

(No Model.)

F. B. PETERSON.
WATER HEATER.

No. 576,763.

Patented Feb. 9, 1897.

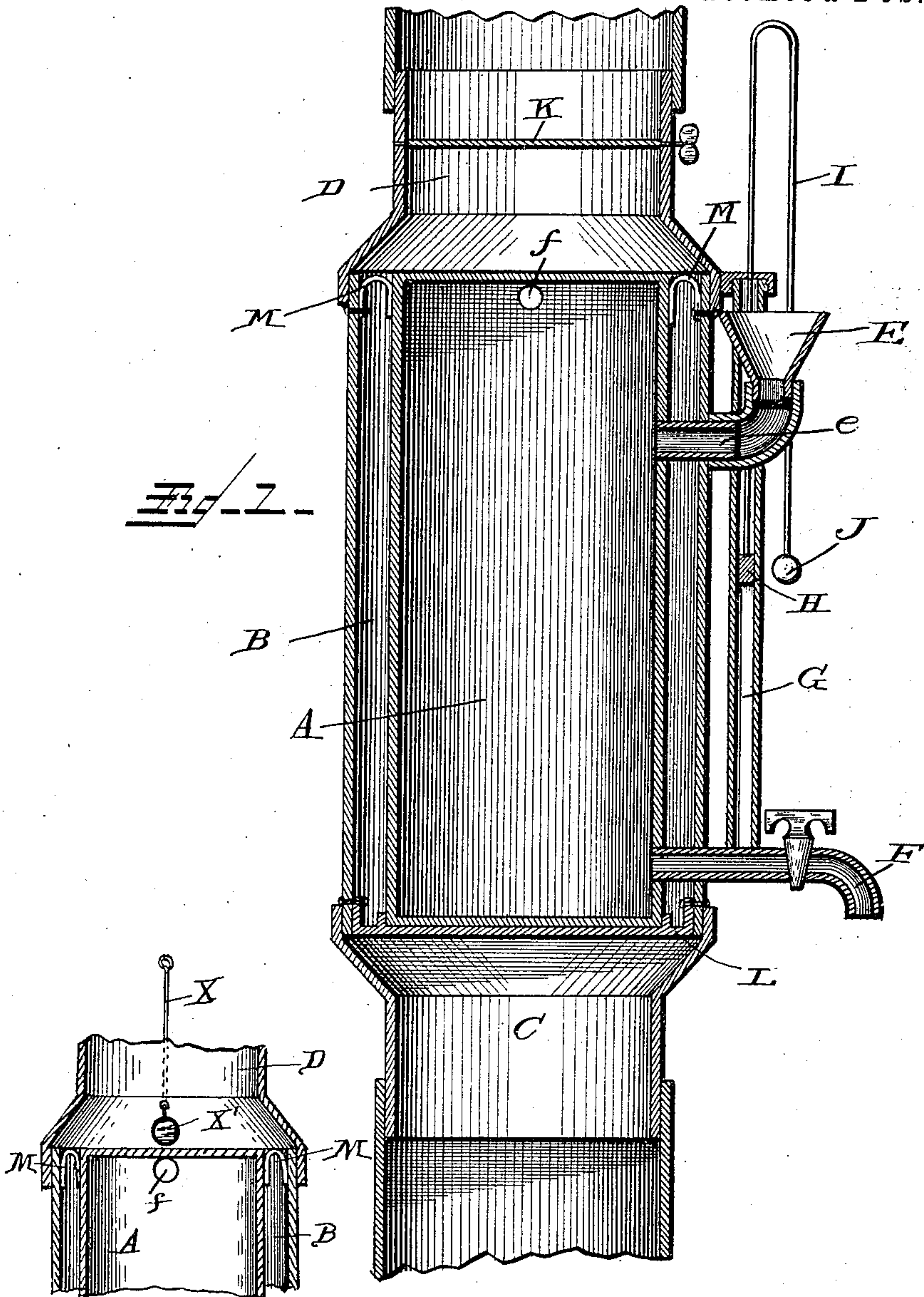


Fig. 1.

