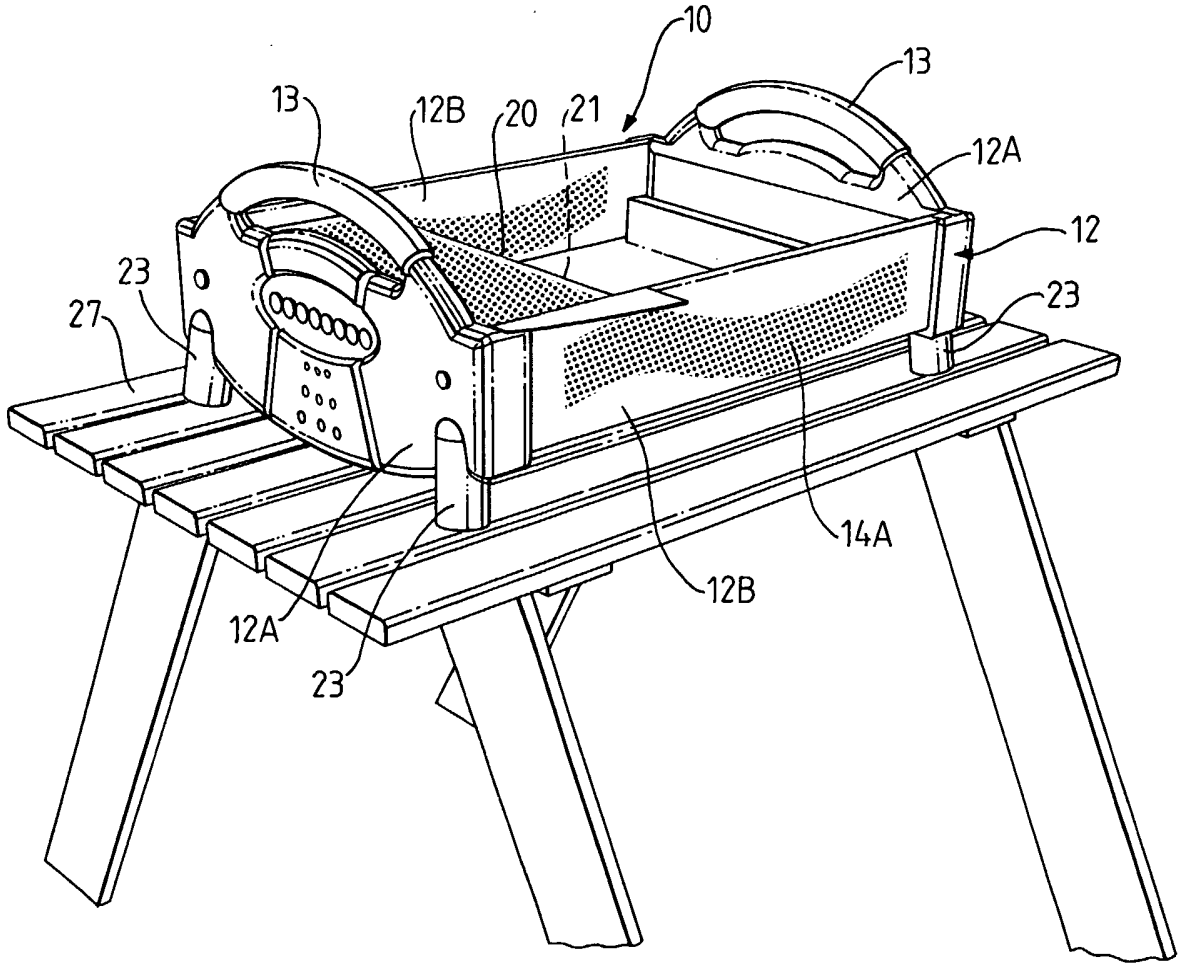
10
13
13
12B
20
21
12A
12
23
27
23
14A
12B
12A
23

