Sept. 9, 1930. J. NEUKAM 1,775,208

HOT WATER HEATING ARRANGEMENT

Filed Feb. 12, 1929

Fig. 1.

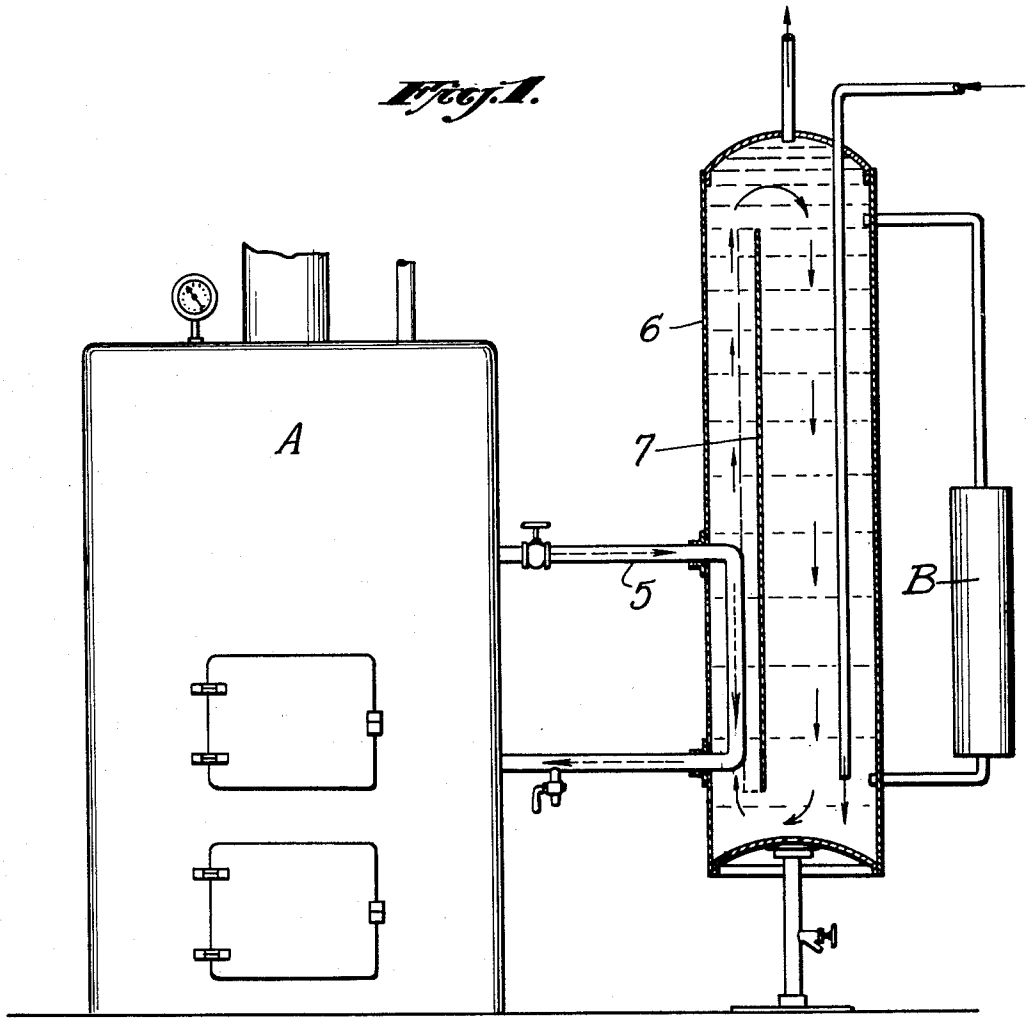
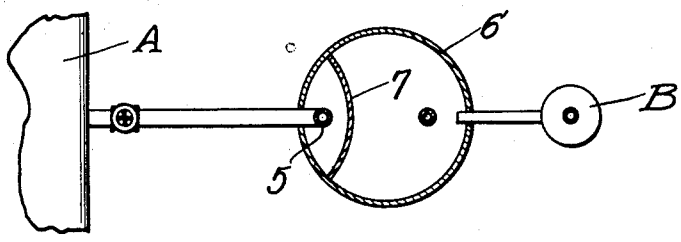


Fig. 2.



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UNITED STATES PATENT OFFICE

JOHN NEUKAM, OF HAWTHORNE, NEW YORK

HOT-WATER-HEATING ARRANGEMENT

Application filed February 12, 1929. Serial No. 339,355.

The invention relates to new and useful improvements in hot water heating systems, and aims to provide a system, wherein the hot water of a house heating plant may be utilized for the heating of water in a service boiler, so that a supply of hot water for the various outlets in the house will be available continuously during the operation of the heating plant, and this without requiring the use of gas or electrical heaters for the service water as is usually required.

My arrangement can be successfully operated in conjunction with either a hot water or steam heating plant, and inasmuch as the structural details are of a very simple nature, the arrangement can be installed at minimum expense, and in view of its construction can be operated at no expense additional to that required in the operation of the heating plant.

In the drawing wherein like reference characters indicate corresponding parts throughout the several views, wherein;

Figure 1, is a view partially in elevation, and partially in cross section of my improved arrangement, and

Figure 2, is a horizontal cross section through the service water boiler.

Now having particular reference to the drawing, A, designates generally a conventional hot water, or steam heating plant. In the present instance there is associated with the water boiler of the furnace, a circulation pipe 5, having communication with the boiler at its opposite ends, and being extended laterally from the furnace. Located adjacent the furnace is a service water stand boiler 6, within which is arranged a relatively large area of the circulation pipe 5, this area being located within the boiler preferably on a vertical plane, and adjacent the lower end thereof. The openings in the boiler 6, through which the ends of the circulation pipe 5 passes, are suitably packed, and within the boiler 6, is a vertical baffle wall 7, the ends of which are spaced from the ends of the boiler. The baffle causes a circulation of the water within the boiler, and as disclosed is so arranged to locate the heating area of the circulating pipe 5, within a narrow water passage in the boiler.

The boiler 6 is equipped with usual water inlet and outlet pipes and obviously the circulation of the very hot water through the circulating pipe 5, will cause the water within the stand boiler 6, to be properly heated. If desired, a suitable gas or electric heater B, may be associated with the stand boiler, in order that hot water may be provided when the furnace A is not in use.

In view of the foregoing description when considered in conjunction with the accompanying drawing, it will be readily apparent that I have provided a novel, simple, and efficient hot water heating system that is well adapted for all of the purposes heretofore designated, and even though I have herein shown and described the invention, as consisting of certain detail structural elements, it is nevertheless understood that some changes may be made therein without departing from the spirit and scope of the appended claim.

Having thus described my invention what I claim as new, and desire to secure by Letters Patent is:

A hot water heating arrangement of the character described comprising a stand boiler, an arcuate partition plate having longitudinal edges secured to the inner walls of the boiler on one side thereof, said partition terminating in spaced relation to the opposite ends of the boiler and a hot water constructing pipe extending longitudinally between the partition and the adjacent boiler wall, said pipe connected with means to heat the water therein.

In testimony whereof I affix my signature.

JOHN NEUKAM.