



(22) Date de dépôt/Filing Date: 1991/02/15

(41) Mise à la disp. pub./Open to Public Insp.: 1991/08/21

(45) Date de délivrance/Issue Date: 2003/07/29

(30) Priorité/Priority: 1990/02/20 (93 201) PT

(51) Cl.Int.<sup>5</sup>/Int.Cl.<sup>5</sup> A47J 37/06

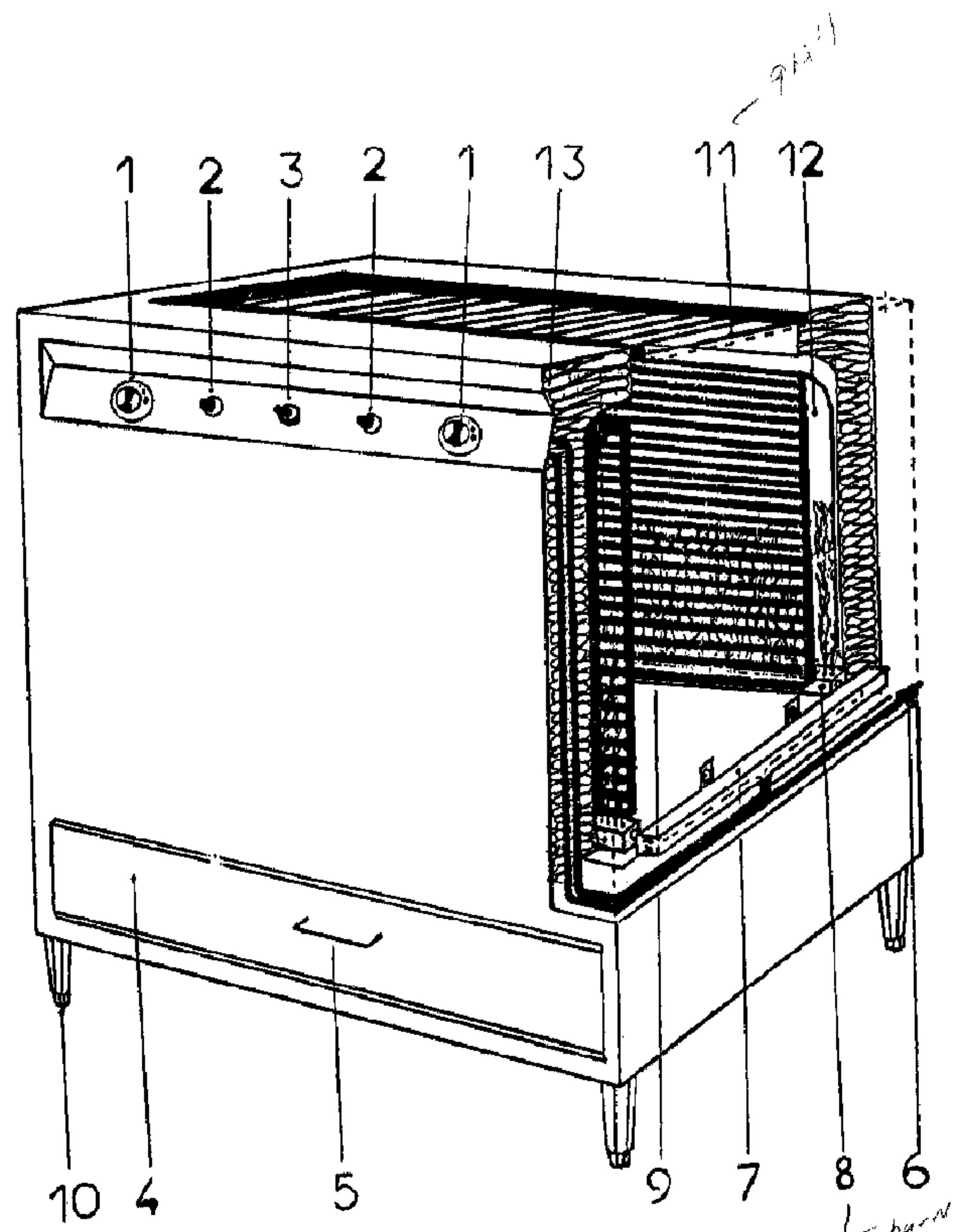
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(54) Titre : GRILL HORIZONTAL

(54) Title: HORIZONTAL GRILLER



(57) Abrégé/Abstract:

The present invention refers to a horizontal griller with structure in stainless steel, meant for industrial or domestic purposes, with isolated walls to prevent the loss of heat. On its upper part there is a grill placed horizontally, and at a level lower to this, placed sideways, there are the heat distributing sources, which may be provided with a ventilator to activate the circulation of heat. In parallel to the grill, below, there is a reception box for the food residues, which do not touch the heating source, therefore not producing any smokes or smells from burnt fat.