FIG. 2

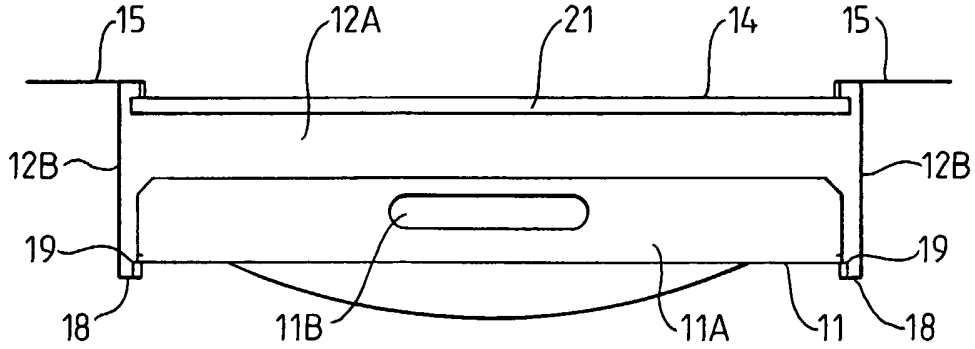
15
12A
21
14
15
12B
12B
19
19
18
11B
11A
11
18

FIG. 3

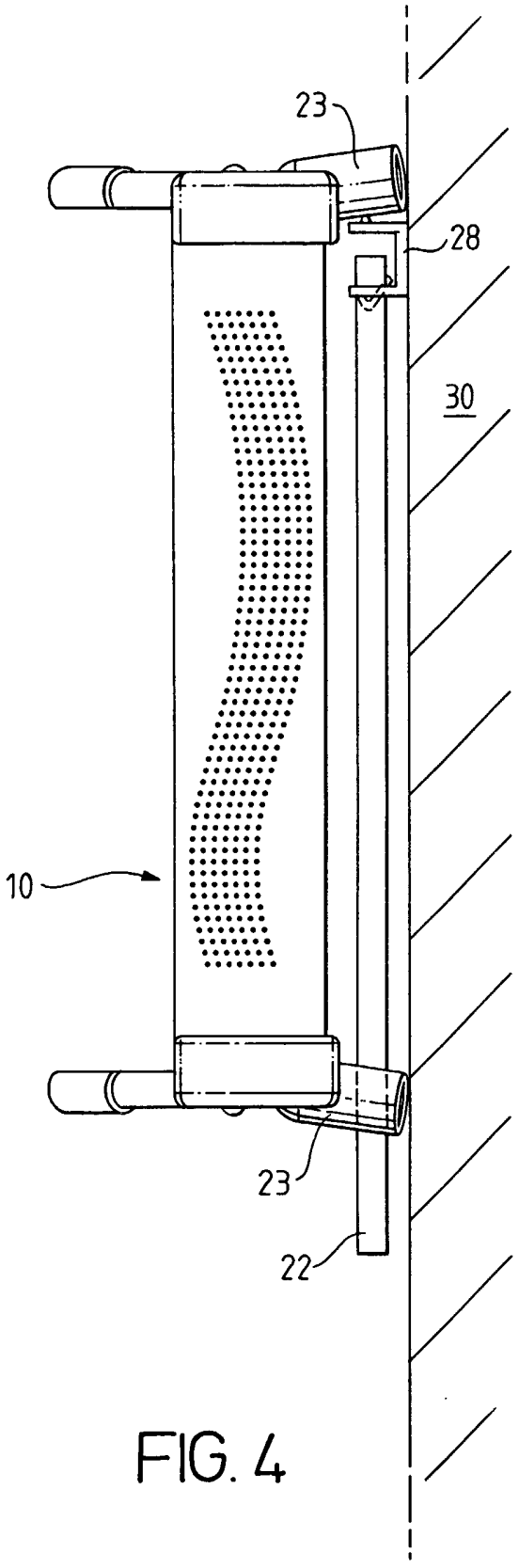

FIG. 4