

No. 787,253.

PATENTED APR. 11, 1905.

S. L. WOTTRING.
WATER HEATER.

APPLICATION FILED JULY 1, 1904.

2 SHEETS—SHEET 1.

FIG. 1.

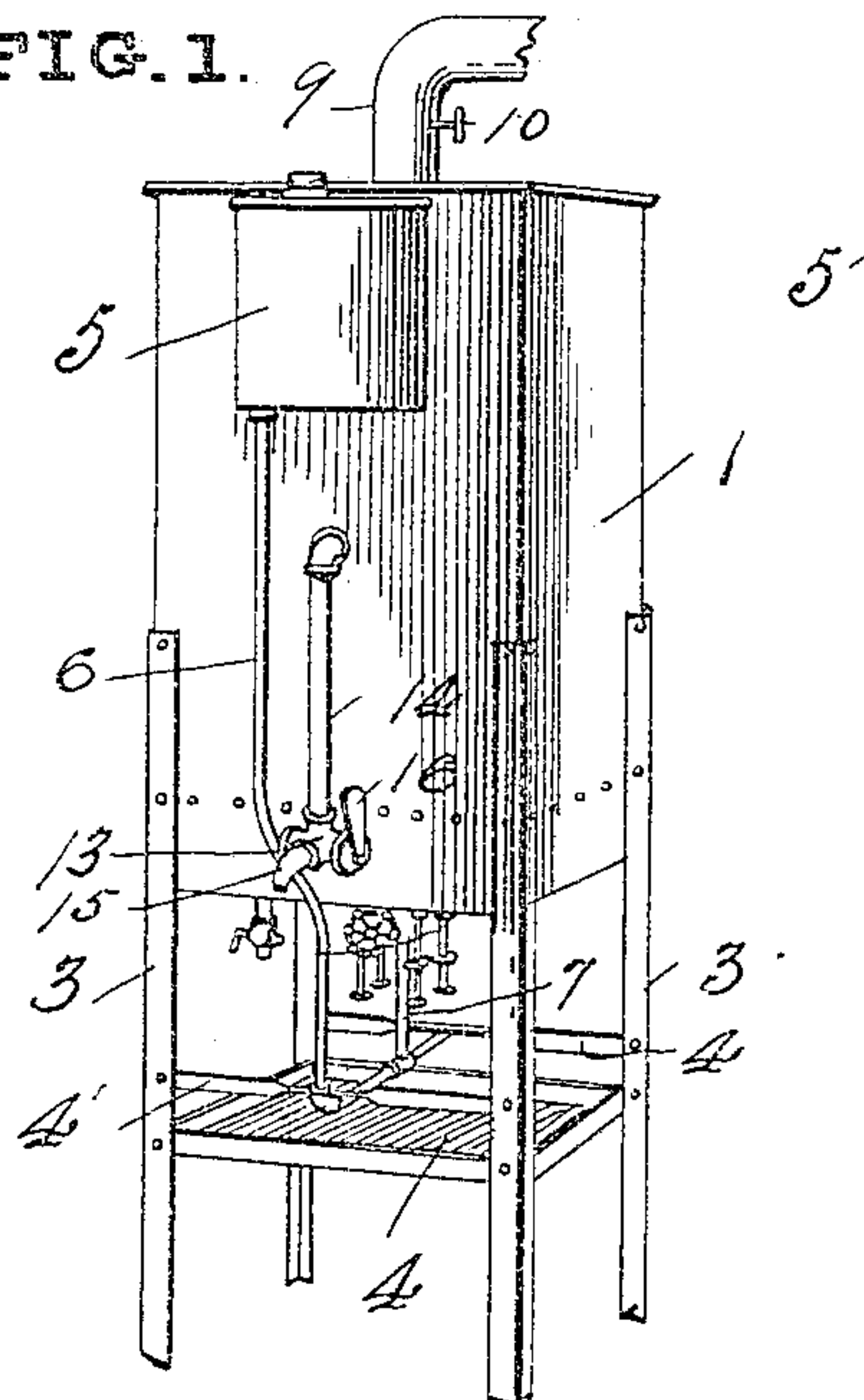


FIG. 2.