## ABSTRACT

The present invention refers to a horizontal griller with structure in stainless steel, meant for industrial or domestic purposes, with isolated walls to prevent the loss of heat. On its upper part there is a grill placed horizontally, and at a level lower to this, placed sideways, there are the heat distributing sources, which may be provided with a ventilator to activate the circulation of heat. In parallel to the grill, below, there is a reception box for the food residues, which do not touch the heating source, therefore not producing any smokes or smells from burnt fat.

## HORIZONTAL GRILLER

The present invention refers to a horizontal griller or grill apparatus.

It has been found out that on the field of grillers for industrial and domestic use, mainly grillers for food, the elimination of smokes which are always detrimental to the health, as well as the limiting of smells due to the  
10 uncomfortable atmosphere they provoke are most important problems to be solved.

Pursuant to these activities there was launched already in Portugal the vertical griller, which is object of a patent No. PT 70 846 published on March 1, 1980, and in various other countries to which it is being exported. This griller obeys to the VDE norms of quality, duly approved (VDE stands for "Verband der Elektrotechnik, Elektronik und Informationstechnik", which translates as "Association for  
20 Electrical, Electronic & Information Technologies" in English).

In order to further improve grill apparatuses of that kind the invention which may be concerned mainly for industrial purposes but to domestic use as well, is based on an extensive study and experiences carried out to reach the results now achieved and which consist of the following:

a) The horizontal griller is built of stainless steel  
30 with the walls duly isolated so that there will not be verified any loss of heat and its exterior temperature is in accordance with that demanded by the norms of quality;



b) It has the form of a parallelepiped and has a grill on its upper part placed horizontally, and is provided with dimensions adequated to each model;

c) On the sides of the apparatus, at a level below the griller, the distributing sources of heat are disposed vertically, and they can support, if necessary, a ventilator to activate the circulation of heat;

10 d) Parallel to the grill, but on the lower part, there is a drawer to receive the residues of the grilled food, which has the advantage of not provoking smokes or smells, once these residues are not in contact with the sources of heat;

e) Wheels may be applied to the feet of the griller's structure for greater facility of displacement of the apparatus when it concerns models for industrial purposes, since the ones for domestic use can easily be handled.

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It is an object of the invention to provide a grill apparatus which may easier be operated.

According to the present invention, there is provided a grill apparatus made of stainless steel, comprising a horizontal grill on which the food is placed, a source of heat in a form of a longitudinal burner which is operated with gas or electricity, extends laterally below the grill on sides thereof and which includes a burning chamber, isolators  
30 located between the burning chamber and walls of the apparatus, and a reception drawer placed below and in parallel with the grill, characterized in that:

the grill is placed on an upper part whereas the source of heat is placed at an opposite, lower part of the apparatus;

the burning chamber is vertically disposed above the source of heat and comprises an upper portion which is curved to an underside of the grill; and

10 a heat spreading panel is vertically located at an inner side of the burning chamber in parallel therewith, the heat spreading panel extending from the source of heat to the upper portion of the burning chamber, ending a certain distance apart from the upper portion and comprising a plurality of longitudinal passage openings.

To better assist the comprehension of the invention, attention is drawn to the accompanied two sheets of drawings, supplied as exemplification, since any alteration of a detail which is not out of the field described should be considered as covered by the scope of the invention.

20 In the drawings:

Fig. 1 is a front, sectional, perspective view of the grill apparatus according to the invention.

Fig. 2 is a front view of the grill apparatus of Fig. 1.

Fig. 3 is a sectional side view of the grill apparatus of Fig. 1.

30 Fig. 1 shows the grill apparatus with a lateral cut, provided with a gas control device (tab) 1, a plug 2 of the security device against accidental extinction of gas, a lighter 3, a receptive drawer 4 of residues, a handle 5 of

the drawer, an entry tubing 6 for the gas, a gas collector 7, a burner 8, a heat spreading panel 9, feet and/or wheels 10, a horizontal grill 11 on which the food is placed, a burning chamber 12 and isolators 13.

Fig. 2 shows a front view of the grill apparatus including the parts already referred to in Fig. 1.

Fig. 3 shows the cut side view, also including the parts  
10 already referred to in Fig. 1.

