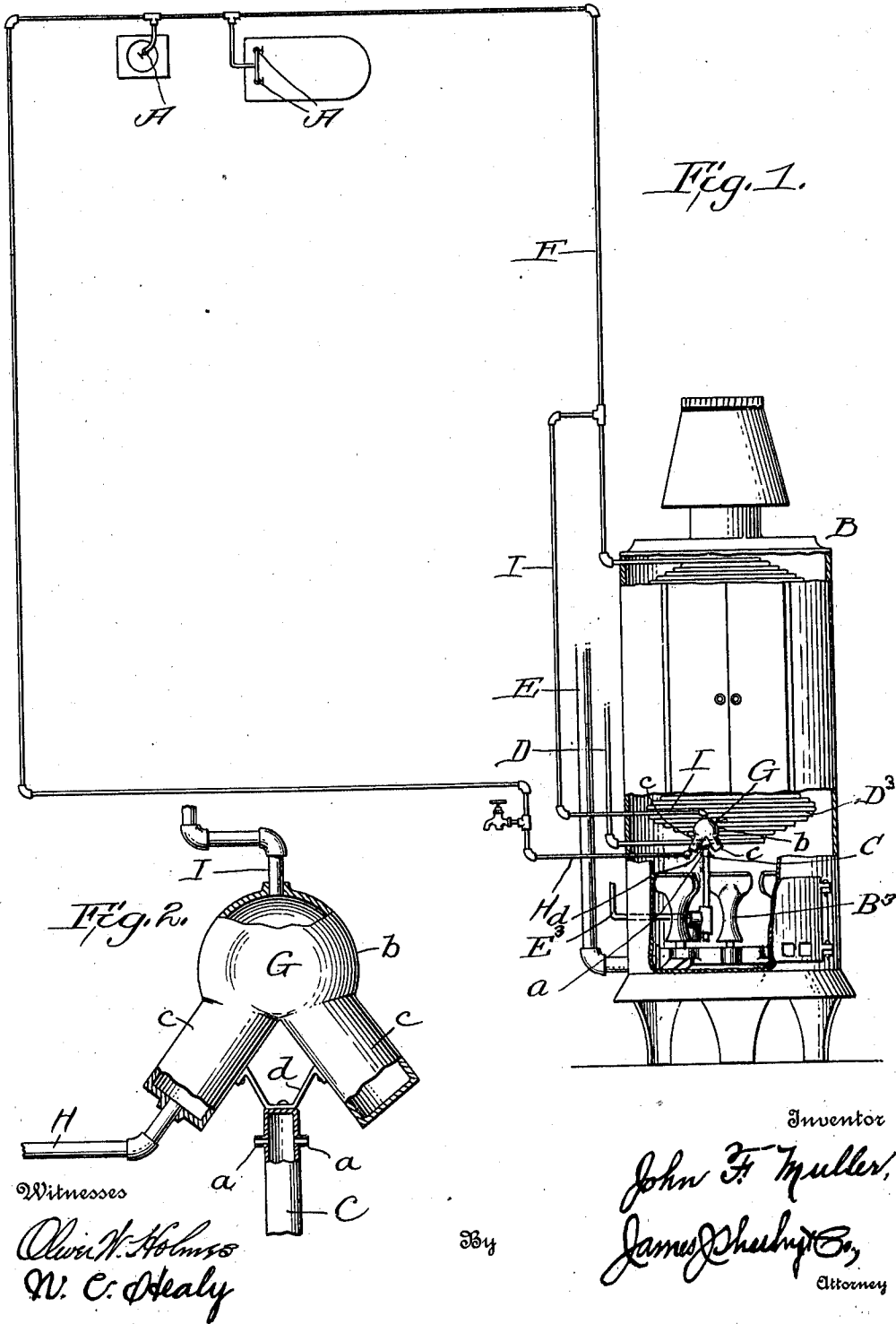


J. F. MULLER.
WATER HEATING APPARATUS.
APPLICATION FILED MAY 20, 1910.

982,844.

Patented Jan. 31, 1911.



UNITED STATES PATENT OFFICE.

JOHN FERRIS MULLER, OF NEW ORLEANS, LOUISIANA.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN F. MULLER, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented new and useful Improvements in Water-Heating Apparatus, of which the following is a specification.

My present invention pertains to water heating plants such as comprise water heaters in which a pilot light is kept constantly burning.

The object of the invention is to provide in an apparatus or plant of the kind stated, means for utilizing the heat given off by the constantly burning pilot light, to keep warm the water in the pipe that leads from the heater to the faucet or faucets at the point or points of use, this with a view of assuring the water that first flows through the faucet or faucets when the automatic heater is started, being hot.

