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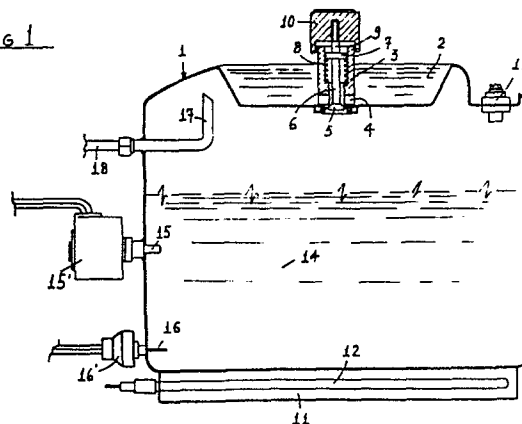
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54 Steam generator, in particular for operating electric steam vapor irons.

57 It comprises a vessel (1) defining, at the top thereof, a chamber (2) communicating with the vessel interior through a manually operable spring biased check valve the body (3) thereof is formed with two radially extending holes (4), as provided upstream of the valve shut-off member (5), the vessel (1) being arranged on a base (11) including electric resistance heating means (12) and being further provided with safety and adjusting means (13, 15', 16') as well as with a generated steam outlet duct (17).

Fig 1



The present invention relates to a steam vapor generator, which is particularly effective to be used for supplying or operating electric steam vapor irons.

As it is well known, in the industrial ironing of cloth articles there are conventionally used electric irons which are effective to subject the cloth articles to be ironed to a moistening action, by means of steam vapor, either overheated or not.

The mentioned electric irons, in actual practice, are provided with a suitably perforated plate which communicates, through a shut off valve and a flexible duct, with a small size steam generator or source.

The latter is usually provided with a suitable volume vessel, including water heating means effective to transform into steam the contained water, to convey the produced steam to the mentioned flexible duct.

Presently the water vessel comprises one or more union members, provided with tight closure plugs, for periodically introducing water into the vessel itself.

That vessel supplying system, however, is a



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rather dangerous one since, in general, the water vessel is under pressure.

Accordingly, as the union closure plug is removed, boiling steam leakages may occur susceptible to scald the operator.

Moreover the closure plug is usually at a very high temperature and may by itself scald the operator.

Thus, the task of the present invention is to overcome the above mentioned drawbacks by providing a steam generator, particularly for operating electric steam irons, wherein the steam producing water may be introduced without directly contacting the steam generating vessel.

This task, as well as other related practical objects, which will become more apparent hereinafter, are achieved by a steam vapor generator, particularly for operating electric steam irons, characterized in that it comprises a vessel defining, by the upper portion of the casing thereof, an outer chamber communicating with said vessel interior through a manually operable spring check valve the body thereof is formed with two radially extending holes as provided upstream of the valve shut-off member seat, said

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vessel being arranged on a base including heating means and being further provided with safety and adjusting means as well as with a produced steam outlet duct.

Further characteristics and advantages of the steam generator, particularly for operating electric steam irons, according to the present invention, will become more apparent hereinafter from the following detailed description of a preferred embodiment thereof, being illustrated, by way of an indicative example, in the accompanying drawing, where:

fig.1 is a cross-sectional view schematically illustrating the steam generator according to the present invention

With reference to the mentioned figures, the steam generator, particularly for operating electric steam irons, according to the invention, comprises a suitable size vessel 1, the upper or top portion thereof is so shaped as to define a chamber having such a volume which depends on the volume of the vessel itself.

At the bottom of the mentioned chamber there

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is formed a hole, thereat there is locked one end of a valve body 3, provided with radially extending holes 4, as formed upstream of the seat of its shut-off member 5.

The latter is mounted on a stem 6 which is provided, at an intermediate position thereof, with a disk member 7 resiliently biased by a coil spring 8, the free end thereof, 9, is helicoidally coupled to a plug 10, arranged above the mentioned valve body 3.

Said vessel 1, in turn, is mounted on a base 11, including an electric heating resistance 12 and provided, at the top thereof, with a safety valve 13.

With the inside of that same vessel, at a lower level than the water level, 14, the sensing elements 15 of a pressure switch 15' and 16 of a thermostat 16 respectively, communicate.

Moreover, inside said vessel, at the top thereof, that is at a level higher than the water level, there is provided a duct 17, the free end thereof is preferably upwardly directed.

This duct exits said vessel and is coupled to the steam conveying duct 18.

Thus, the provision of the chamber 2 at the top of the vessel, permits to introduce the make up water without the need of directly acting on the vessel itself.

To this end, in fact, it will be sufficient to fill with water the mentioned chamber and then press on the plug 10 in such a way as to disengage the shut-off member from the seat thereof, thereby water may flow into the underlying vessel through the mentioned radially extending holes 4 of the valve body.

While a preferred embodiment of the steam generator has been thereinabove disclosed, it should be apparent that said embodiment is susceptible to several modifications and variations, without departing from the scope of the invention, as it is defined in the accompanying claims.