This grill apparatus is conceived to work in two versions - by gas or by electricity - being the basis completely identical in both cases, and can be easily adapted to either case upon assembling.

To summarize the above one can say that the present invention refers to a grill apparatus with structure in stainless steel, needed for industrial or domestic purposes,  
20 with isolated walls to prevent the loss of heat. On its upper part there is a grill 11 placed horizontally, and at a level lower to this, placed sideways, there are the heat distributing sources, which may be provided with a ventilator to activate the circulation of heat. In parallel to the grill 11 below, there is a reception box 4 for the food residues, which do not touch the heating source, therefore not producing any smokes or smells from burnt fat.

As apparent in Figures 1 and 3, the curvature of the  
30 upper portion of the burning chamber 12 is preferably 90°.



## CLAIMS:

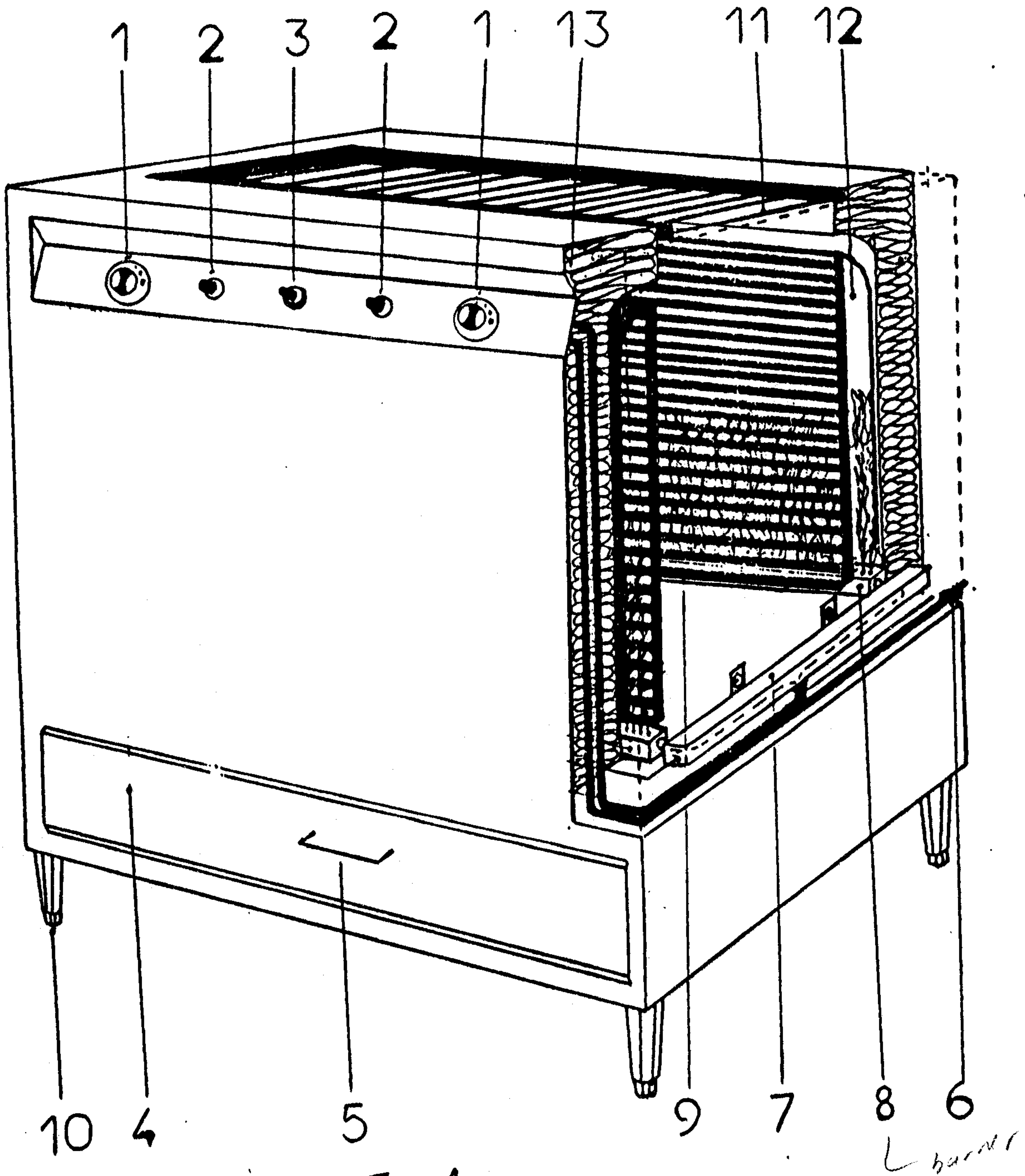
1. A grill apparatus made of stainless steel, comprising a horizontal grill on which the food is placed, a source of heat in a form of a longitudinal burner which is operated with gas or electricity, extends laterally below the grill on sides thereof and which includes a burning chamber, isolators located between the burning chamber and walls of the apparatus, and a reception drawer placed below and in  
10 parallel with the grill, characterized in that:

