

J. F. BUSEY & J. F. BUSEY, JR.
 STOVEPIPE WATER HEATER.
 APPLICATION FILED AUG. 29, 1907.

956,934.

Patented May 3, 1910.

2 SHEETS—SHEET 1.

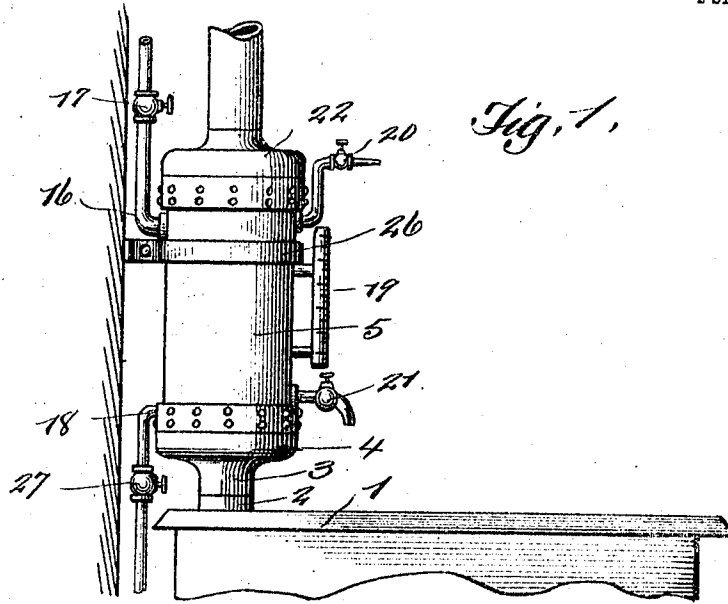
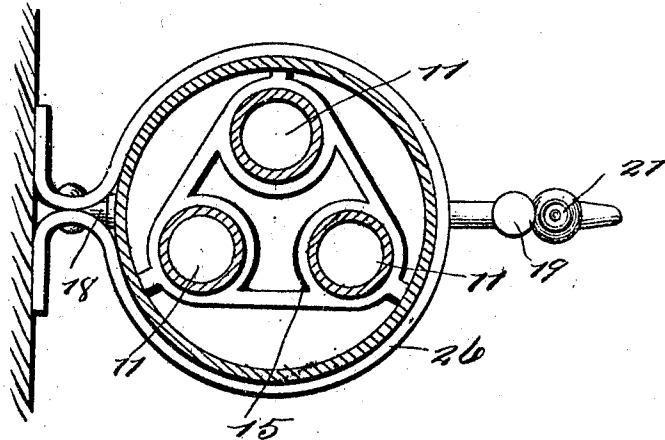


Fig. 3.



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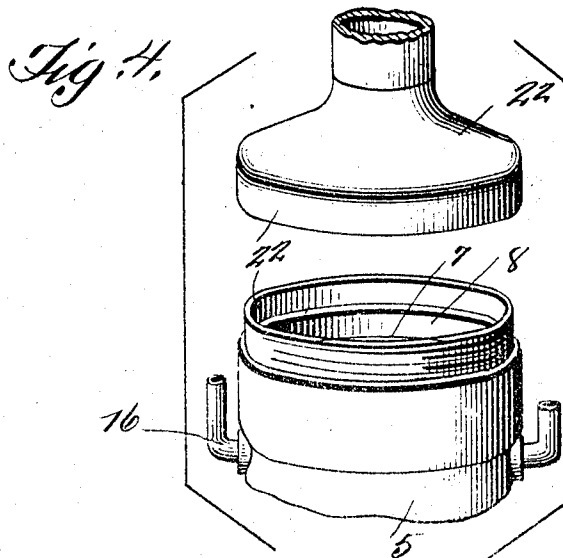
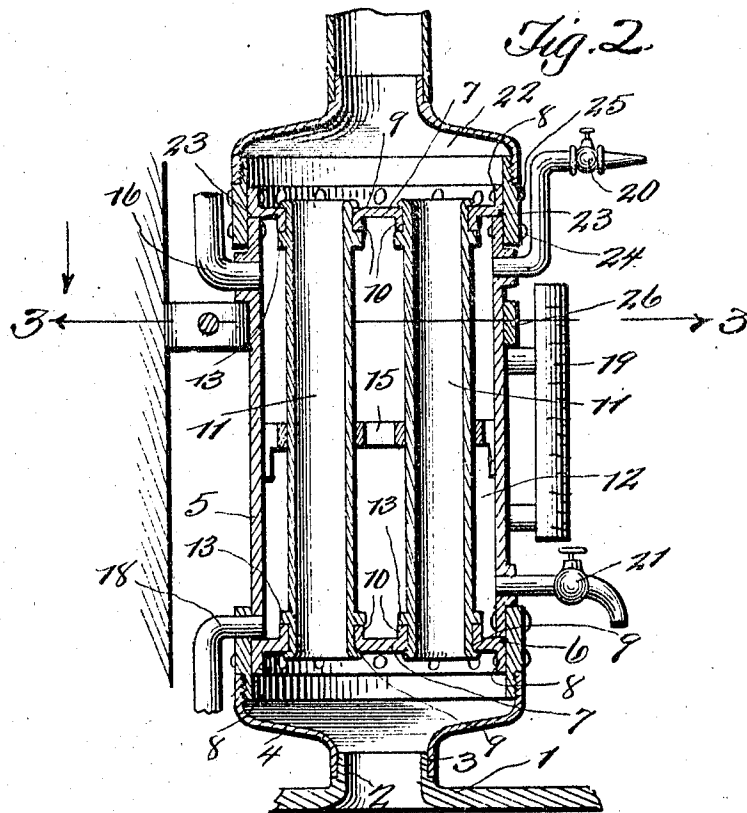
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UNITED STATES PATENT OFFICE.