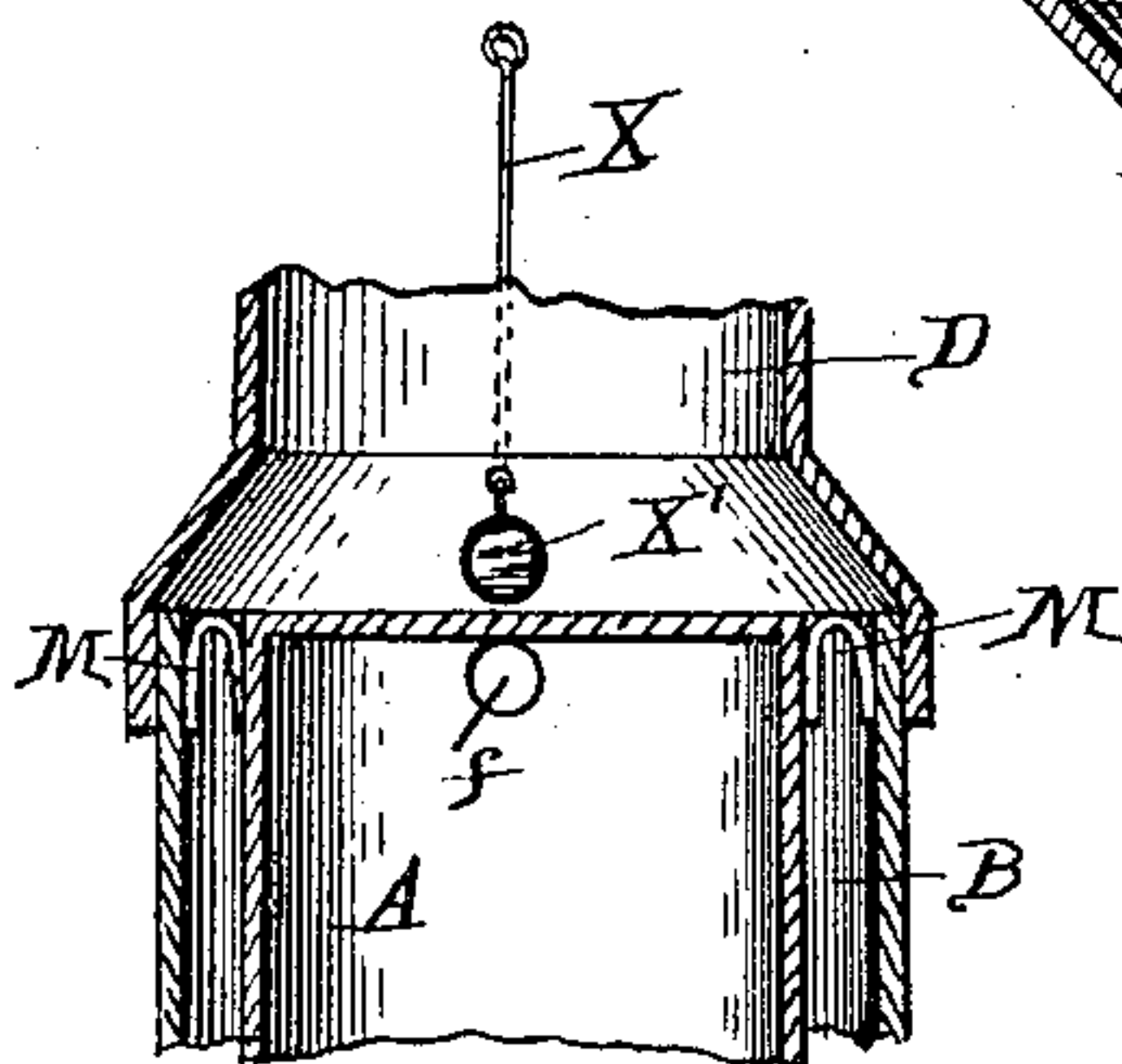
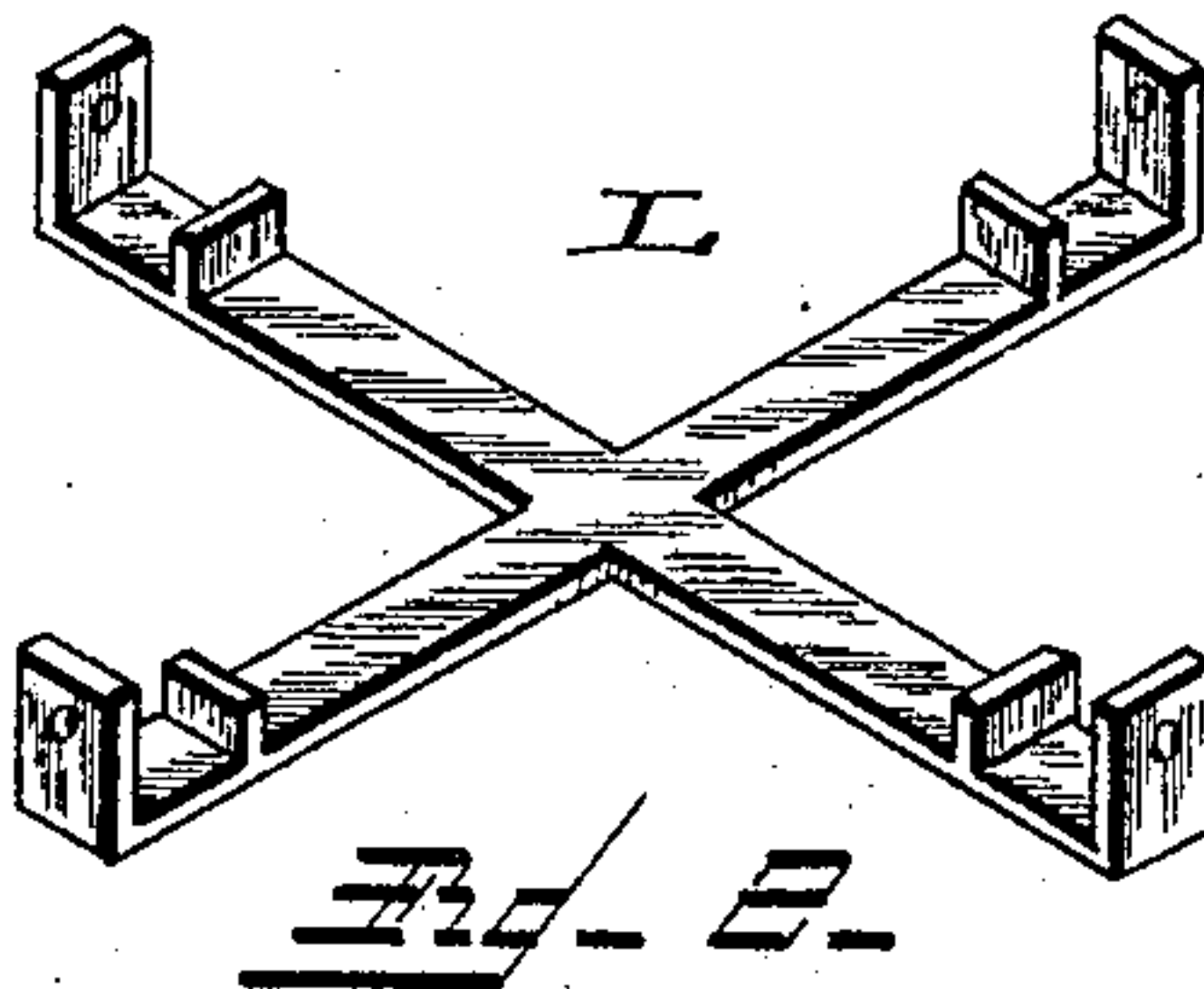