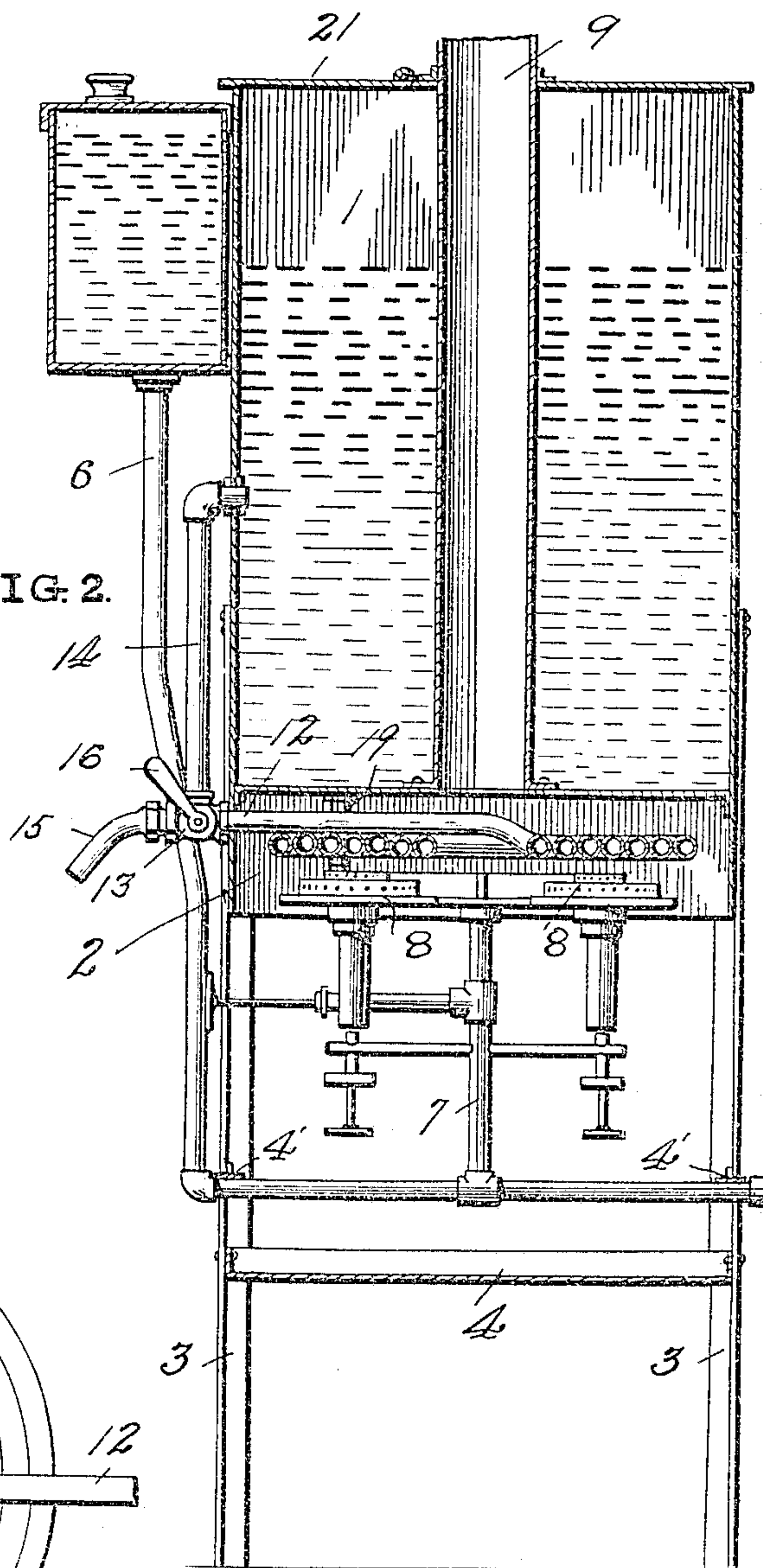
