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ELECTRIC HOT WATER TANK ATTACHMENT

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Fig. 1.

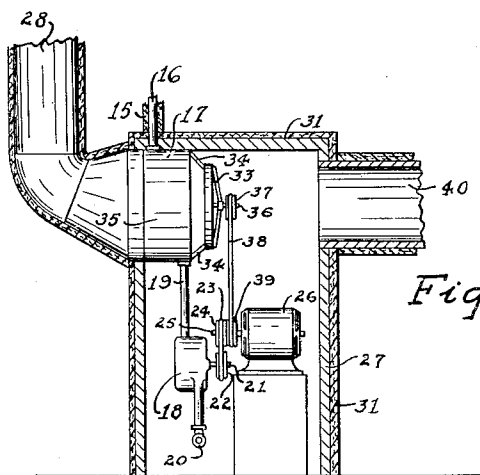
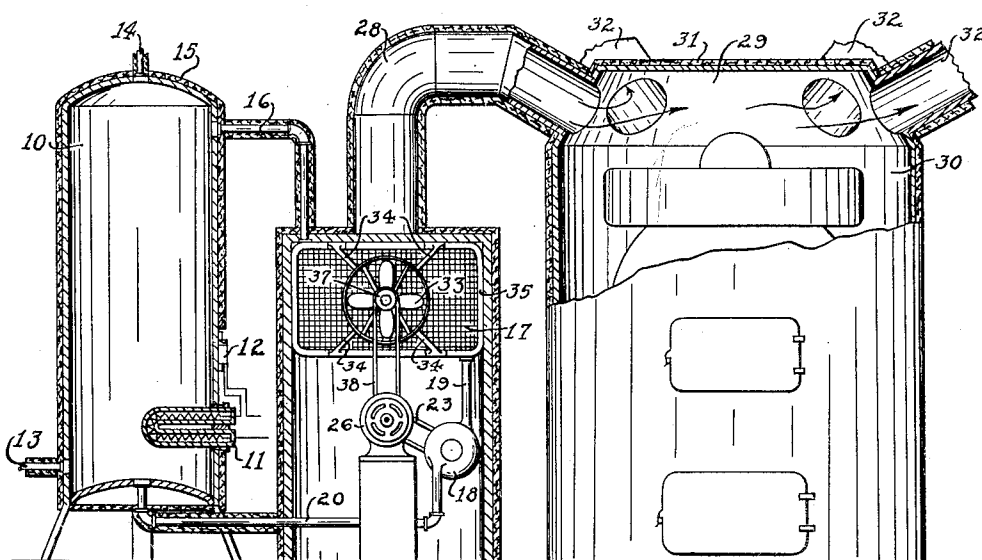


Fig. 2.

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UNITED STATES PATENT OFFICE

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ELECTRIC HOT-WATER TANK
ATTACHMENT

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Application March 25, 1947, Serial No. 737,170

1 Claim. (Cl. 237—50)

1

This invention relates to an electric hot water tank attachment which is adapted to be used for the heating of establishments in which the tank is installed.

An object of the invention is to provide a device of this character which, when used in conjunction with a hot air furnace, will furnish heat developed by the device, to the establishment in which it is installed.

With the above and other objects in view, the invention consists of the novel details of construction, arrangement and combination of parts more fully hereinafter described, claimed and illustrated in the accompanying drawing in which:

Figure 1 is a view partly in section of a system embodying the invention and

Figure 2 is a vertical sectional view of the heating arrangement, per se.

Referring more in detail to the drawing, the reference numeral 10 designates a hot water tank which is provided with the conventional electric heating means 11 which is controlled by a conventional thermostat 12.

The tank is used to heat domestic water, having the inlet pipe 13 and outlet pipe 14, and the tank is completely covered by a layer of insulation 15.

The present invention contemplates the use of the hot water in the tank for the heating of dwellings, in the same manner as the hot air heater of an automobile is used to heat the automobile interior. To this end, the tank is provided with a secondary outlet 16 which is connected to a radiator 17 which is constructed in a manner similar to the radiator of an automobile. The radiator is connected to a water circulating pump 18 by an outlet 19, and the pump is connected to the bottom of the tank by an outlet 20.

The drive shaft 21 of the pump 18 is provided with a pulley 22 having a belt drive connection 23 with a pulley 24 on the drive shaft 25 of an electric motor 26. Thus when the motor is energized, water is pumped from the tank 10 into the radiator 17 and back into the tank 10, maintaining a complete circulation of water during the operation of the motor 26.

The radiator 17 is mounted at the top of a box-like housing 27, which rests on the floor, and is provided with an outlet pipe 28 connected to the dome 29 of a hot air furnace 30.

The housing 27, pipe 28 and furnace 30 are all covered by a layer of insulation 31, as are the other conventional hot air ducts 32 of the furnace.

The radiator has a fan 33 mounted at the rear thereof by brackets 34 connected to the frame 35 of the radiator, and the shaft 36 of the fan is equipped with a pulley 37 having a hub drive

2

connection 38 with a pulley 39 on the drive shaft 25 of the motor 26. Thus the fan will force air through the radiator where it is heated, out pipe 28 into the furnace 30 and out ducts 32 to heat the dwelling in which the furnace is installed.

The housing 27 is also provided with an intake pipe 40 which is also covered with the insulating covering 31, and this pipe is connected to the return duct, not shown, of the furnace 30. Thus the hot air is circulated through the furnace, and the dwelling, for the heating thereof, without the use of any fuel in the furnace, which is conventionally used for the heating of the dwelling.

There has thus been provided an attachment which will heat a dwelling without the use of any conventional fuel, and it is believed that the operation and construction of the invention will be apparent to those skilled in the art.

It is also to be understood that changes in the minor details of construction, arrangement and combination of parts may be resorted to, provided they fall within the spirit of the invention, and the scope of the appended claim.

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent is:

A device of the character described, in combination with a heat insulated hot water tank and a heat insulated hot air furnace, comprising a housing, a radiator in said housing, means for connecting said radiator to said tank, means for connecting said housing to said furnace, and said means comprising an insulated pipe having a bell formation on one end confronting the radiator, means for circulating the water in the tank and the radiator insulation means on said tank, housing a connecting means for retaining the heat therein and means for forcing air from said housing, which has been heated by said radiator, into said furnace, for the heating of a dwelling, and motor means in said housing for operating said water circulating and heat circulating means.

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The following references are of record in the file of this patent:

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