My invention is designed more particularly for use in connection with an automatic water heater—i. e., a heater in which a pilot light is kept constantly burning and in which the main gas supply is under automatic control; and it will be best understood by reference to the following description when taken in connection with the accompanying illustration of one specific embodiment thereof, while its scope will be more particularly pointed out in the appended claims.

In the drawings which are hereby made a part hereof: Figure 1 is a diagrammatic view illustrative of a plant embodying my improvement. Fig. 2 is an enlarged detail view illustrative of the specific auxiliary water container which I prefer to employ as properly arranged relative to the pilot light of the heater.

Similar letters designate corresponding parts in both views of the drawing, referring to which:

A A are faucets located at points where it is desired to make use of hot water, and B is a water heater which may be of the conventional construction illustrated, or of any other construction consistent with the purpose of my invention without involving departure from the scope of the latter as claimed. I prefer to employ an automatic water heater, and it will be noted that the said automatic water heater comprises a main burner B³, a pilot light C, a cold water inlet pipe D, a main water container D³ con-

nected therewith, a gas supply pipe E leading to the main burner, a comparatively small gas supply pipe E³ leading to the pilot light, and a hot water outlet pipe F; the said pipe F extending between the main water container D³ and the faucets A as illustrated. It will also be observed that the pilot light C is provided with lateral education apertures *a* for gas, and that supported on the said pilot light is the auxiliary water container G comprised in my improvement. The auxiliary water container G may be in any form and of any construction consonant with my invention without involving departure therefrom. I prefer, however, to have it comprise an upper major portion *b*, and diverging legs *c* connected therewith and arranged at opposite sides of the upper end of the pilot light C to which the said legs are connected through the medium of a bracket *d*, as clearly shown in Fig. 2. I also prefer to connect to the lower end of one of the legs *c* the pipe H which, in accordance with my invention, extends from the faucet that is farthest from the automatic heater B to the auxiliary water container G.

Extending from the auxiliary water container G and preferably from the uppermost point thereof, as shown, is a pipe I which is connected with the pipe F, preferably, though not necessarily, at a point intermediate the water container D³ and the faucet A nearest the automatic heater.

In the practical use of my improvements, it will be manifest that because of the pilot light C being constantly lighted, and the auxiliary water container G being arranged and connected as described, the water intermediate the main water container D³ and the faucets will be kept in a hot state, this because of the circulation of such water through the auxiliary container G, the pipe I, the pipe F and the pipe H. From this it follows that when any one of the faucets A is opened after the starting of the automatic heater B, the water that first flows through the said faucet will be hot, and will be followed by water heated by the automatic heater in the ordinary well known manner. Then when the automatic heater is put out of operation, the water in the pipe F and intermediate the heater and the faucets A will be maintained in a heated state by my improvements in the manner before described.

It will be gathered from the foregoing that when a water heating apparatus comprises my improvements it is unnecessary after opening any one of the faucets to wait and draw off cold water before the hot water supplied by the operation of the automatic heater reaches the faucet. On the other hand as soon as any one of the faucets is opened, the hot water furnished by the operation of my improvements flows there-through.

The specific auxiliary water container G illustrated and described is advantageous because it is calculated to hold a large quantity of water in close proximity to the flames of the pilot light C.

While I have shown and described one form of my invention, it is to be understood that I am not limited to the details or the form or relative arrangement of parts disclosed, but that modifications may be made therein without departing from the spirit thereof.

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

1. In a water heating apparatus, the combination of a faucet; a water heater comprising a main water container, a main burner, a pilot light adapted to be kept constantly lighted and having lateral education apertures adjacent its upper end and

also comprising a hot water outlet pipe leading from the main water container to the faucet, and a cold water inlet pipe; an auxiliary water container comprising a body or major portion disposed above and heated by the pilot light and connected with the hot water outlet, legs diverging from said body or major portion, and a bracket interposed between said legs and the upper end of the pilot light; and a pipe leading from the faucet to one leg of the auxiliary water container.

2. In a water heating apparatus, the combination of a faucet; a water heater comprising a main water container, a main burner, a pilot light adapted to be kept constantly lighted, a hot water outlet pipe leading from the main water container to the faucet, and a cold water inlet pipe; an auxiliary water container arranged in close proximity to and constantly heated by the pilot light and connected with the hot water outlet; and a pipe leading from the faucet back to the auxiliary water container.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOHN FERRIS MULLER.

Witnesses:

FRANK RIETH, Jr.,
Jno. B. HUSS.