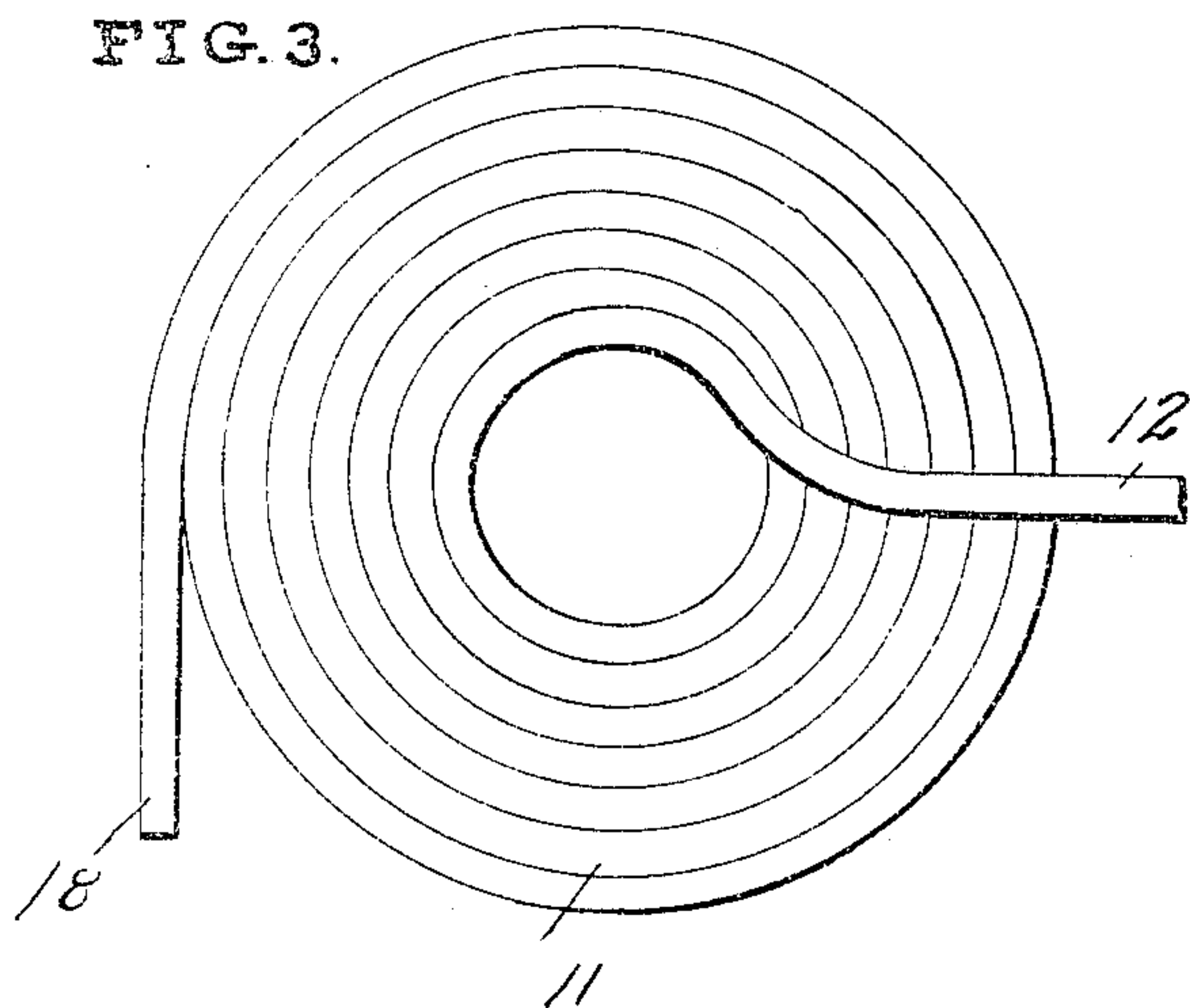


