No. 875,253. PATENTED DEC. 31, 1907.

M. P. FREEBEY & G. MOORE.

HOT WATER ATTACHMENT FOR STOVES.

APPLICATION FILED MAY 21, 1906.

Fig. 1.

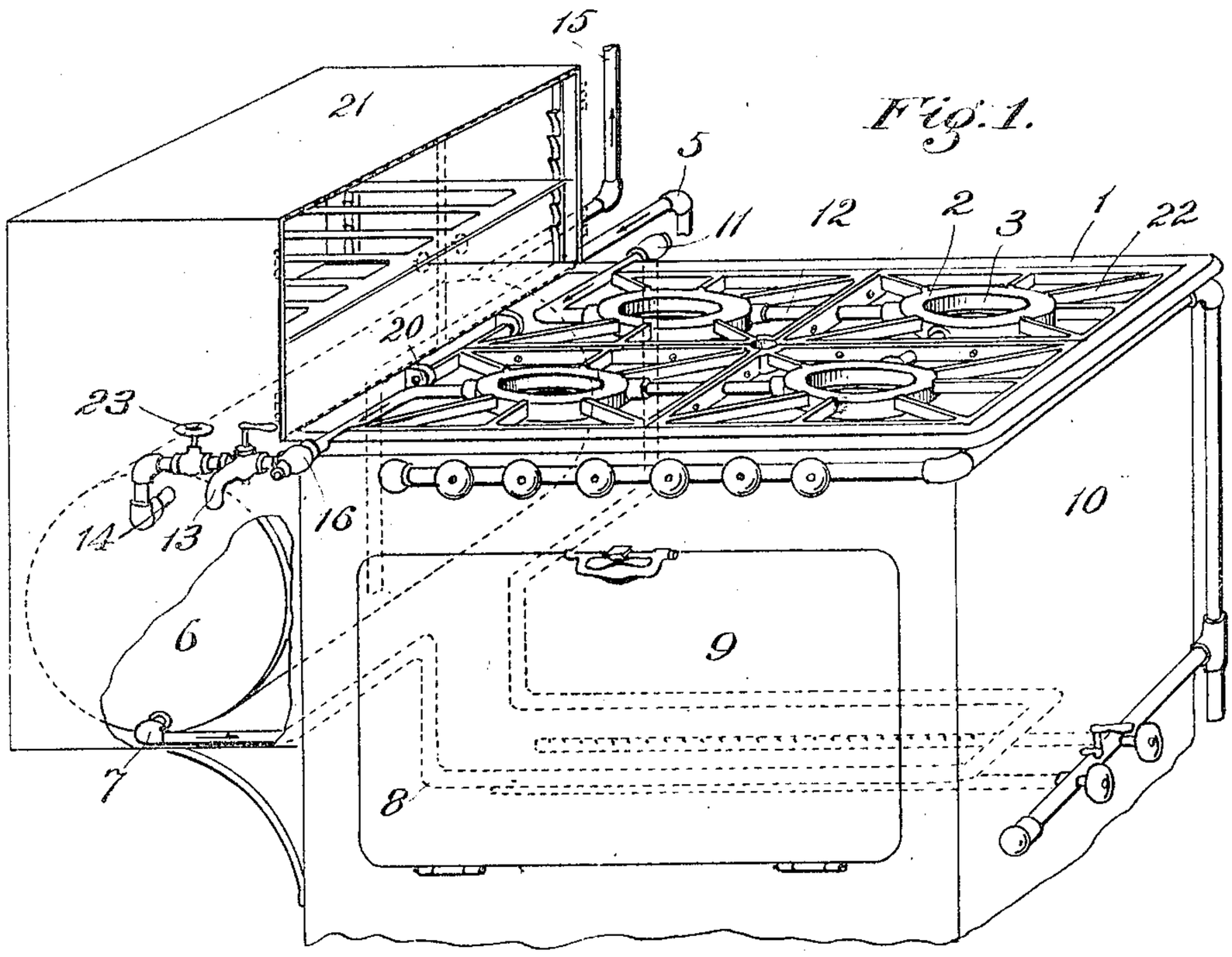


Fig. 2

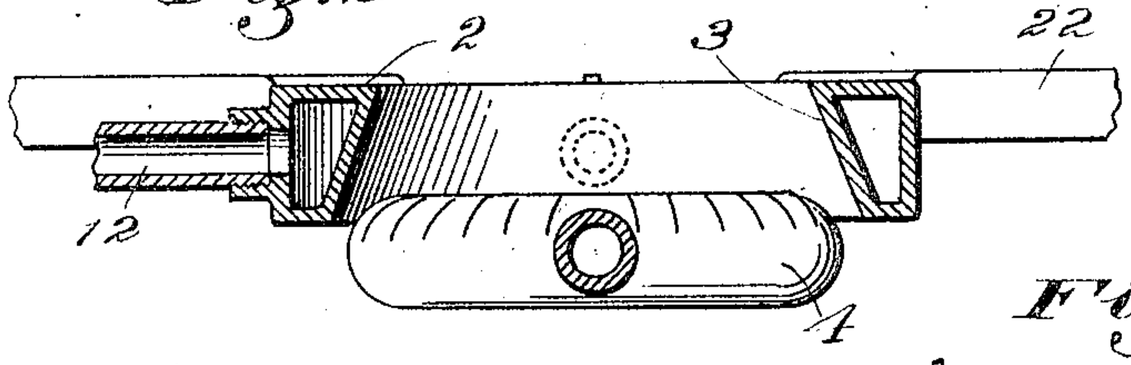


Fig. 3.

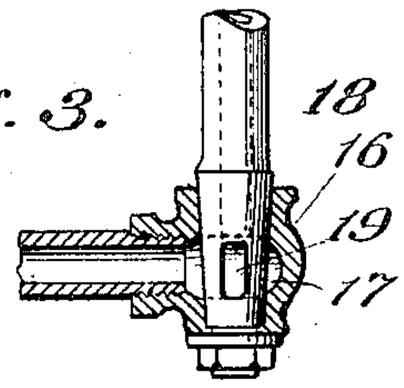
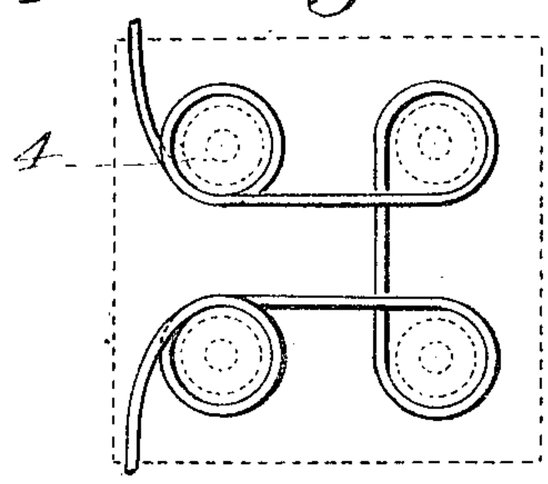


Fig. 4



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UNITED STATES PATENT OFFICE.

MORDECAI P. FREEBEY AND GRANT MOORE, OF LOS ANGELES, CALIFORNIA.

HOT-WATER ATTACHMENT FOR STOVES.

No. 875,253. Specification of Letters Patent. Patented Dec. 31, 1907.

Application filed May 21, 1906. Serial No. 317,959.

To all whom it may concern:

Be it known that we, MORDECAI P. FREEBEY and GRANT MOORE, both citizens of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Hot-Water Attachment for Stoves, of which the following is a specification.

This invention relates to an attachment for stoves designed for the purpose of heating water.

One of the objects of this invention is to provide means for circulating water around the burners of a gas, gasolene, or other stove whereby the water is heated by the same heating medium as that which is used for cooking purposes.

To accomplish this without reducing the intensity of the flame and without lessening the efficiency thereof for cooking purposes, is the primary object of this attachment.

A further object of this invention is to provide a top for stoves and the like, composed of a series of annular water-receiving passages, which passages are arranged to be placed over and in close proximity to an equal series of burners, whereby the flame therefrom impinges against the water-containers and confines the heat within a certain specific area while at the same time preserving the efficiency thereof for the cooking utensils arranged to sit immediately above the containers and the flame.

The invention comprises primarily a substantially rectangular top having a cold-water inlet and a hot-water outlet, which outlet may also be connected with a stationary boiler serving and distributing hot water throughout the house.

It comprises also means for keeping the victuals and foods warm by means of hot water, all of which features will be more specifically described in connection with the accompanying drawing, and then pointed out in the claims.

In the drawing, Figure 1 represents a perspective view of my invention; Fig. 2, a longitudinal, vertical section of one of the water-circulating passages; Fig. 3, a sectional elevation of the water connection, and Fig. 4, a modification.

Specific reference being had to the drawing, 1 represents a frame having a plurality of annular water-receiving passages 2. The interior periphery of said passages is inclined, as shown at 3, the purport of which is to deflect the heat upwardly against the utensils located above the burners 4.