the grill is placed on an upper part whereas the source of heat is placed at an opposite, lower part of the apparatus;

the burning chamber is vertically disposed above the source of heat and comprises an upper portion which is curved to an underside of the grill; and

a heat spreading panel is vertically located at an inner side of the burning chamber in parallel therewith, the heat spreading panel extending from the source of heat to the  
20 upper portion of the burning chamber, ending a certain distance apart from the upper portion and comprising a plurality of longitudinal passage openings.

2. The grill apparatus according to claim 1, characterized in that a curvature of the upper portion of the burning chamber is 90°.



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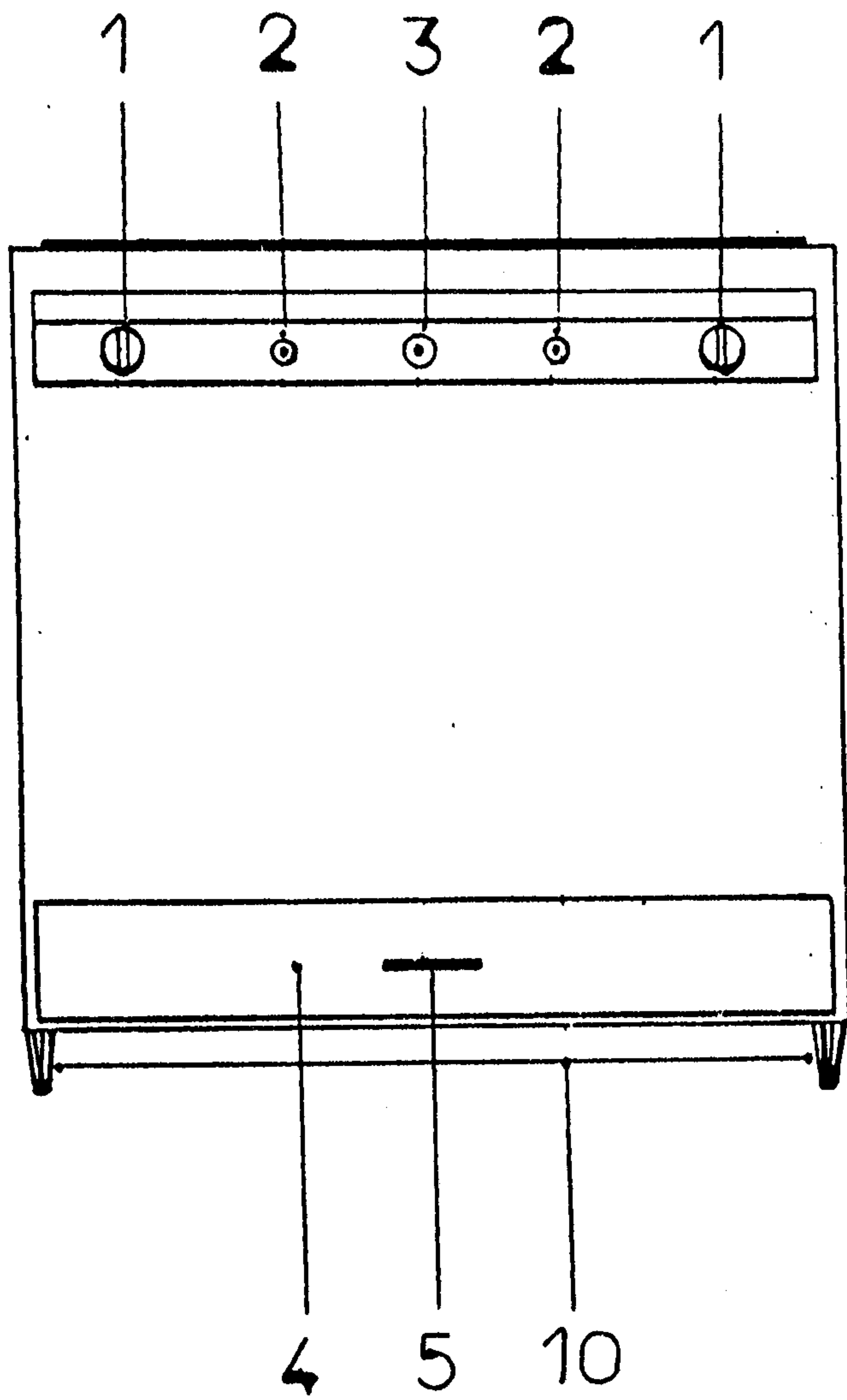