FIG. 3.



Witnesses

Chas. K. Davis.

May E. Moore.

Sylvanus L. Wattring

Inventor

Wm. A. Moore

by

Attorney

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2 SHEETS—SHEET 2.

FIG. 4.

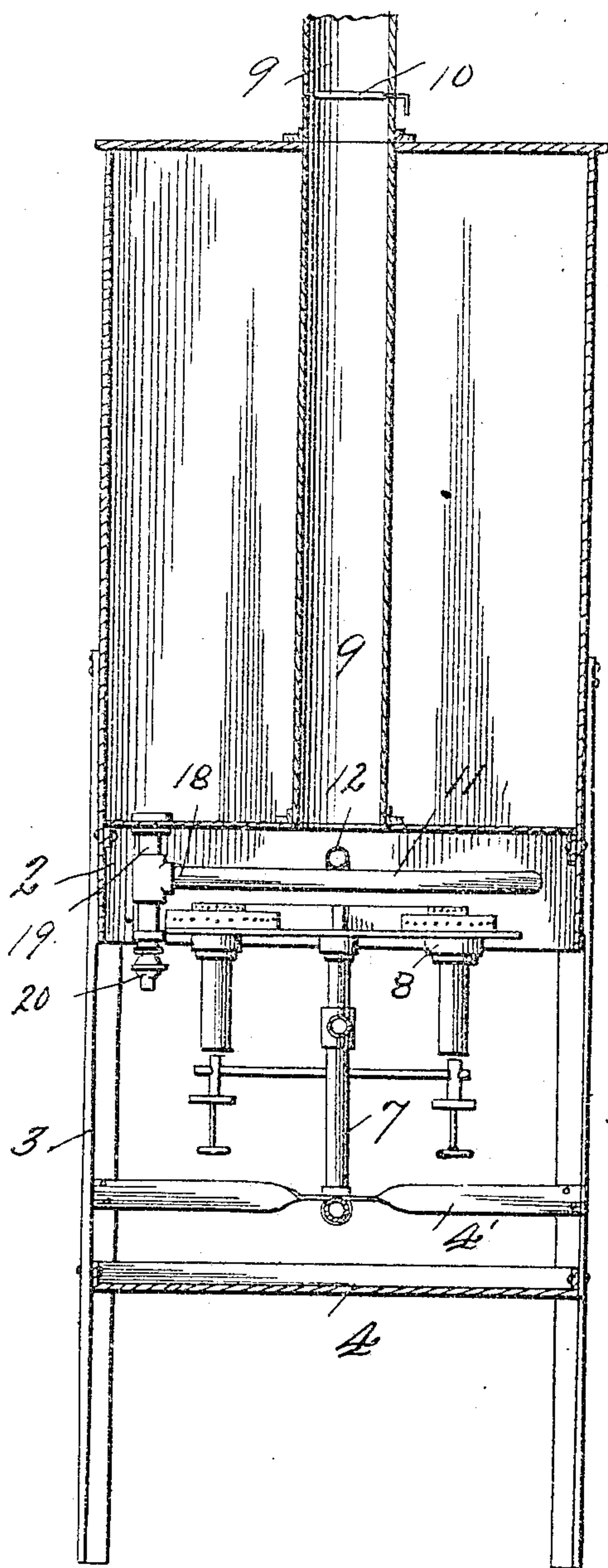


FIG. 5.