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C L A I M S

- 1- A steam vapor generator, particularly for operating electric steam irons, characterized in that it comprises a vessel (1) defining, by the top portion of the casing thereof, an outer chamber (2) communicating with said vessel interior through a manually operable spring biased check valve the body (3) thereof is formed with two radially extending holes (4) as provided upstream of the valve shut-off member (5), said vessel (1) being arranged on a base (11) including heating means (12) and being further provided with safety and adjusting means (13, 15', 16') as well as with a produced steam outlet duct (17).
- 2- A steam generator, according to the preceding claim, characterized in that at the bottom of said chamber (2) there is formed a hole therein there is locked one end of said valve body (3), the shut-off member (5) of said body being mounted on a stem (6) provided, at an intermediate position thereof, with a disk member (7) resiliently biased by a coil spring (8) the free end (9) thereof is helicoidally coupled to a plug (10) arranged above said valve

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body.

3- A steam generator, according to claim 1, characterized in that said vessel (1) is mounted on a base (11) including a heating electric resistance (12) and provided, at the top thereof, with a safety valve (13).

4- A steam generator, according to claim 1, characterized in that in the inside of said vessel (1), at a lower level than the level of the water contained therein, there are arranged the sensing elements (15, 16) of a pressure switch (15') and thermostat (16') respectively.

5- A steam generator, according to claim 1, characterized in that, in the inside of said vessel (1), at the top thereof, that is at a level higher than the level of the water contained therein, there is arranged a duct (17) the free end thereof is upwardly directed and which exits said vessel and is coupled to a steam conveying duct (18).

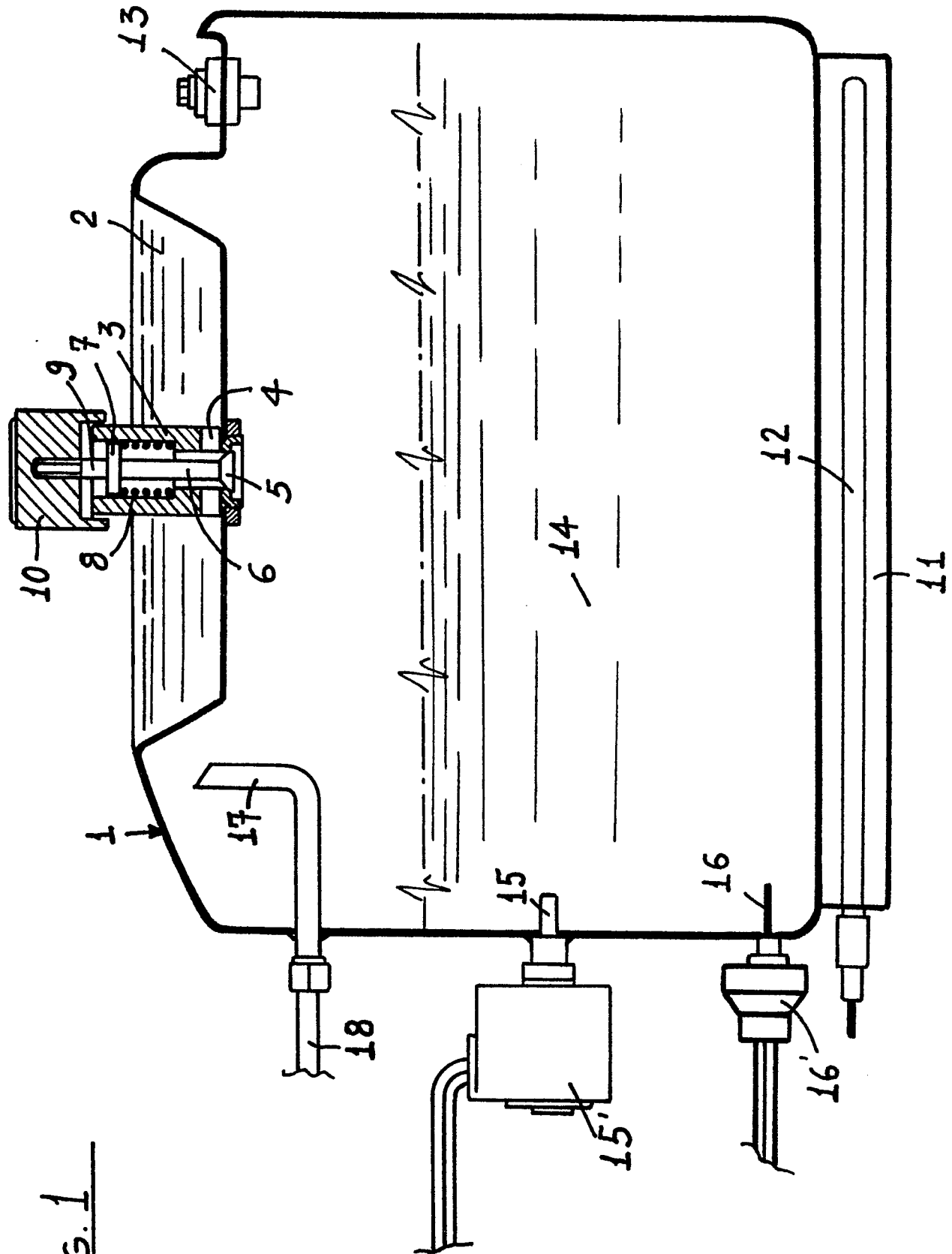


FIG. 1