JOHN FRANKLIN BUSEY AND JOHN FRANKLIN BUSEY, JR., OF CONCORD, CALIFORNIA.

STOVEPIPE WATER-HEATER.

956,934.

Specification of Letters Patent.

Patented May 3, 1910.

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To all whom it may concern:

Be it known that we, JOHN FRANKLIN BUSEY and JOHN FRANKLIN BUSEY, JR., citizens of the United States, residing at Concord, in the county of Contra Costa and State of California, have invented a new and useful Stovepipe Water-Heater; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention pertains to a new and useful water heating apparatus; and the invention in its broadest aspect has for its essential object to provide a device of this character which displaces a section of the smoke pipe of a stove or range, and by which displacement the water contained in the heater will be heated by the smoke passing through the smoke pipe, together with the products of combustion from the stove or range.

The invention aims for a further object to provide a device having an upper and lower cap, of such construction that each end of the heater and the ends of the pipes within the same are closed. The connections between the said caps and the heater are provided with suitable packing, so as to provide tight joints.

This invention comprises further objects and combinations of elements which will be hereinafter more fully described, shown in the accompanying drawings, and the novel features thereof will be pointed out by the appended claim.

To obtain a full, and correct understanding of the details of construction, combinations of features, elements and advantages, reference is to be had to the hereinafter set forth description and the accompanying drawings, in connection therewith, wherein—

Figure 1 is a perspective view of a stove or range showing a portion of the smoke pipe removed, and in its place thereof the improved water heater positioned. Fig. 2 is a sectional view vertically through the water heater. Fig. 3 is a cross sectional view on line 3—3 of Fig. 2. Fig. 4 is a perspective view of a portion of the heater, showing one of the caps in a position ready to close the end of the heater.

Making renewed reference to the accompanying drawings, wherein similar reference characters indicate corresponding parts in the

several illustrations, by figures, 1 designates the upper portion of a stove or range, to the top portion of which an annular flange 2 is fixed, with which the annular flange 3 of the lower cap 4 of the heater engages, as clearly shown. This cap 4 closes the lower end of the heater 5 and is provided with suitable packing 6, so as to make a tight joint therewith. The cap 4 is provided with a bottom 7 having an annular flange 8, which is riveted to the said cap. This bottom is also provided with a plurality of openings 9, about the circumference of which are annular flanges 10, which engage the smoke pipes 11, so as to close communication between the inner surface of the smoke pipes and the water space 12 of the heater; the said smoke pipes are provided with annular collars 13 which engage the annular flanges 10, so as to make a close joint, as clearly illustrated in Fig. 2. These smoke pipes are securely held in a perpendicular position by a suitable spider 15, as clearly shown in Fig. 3, and which is suitably secured to the said water heater and the said smoke pipes, as clearly shown. Said heater is provided with a water inlet 16 which is provided with a valve 17 for regulating the flow thereof, and is also provided with a water outlet 18, as also shown. Fixed to the front of the water heater is a suitable water gage 19 and a suitable valve 20 which is utilized for the purpose of reducing the steam pressure within the heater, as will be clearly manifest. The lower portion of the heater is provided with a suitable spigot 21 for the purpose of drawing off the water when it is desired for different purposes.

The upper cap 22 is somewhat similar in construction to the cap 4 only the cap 22 is reversed, but is provided with the member 7, having the annular flange 8, the openings 9, about which the annular flanges 10 are positioned, which flanges 10 engage the annular collars 13. The cap 22 is also provided with packing 23 similar to the packing 6. The cap 22 is riveted to the upper end of the heater, as shown at 24, and the flange 8 of the member 7 carried by the cap 22 is riveted, as shown at 25, to the said cap 22. The heater is supported to the wall, in rear of the stove or range, by means of a band 26, as clearly shown in Fig. 1, which band is suitably fixed to the wall, as illustrated. The water outlet 18 is for the purpose of removing the sediment, that accumu-

lates in the bottom of the heater; this water outlet pipe is controlled by suitable valve 27, as clearly shown.

It is to be understood that various changes
5 and modifications may be employed in the construction and embodiment thereof; combinations of features, and elements, without in any way departing from the spirit and scope of the invention covered by the claim
10 thereof; it being understood that whatever variations or modifications are employed must fall within the scope of the appended claim.

From the foregoing, the essential features,
15 elements and the operation of the device, together with the simplicity thereof, will be clearly apparent.

Having thus fully described the invention, what is claimed as new and useful by the
20 protection of Letters Patent, is:—

In a water heating device for attachment to a stovepipe, the combination of a cylindrical casing provided with end inclosing

caps having openings whereby heat from the stove may enter and leave the casing, a plurality of heating tubes vertically arranged within said casing and provided with annular shoulders, plates having flanged apertures to receive the ends of the tubes and to engage said shoulders to maintain said tubes in vertical positions, said casing having interior annular shoulders at either end against which the plates are disposed, and a spider plate disposed centrally upon the interior of the casing to assist in holding the tubes in vertical positions, as and for the purpose specified. 25 30 35

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

JOHN FRANKLIN BUSEY.
JOHN FRANKLIN BUSEY, Jr.

Witnesses:

LINDA BUSEY,
Mrs. R. A. JONES.