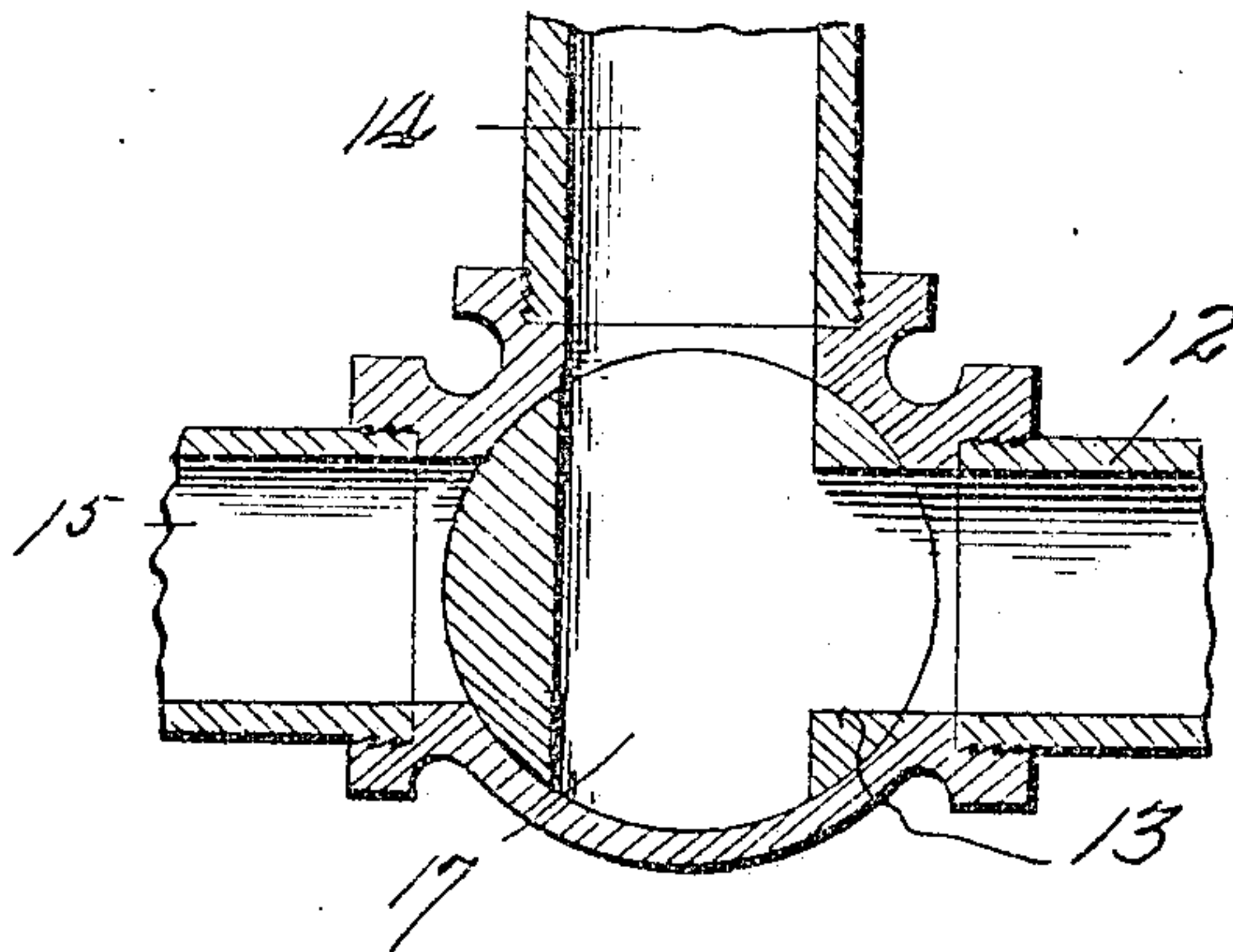
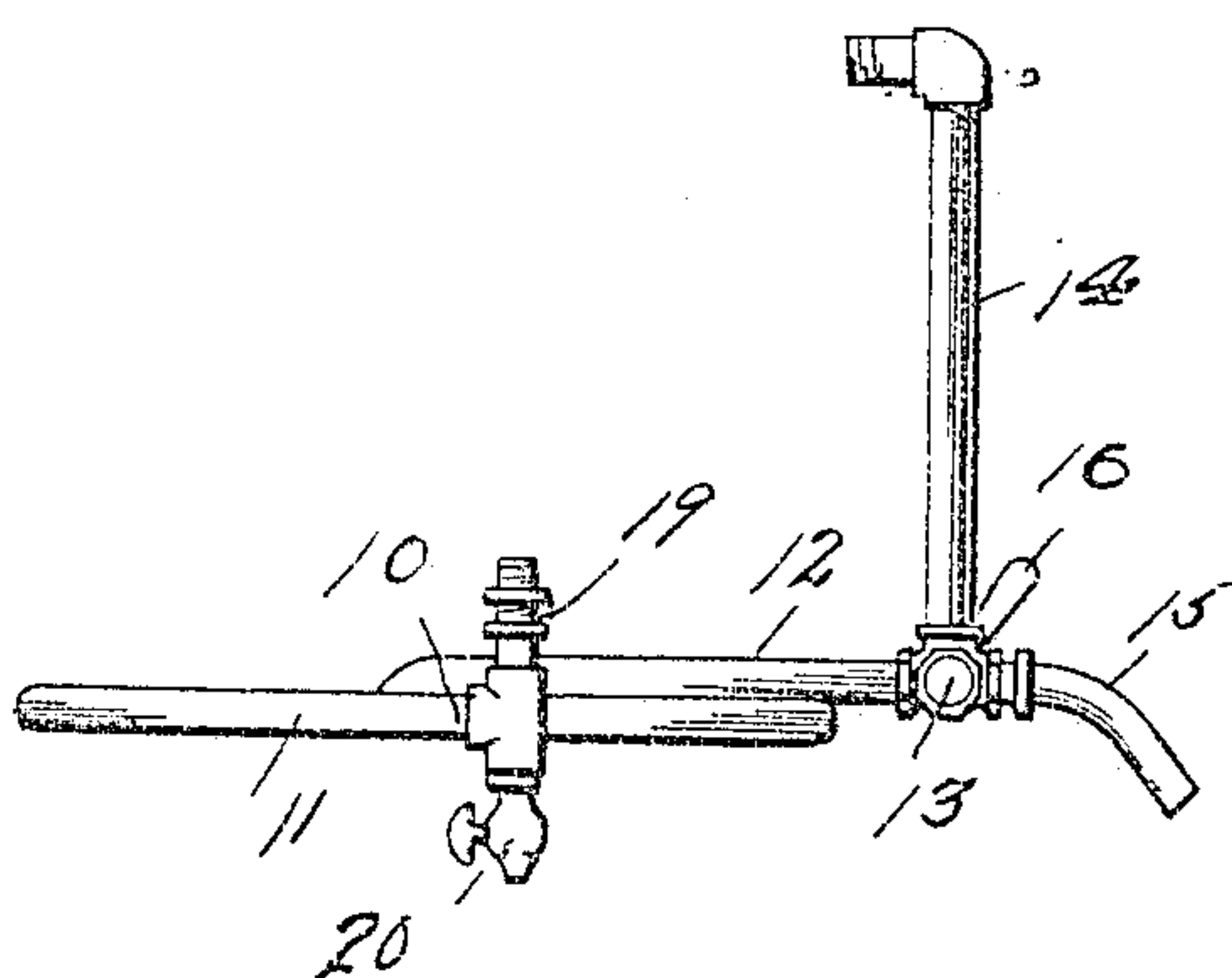


