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(71) Applicant

Licentia Patent-Verwaltungs -GmbH (FR Germany),
Theodor-Stern-Kai 1, D-6000 Frankfurt am Main 70,
Federal Republic of Germany

(72) Inventors

Herbert Mann
Jürgen Mielke
Roy Smith

(74) Agent and/or Address for Service

Gee & Co,
Chancery House, Chancery Lane, London WC2A 1QU

(54) Water-heater, which is
constructed in the form of a
column-like table appliance

(57) A water-heater which is
constructed in the form of a column-
like table appliance consists of a
fresh-water reservoir (2) with an
electrical heating device (5) and a
temperature cut-out (9) for the
heating device (5) as well as a
discharge outlet (6) in the bottom (4)
of the fresh-water reservoir (2) which
is controlled by a valve device (13),
and one rocking lever (10) for
switching on the temperature cut-out
(9) and one (12) for actuating the
valve device (13), the two levers
being held, in the housing (1') of the
water-heater. The two rocking levers
(10, 12) are alike in construction and
are pivotally mounted in the housing
(1). A tension spring (11) serving as
a common restoring spring, acts on
both rocking levers (10, 12).

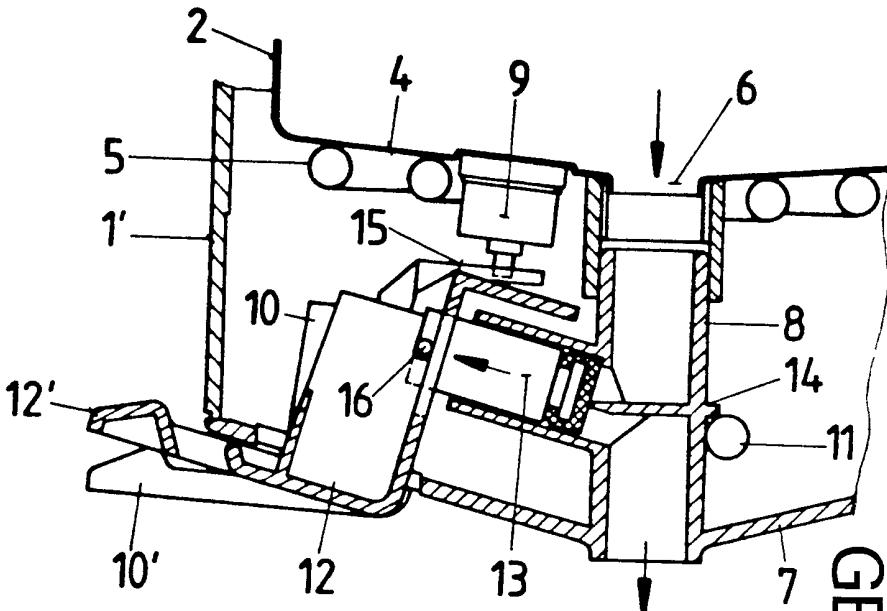


Fig. 2

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Fig. 1

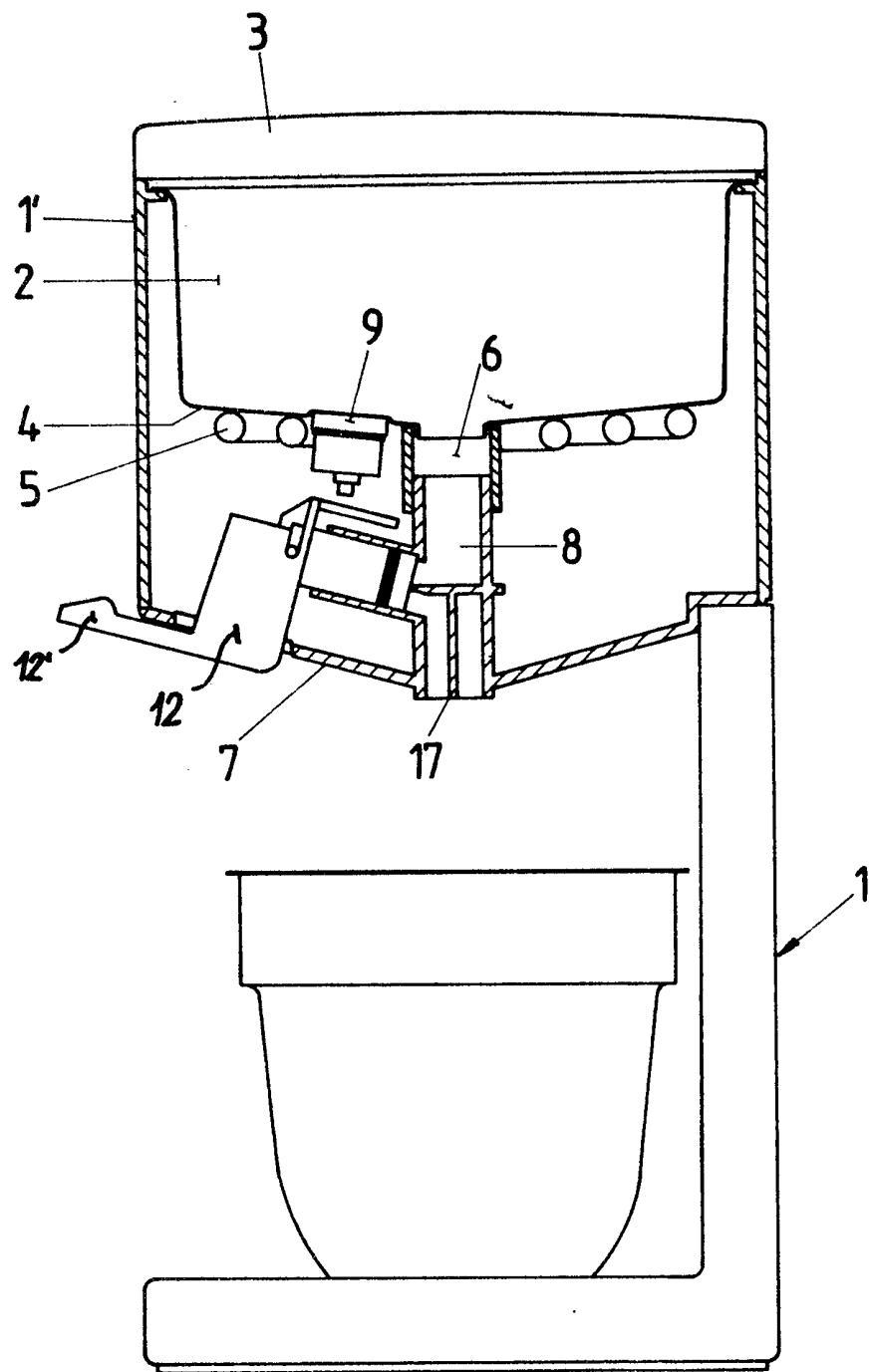


Fig. 2

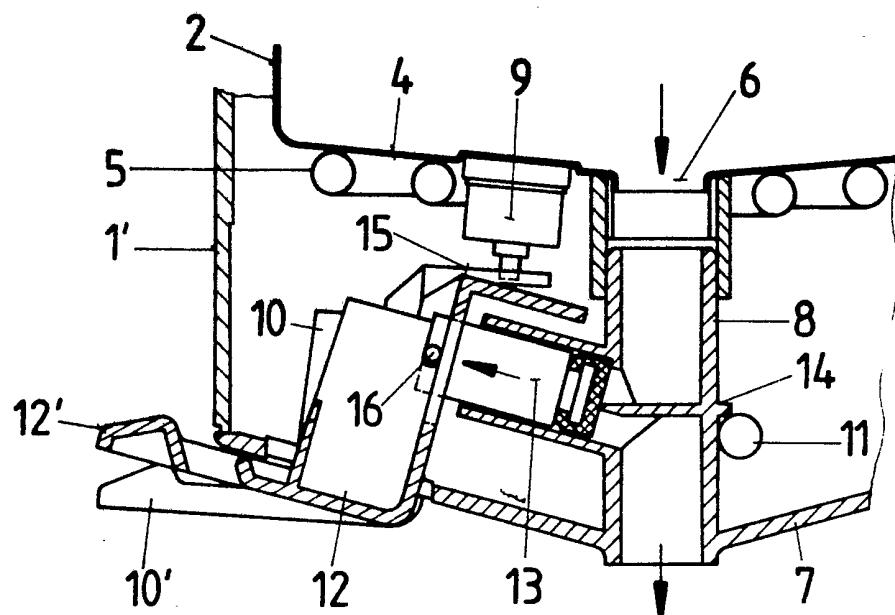
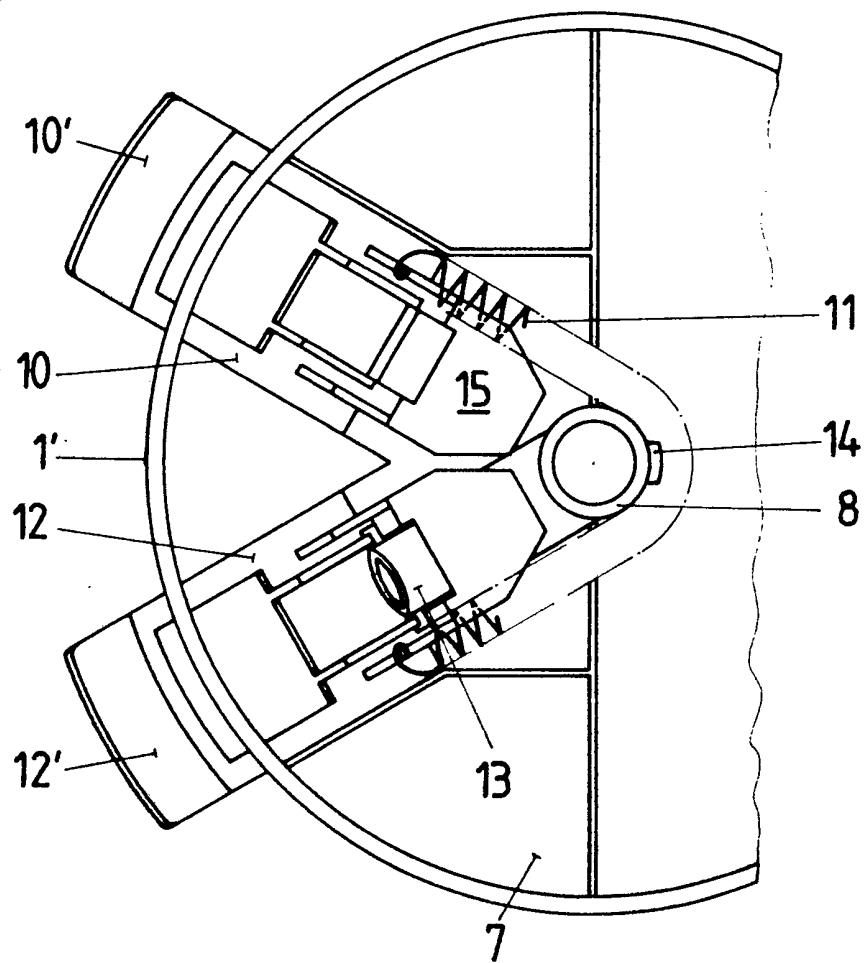


Fig. 3



SPECIFICATION

Water-heater, which is constructed in the form of a column-like table appliance

5 This invention relates to a water-heater which is constructed in the form of a column-like table appliance, consisting of a fresh water reservoir with an electrical heating device and

10 a temperature-responsive cut-out for the heating device, with a discharge outlet in the bottom of the fresh-water reservoir, which outlet is controlled by a valve device, and one manual control for switching on the temperature-

15 responsive cut-out and one for actuating the valve device, which controls are held in the housing of the water-heater.

Water-heaters of this type are generally known. Such water-heaters serve to bring

20 small or very small amounts of water (about one or two cups) to boiling temperature in the shortest possible time, without great expense, for making a cup of instant coffee or a "soup drink" for example. The known appliances of

25 this type are still in need of a great deal of improvement, however, because they are not yet fully nature in construction and the cost of assembly is still considerable because of the large number of small parts.

30 It is therefore an object of the invention to provide an improved appliance of the type referred to which is simple in construction and reliable in operation and wherein the cost of assembly is reduced.

35 In accordance with the invention an appliance as initially referred to is improved in that each of the controls referred to is a component of a rocking lever, both rocking levers are of the same construction and are pivotally

40 mounted in the housing, and a tension spring serving as a common restoring spring acts on both rocking levers.

Further preferred features of the invention will become apparent from the following description and the appended claims.

45 The water-heater according to the invention, which can be used as a table appliance, is distinguished by a particularly simple and material-saving construction so that it can be

50 produced at a reasonable price as a mass-produced article from the manufacturing point of view.