5 indicates a cold-water inlet supplying water to the stationary boiler 6. The cold-water outlet 7 from the boiler consists of pipe 8 arranged within the heating area of the burners contained in the oven 9 of the body of the stove 10, so that the water in its passage through these pipes is heated before it enters into the water-circulating passages 2.

11 indicates the connection between the cold-water supply and the water-distributing annuli 2, the said annuli 2 being connected with each other by means of pipes 12 whereby a continuous circulation of the water through the pipes as well as the annular passages is obtained. The arrangement of these annular water containers is such that the water is to some extent halted in its rapid progression therethrough, and consequently the heat issuing from the burner below is enabled to heat the water in a quicker manner.

The water circulating through the body portion of the attachment may either be drawn off at the faucet 13, or may discharge into the boiler 6, as shown at 14; thus hot water may be had at all times for outside use as well as for service throughout the house, the hot water pipe 15 leading from the boiler serving to distribute the water therethrough.

The entire top is capable of being swung away from the heating area of the burners as well as into a position vertical with the horizontal line of the stove, while at the same time maintaining a constant flow through the annular passages, and in fact through the entire system of pipes. This is accomplished preferably by means of a jointed connection shown at 16 which forms a hinge for the top and which has an enlarged opening 17 therein to accommodate the outlet pipe 18 provided with a plurality of lateral openings 19. In this manner the top may be swung away from the surface of the stove without interfering with the flow of the water. In order to relieve the strain from the jointed connection due to the weight of the top, we provide a hinged connection 20 which carries as well as supports the entire attachment when raised to a position vertical to the horizontal plane of the stove.

21 represents a box or casing arranged in a position with respect to the boiler whereby the heat therefrom rises and is stored therein for the purpose of keeping foods, victuals etc., warm.

It is obvious from the description that as the water is circulated through the annular passages the heat from the burners impinges against the interiorly-inclined walls of the water-containing chambers, and is thus heated while in circulation without any extra utilization of fuel and without any loss in the heat units.

On account of the angular disposition of the walls of the passages, the heat from the flame is concentrated and restricted within a certain area whereby the efficiency of the flame is not diminished on account of the cold water passing through the passages, but increased by the confinement thereof between the space formed by the bottom of the burner and the bottom of the utensil which is placed on the ridges 22 attached to the annular passages 2.

Practical operation of this attachment has demonstrated the increased efficiency of the heat obtained in this manner, inasmuch as the water issuing from the faucet 13 is raised to a temperature near the boiling point. In place of the annular passages for allowing a circulation of the water therethrough for the purpose of heating we may employ a series of coils arranged to be placed above the burners, the effect of which would be the same or nearly the same as that produced by the passages 2. The use of this modification is believed to be fully within the scope of this invention as well as other modifications embodying the features of this invention which broadly consists in providing a top for gas, gasolene, and other stoves with water-distributing passages whereby the water is heated instantaneously.

A cut-off 23 is provided intermediate the faucet 13 and the pipe discharging into the boiler 6, which is designed to cut off the flow of water through the pipes into said boiler 6 for the purpose of obtaining an instantaneous supply of hot water from the faucet 13.

Having thus described and ascertained the nature of this invention, what we claim and desire to secure by Letters-Patent of the United States is:—

1. A hot water attachment for stoves and the like comprising a stove proper and the burners, a boiler and a top hingedly connected with said stove, said top having a plurality of water-distributing passages consisting of interconnected annular hollow bodies having divergent walls, said passages being connected with said boiler by a swiveled connection to permit of the movement of said top, together with its water-receiving passages in a vertical position, an inlet to and an outlet from said water-receiving passages, a faucet located intermediate the terminus of the water outlet and the return to the boiler, and a rectangular victuals-warming receptacle located directly over the boiler.

2. A hot water attachment for stoves and the like comprising a stove proper and the burners, a boiler and a top hingedly connected with said stove, said top having a plurality of water-distributing passages consisting of interconnected annular hollow bodies having divergent walls, said passages being connected with said boiler by a swiveled connection to permit of the movement of said top, together with its water-receiving passages, in a vertical position, an inlet to and an outlet from said water-receiving passages, and a faucet located intermediate the terminus of the water outlet and the return to the boiler.

In testimony whereof, we have hereunto set our hands at Los Angeles, California, this 14th day of May, 1906.

MORDECAI P. FREEBEY.
GRANT MOORE.

In presence of—
ANTON GLOETZNER, JR.,
C. J. WILLIAMS.