FIG. 6.

Sylvanus L. Wottring.

Inventor

J. M. Moore.

by

— Attorney —

Witnesses

Chas. K. Davis.

May E. Moore

UNITED STATES PATENT OFFICE.

SYLVANUS L. WOTTRING, OF PROSPECT, OHIO.

WATER-HEATER.

SPECIFICATION forming part of Letters Patent No. 787,253, dated April 11, 1905.

Application filed July 1, 1904. Serial No 214,899.

To all whom it may concern:

Be it known that I, SYLVANUS L. WOTTRING, a citizen of the United States, residing at Prospect, in the county of Marion and State of Ohio, have invented certain new and useful Improvements in Water-Heaters, of which the following is a specification.

My invention relates to improvements in water-heaters, and has for its object the provision of an apparatus of this character which will be adapted especially for use in homes or other places which are not provided with gas or water connection throughout the house.

In construction the device is simple and cheap and is designed to occupy a limited space, so that it may be placed in a bath-room and heat and furnish water for an adjacent bath-tub.

Another object is the provision of means whereby the water for a desired purpose may be rapidly heated either to a high or comparatively lower temperature with a minimum expense for fuel; and withal the invention embodies a device or apparatus of this character which is compact, portable, easily manipulated and controlled and which will also be ornamental in appearance.

The invention consists in a water-tank and pipe connections thereto provided with outlet-spout, a coil or superheater, and means for heating the water in the coil and tank; and it further consists in certain other features of invention and combinations and arrangements of parts, as hereinafter pointed out specifically in the claim, described in the specification, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my water-heater complete. Fig. 2 is a central vertical section of the heater, some parts being shown in elevation. Fig. 3 is a top plan of the coil detached. Fig. 4 is a vertical central section taken at right angles to Fig. 2. Fig. 5 is a side elevation of the coil and its connections, and Fig. 6 is a broken sectional view of the three-way cock.

