

H. W. O'DOWD.
WATER HEATER.
APPLICATION FILED SEPT. 23, 1908.

1,064,001.

Patented June 10, 1913.

Fig. 1.

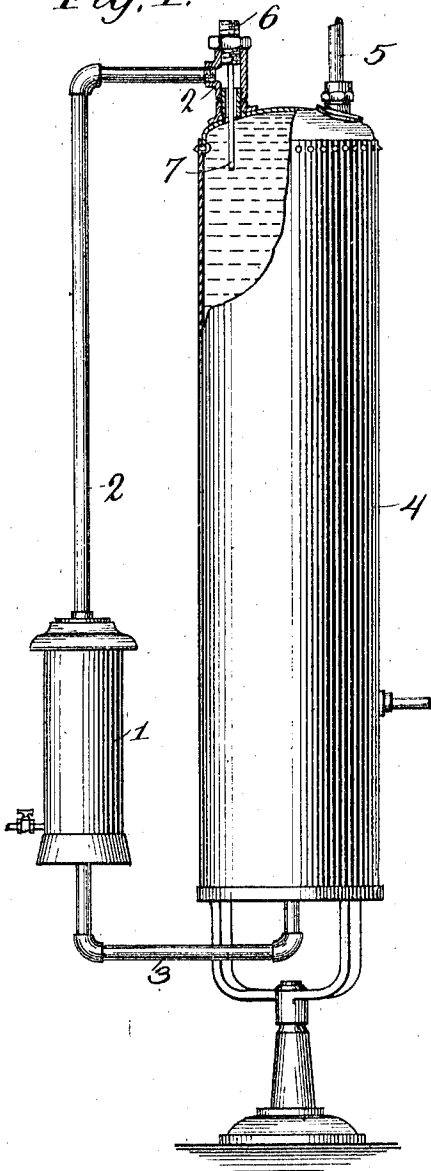


Fig. 2.

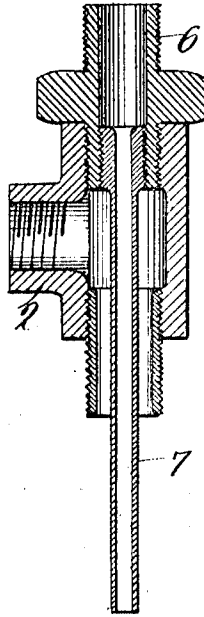
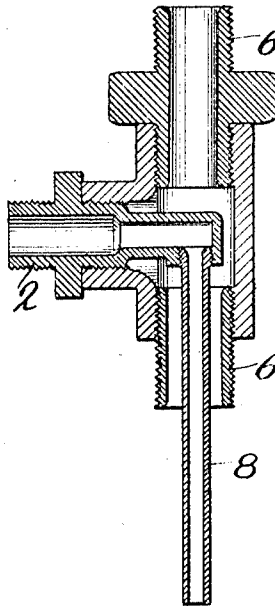


Fig. 3.



WITNESSES:

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HENRY W. O'DOWD, OF PEEKSKILL, NEW YORK, ASSIGNOR TO WILLIAM M. CRANE COMPANY, A CORPORATION OF NEW YORK.

WATER-HEATER.

1,064,001.

Specification of Letters Patent.

Patented June 10, 1913.

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To all whom it may concern:

Be it known that I, HENRY W. O'DOWD, a citizen of the United States, and a resident of Peekskill, county of Westchester, and State of New York, have invented certain new and useful Improvements in Water-Heaters, of which the following is a specification.

My invention relates to water heaters; and, while it may be embodied in constructions adapted for various purposes, it is more particularly applicable to water heaters of the domestic instantaneous type.

In water heaters of the character referred to a serious defect exists, where the pipe from the heater to the boiler and the hot water delivery pipe from the boiler are connected near the boiler, in that when the heated water is drawn off through said delivery pipe, water is drawn not only from the boiler but also from the heater through said pipe leading from the heater with the result that the temperature of the heated water so drawn is quickly and very materially reduced.

An object of the invention, therefore, is to provide a construction of water heater of the character mentioned which shall be adapted to permit the heated water to be drawn exclusively from the boiler.

Other objects of the invention are to supply a water heater of the said character which shall be simple and cheap in construction, and highly efficient and economical in operation.

These and other objects of the invention will in part be obvious and in part be made clear from the following description.

My invention consists in the novel parts, improvements, combinations, and features of construction herein shown and described.

In the accompanying drawing, which is referred to herein and made a part hereof, are illustrated two embodiments of my invention, the same serving in connection with the description herein to explain the principles of the invention.

Of the drawing: Figure 1 is an elevation of a water heater constructed in accordance with my invention, a part being broken away; Fig. 2 is a longitudinal central section of an embodiment of a feature of my invention; and Fig. 3 is a longitudinal central section of another embodiment of said feature.

A water heater constructed in accordance with one feature of my invention comprises a heating member, a boiler, communicating pipes between said heating member and boiler, a delivery pipe for the heated water connected with one of said communicating pipes, and means for preventing communication between said communicating pipe and said delivery pipe in the direction of the outlet of said delivery pipe. In accordance with one embodiment of this feature of the invention, the pipe communicating with the heating member and the boiler is connected to said delivery pipe to form a T connected with the boiler; a pipe within said T communicates with the boiler and the delivery pipe beyond the point of connection with the T of said pipe communicating with the heating member and the boiler; and said pipe communicating with the heating member and the boiler and said pipe located within the T communicate with said boiler at different points. In accordance with another embodiment of the invention, the pipe within said T is connected to the pipe communicating with the heating member and the boiler. These and other features of the invention will be more fully set forth in the following description.

Referring now in detail to the drawing, the embodiment of the invention illustrated comprises a heating member 1 connected by pipes 2 and 3 to a boiler 4, having a cold water supply pipe 5 and a hot water delivery pipe 6.

In accordance with one embodiment of the invention, as shown in Figs. 1 and 2, a nipple 7 is connected to the delivery pipe 6 at a point beyond the connection of the pipe 2 to said delivery pipe, said nipple 7 extending into the boiler. As will be seen, when water now is drawn, the supply will come from the boiler 4, the communication of the pipe 2 with the delivery pipe 6 in the direction of the delivery outlet having been prevented, so that the water from the heating member will flow directly into the boiler. A variation of this means for preventing communication between the pipe 2 and the delivery pipe 6 in the direction of the outlet is shown in Fig. 3, in which is illustrated a continuation 8 of the pipe 2 extending down through the delivery pipe 6 into the boiler, by which means the heated water from the heating member is prevented from being

drawn off through the delivery pipe 6, as before described.

It will be seen that a water heater constructed in accordance with my invention will provide a continuous supply of hot water without any material decrease in the temperature thereof, will be of simple and durable construction, and highly efficient and economical in operation.

Other advantages will be apparent to those skilled in the art.

My invention in its broader aspects is not limited to the precise construction shown and described nor to any particular construction by which the same has been or may be carried into effect, as many changes may be made in the details thereof without departing from the main principles of the invention or sacrificing its chief advantages.

I claim:

A water heater including in combination a

heating member, a boiler, communicating pipes between said heating member and boiler, and a delivery pipe for the heated water, said boiler having formed therein an opening, the delivery pipe and the pipe communicating between the heater and the boiler communicating with the boiler through said opening, and means for preventing direct communication between said pipes, whereby the heated water is caused to enter the boiler and be commingled with the water therein before passing into the delivery pipe.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

HENRY W. O'DOWD.

Witnesses:

GEO. H. SCUDDER,
R. L. BOGART.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."