Fig. 2

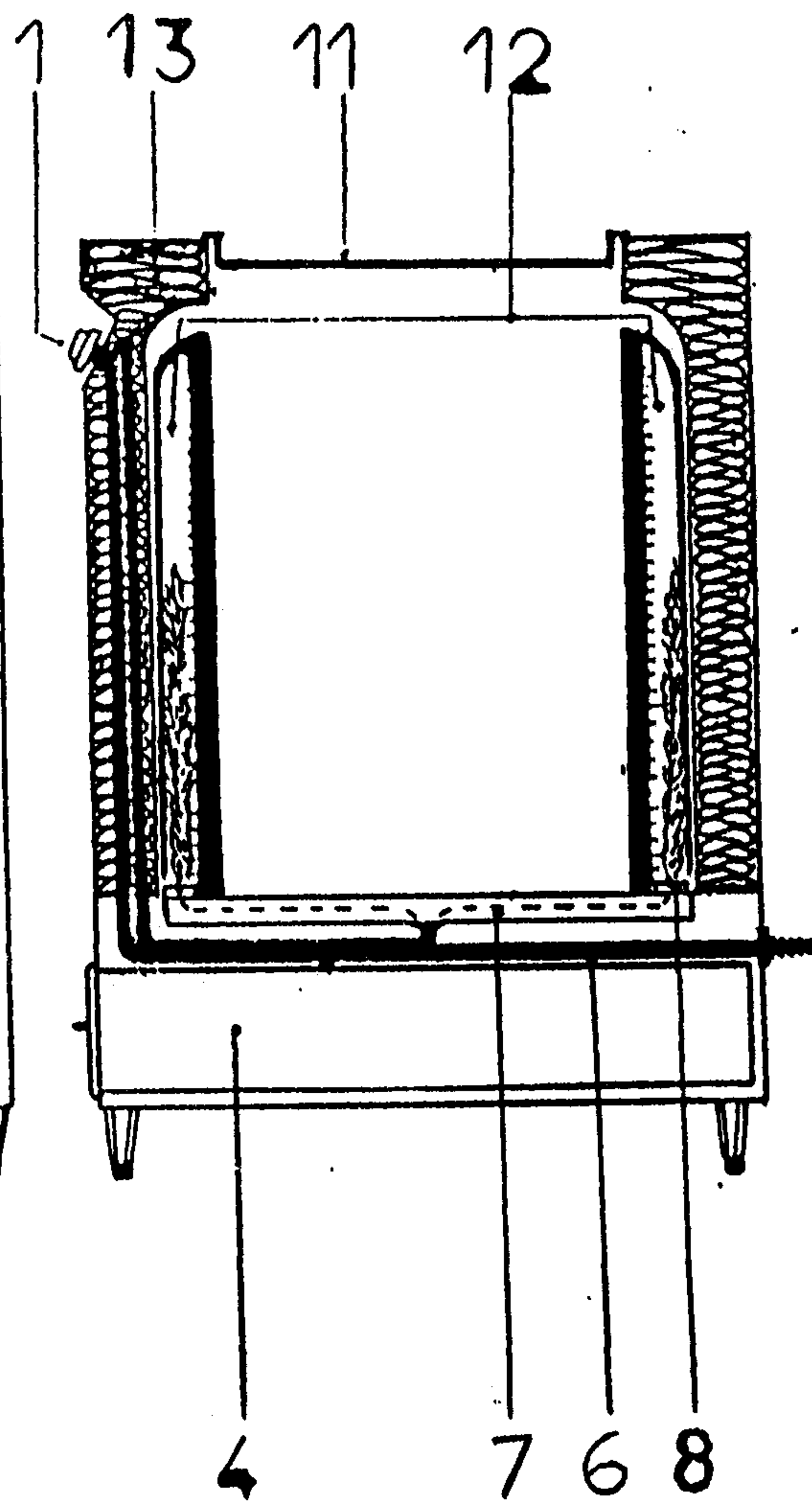


Fig. 3

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