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

FRANK B. PETERSON, OF WOODSTOWN, NEW JERSEY.

WATER-HEATER.

SPECIFICATION forming part of Letters Patent No. 576,763, dated February 9, 1897.

Application filed March 10, 1896. Serial No. 582,619. (No model.)

To all whom it may concern:

Be it known that I, FRANK B. PETERSON, a citizen of the United States, residing at Woodstown, in the county of Salem and State of New Jersey, have invented certain new and useful Improvements in Water-Heaters; and I 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 relates to certain new and useful improvements in water-heaters; and it has for its objects, among others, to provide a simple and cheap water-heater that can be applied to any ordinary stovepipe, so as to utilize the waste heat for the purpose of heating the water. The water-heater also serves as a radiator to aid in heating the room in which it is placed. The water cannot be forced out by filling the receptacle and the steam therefrom cannot escape into the room, but is conducted into the chimney or flue. The draw-off cock or spigot is so arranged that all of the water cannot be drawn off, so that there is no danger of its becoming damaged by the water all boiling away or being drawn off. The water will be kept hot for hours after the fire goes out. It can be made a circulating-boiler, if desired.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be specifically defined by the appended claim.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a substantially central vertical section showing the improvement applied to a stovepipe. Fig. 2 is a detail of the rest for the bottom of the boiler removed. Fig. 3 is a detail.

Like letters of reference indicate like parts in the different views.

Referring now to the details of the drawings by letter, A designates the boiler, which may be of any suitable material and of any desired capacity.

B is the jacket, inclosing the same.

C is the lower hood, fitted over the lower end of the jacket and adapted to fit over or into the smoke-pipe from a stove.

D is the upper hood, fitted over the upper end of the jacket, as shown.

E is a funnel for filling the boiler, the funnel being connected therewith by a suitable pipe *e*, as seen, and near the lower end of the boiler, but at a distance from the bottom thereof, there is a faucet F for drawing off the water when desired. The upper hood is designed to be connected with another length of pipe that leads to or communicates with the chimney or flue. Near the top of the boiler is a vent-opening *f*, through which the steam may escape into the pipe and out into the chimney, so as not to enter the room.

G is a stand-pipe, within which is a float H, with which is connected a wire I, which extends upward and thence downward, as shown, and is connected with the sight J.

K is a damper arranged within the pipe at the upper end of the jacket and having a suitable handle, by which it may be manipulated when desired.

L is a rest in the form of a spider and upon which the lower end of the boiler is supported, said rest or spider being secured to the inner walls of the jacket in any suitable manner.

M is a brace at the top of the jacket, of substantially an inverted-U shape, fastened at one end to the jacket and the other pressing against the boiler, so as to hold the upper end thereof with a yielding pressure.

The advantages of such a form of heater and its means of connection will be readily appreciated and will recommend it to the trade. It can be easily removed from the pipe for cleaning or repairs or for other purposes.

I may sometimes employ a wire X, running through the upper hood and carrying a round piece of metal X', adapted to be dropped over the vent-hole to keep out foul air from the stovepipe when there is no steam within the device.

What is claimed as new is—

The combination with the upper and lower hoods and the jacket held thereby, of the boiler inclosed by said jacket and provided with steam-vent into the upper hood and a wire carrying a plate adapted to be dropped over said vent-hole, substantially as and for the purpose specified.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

FRANK B. PETERSON.

Witnesses:

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FRANCES O. FOGG.