Referring to the drawings, the numeral 1 designates a water-tank constructed of suitable material and of any desired shape, the

illustration in this instance being shown as rectangular. The bottom of the tank is located some distance from the lower end of the walls thereof, and this construction forms a pocket or chamber 2, said chamber or pocket being open at the bottom. Suitable supports or legs, as 3, are extended from the corners of the water-tank and are long enough to hold the tank at a desired elevation. The drip-pan 4, in addition to serving its function as such, acts also as a brace in connection with the braces 4' for holding the supports of the heater rigid. A gasoline or other liquid fuel tank 5 is located at a convenient height and distance from the burners and is bolted to the water-tank 1.

6 indicates the feed-pipe from the gasoline-tank, and said pipe passes down under the water-tank and is provided with a return-pipe 7, which supplies oil or gasoline to the burners 8, which are shown as a cluster of four separate burners, thus covering an enlarged area of heating-space.

Extending upwardly from the pocket or chamber 2 and through the center of the water-tank is the smoke flue or pipe 9, having therein a damper 10. This flue may be connected to a house-chimney, if desirable, or may be extended outside the house in any suitable manner to dispose of the smoke and fumes from the burners.

The coil or heater 11 is located directly above the burners 8 and below the bottom of the tank in the compartment 2. Said coil is composed, preferably, of copper tubing or pipe and is provided at its end 12 with an outlet into valve 13. This valve is a three-way valve and has connected thereto the circulating-water pipe 14 and the spout 15. The connection is controlled by the lever 16 and plug 17, the plug being provided with three passages and adapted to pass the water, as will be hereinafter described. The pipe 14 communicates with the tank 1 at a suitable point therein. The end 18 of the coil is connected to short pipe 19, which enters and communicates with the water-tank at the bottom thereof, and said pipe 19 is provided with a cock 20 for draining the tank of water.

Water may be introduced into the tank in any suitable manner, as through the door 21 at the top of the tank.

On reference to the drawings it will be observed that when water is in the tank and the burners ignited the water in the coil is heated, and if the lever 16 is in the position shown in Fig. 2 the water enters the coil at 19, passes through the coil, pipe 12, valve 13, and pipe 14 to the upper portion of the tank. When the lever is turned down to the left in Fig. 2, the water flows through the coil and out of the spout 15.

While I have shown the heater combined with a water-tank, it will be understood that the coil and burners may be mounted without the accompanying water-tank, but may be connected to any suitable storage-tank located at a distance and connected thereto by a supply-pipe.

By locating the smoke-flue so that it passes through the water-tank an additional heating-space is formed, and the water is heated in the tank to some extent by the passage through the flue of heat, smoke, and gases from the burners.

In case the draft through the smoke-flue is too strong the same may be regulated by the damper 10, and by the employment of this flue the gases and fumes, which would otherwise find their way into the room, are conducted to a suitable place and disposed of without annoyance.

From the foregoing description, taken in connection with the drawings, it will be evi-

dent that I have provided a device or apparatus which will fulfil all the provisions set forth in this specification as the object of my invention, and while I have illustrated only one embodiment of the invention I do not limit myself to the construction shown, but claim also any changes therein within the scope of my claim.

What I claim, and desire to secure by Letters Patent, is—

In a water-heater, a metallic rectangular vessel, a supporting-frame therefor, a pan as 4 in said frame, a partition in the vessel, forming a water-compartment and a heating-compartment, said heating-compartment being open at the bottom, a smoke-flue extending from the heating-compartment through the water-compartment, an open center coil in the heating-compartment having one end connected to the water-compartment below the water-line therein and its other end connected to the bottom of said compartment, a three-way cock connected with said coil and an outlet thereto, a fuel-tank attached to the water-compartment, and burners located under said coil in position to permit the products of combustion to heat the coil and pass upwardly through the smoke-flue.

In testimony whereof I affix my signature in presence of two witnesses.

SYLVANUS L. WOTTRING.

Witnesses:

ROY WOTTRING,
A. L. SHOCKEY.