The invention is illustrated by way of example in the drawings, in which:

55 *Figure 1* is a part-sectional elevation of a column-like water-heater,

Figure 2 is an enlarged detail of the heater of Fig. 1, showing the arrangement of the components actuating the heating device and

60 the discharge valve, and

Figure 3 is a plan view corresponding to Fig. 2.

Referring to the drawings, 1 designates a water-heater which is constructed in the form

65 of a column-like table appliance and is de-

signed to heat up small or very small amounts of water (about one to two cups). The water-heater comprises an upper fresh-water reservoir 2 which is closed by a removable cover

70 3. The fresh-water reservoir 2 consists of a trough-like sheet metal member with a bottom 4 inclined towards the centre and a heating device 5 consisting of a curved jacketed heating element which is fitted below the bottom.

75 The fresh water reservoir 5 is inserted in the housing 1' of the water-heater 1 with spacing from its wall. In the centre of the bottom 4 of the fresh-water reservoir there is a discharge outlet 6 which is in fluid-tight communication

80 with a valve-body socket 8 formed in the false bottom 7 of the housing 1'. Furthermore, fitted to the outer bottom 4 of the fresh-water reservoir 2 is a temperature-responsive cut-out 9 which switches off the heating device 5 after a certain water temperature is reached.

The re-setting of the temperature-responsive switch 9 and hence the switching on of the heating device 5 is effected through a rocking lever 10 which comprises an actuating button

90 10' or handle projecting out of the housing and which is pivotally mounted in the false bottom 7 of the housing 1. Suspended on the rocking lever 10 is a tension spring 11, the other end of which is likewise suspended on a

95 second rocking lever 12 with a handle 12' of the same construction as the handle 10', for the actuation of a valve device 13 accommodated in the valve-body socket 8. The tension spring 11, which acts as a restoring spring for

100 the two rocking levers 10, 11, is laid round the valve-body socket 8, a centering extension 14 being formed thereon to locate it. Thus the valve-body socket 8 acts as the anchorage for the tension spring 11 suspended on

105 each of the two rocking levers 10, 12. As a result of the connection of the two rocking levers 10, 12 through the tension spring 11, the effect is achieved that the restoring of the two rocking levers 10, 12 to their initial position of rest is effected through a single spring element. Furthermore it is worth noting that the two rocking levers 10, 12 are alike in construction although they have to fulfil different functions, so that only one type of rocking

110 lever has to be manufactured and kept in stock. The assembly in production is also substantially facilitated or simplified as a result.

In order to actuate the temperature-responsive switch 9, the rocking lever 10 has a control plate 15. After actuation of the temperature-responsive switch 9, constructed in the form of a self-holding switch, and release of the rocking-lever handle 10', the rocking lever 10 instantly returns to its initial position and

120 hence to the valve-sealing position under the action of the tension spring 11 acting as a restoring spring. The rocking lever 12, to which there is attached by means of a pin 16 the valve device 13 controlling the flow

125 through the valve-body socket 8, also returns,

after the rocking-lever handle 12' is released, into its initial position in which the discharge of water from the water reservoir 2 is stopped.

- 5 There is provided in the region where the water emerges from the valve-body socket 8 a partition 17 which divides or bisects the outlet cross-section. As a result the water emerges calmly and therefore without
- 10 splashes.

CLAIMS

1. A water-heater which is constructed in the form of a column-like table appliance, consisting of a fresh water reservoir with an electrical heating device and a temperature-responsive cut-out for the heating device, with a discharge outlet in the bottom of the fresh-water reservoir, which outlet is controlled by a valve device, and one manual control for switching on the temperature-responsive cut-out and one for actuating the valve device, which controls are held in the housing of the water-heater, characterised in that each of the controls is a component of a rocking lever, both of which are of the same construction and are pivotally mounted in the housing, and that a tension spring serving as a common restoring spring acts on both rocking levers.
- 20 2. A water-heater as claimed in Claim 1, characterised in that the tension spring is secured to the two rocking levers by being linked between them.
- 25 3. A water-heater as claimed in Claim 1 or 2, characterised in that the tension spring is laid round a valve-body socket which contains the valve device and which is a component of a false bottom of the housing.
- 30 4. A water-heater as claimed in Claim 3, characterised in that the valve-body socket is provided with a centering extension for locating the tension spring.
- 35 5. A water-heater as claimed in any preceding claim characterised in that each rocking lever is pivotally mounted in the false bottom of the housing.
- 40 6. A water-heater substantially as described herein with reference to the accompanying drawings.