

(No Model.)

F. ARMSTRONG.

WATER BACK.

No. 324,515.

Patented Aug. 18, 1885.

Fig. 1.

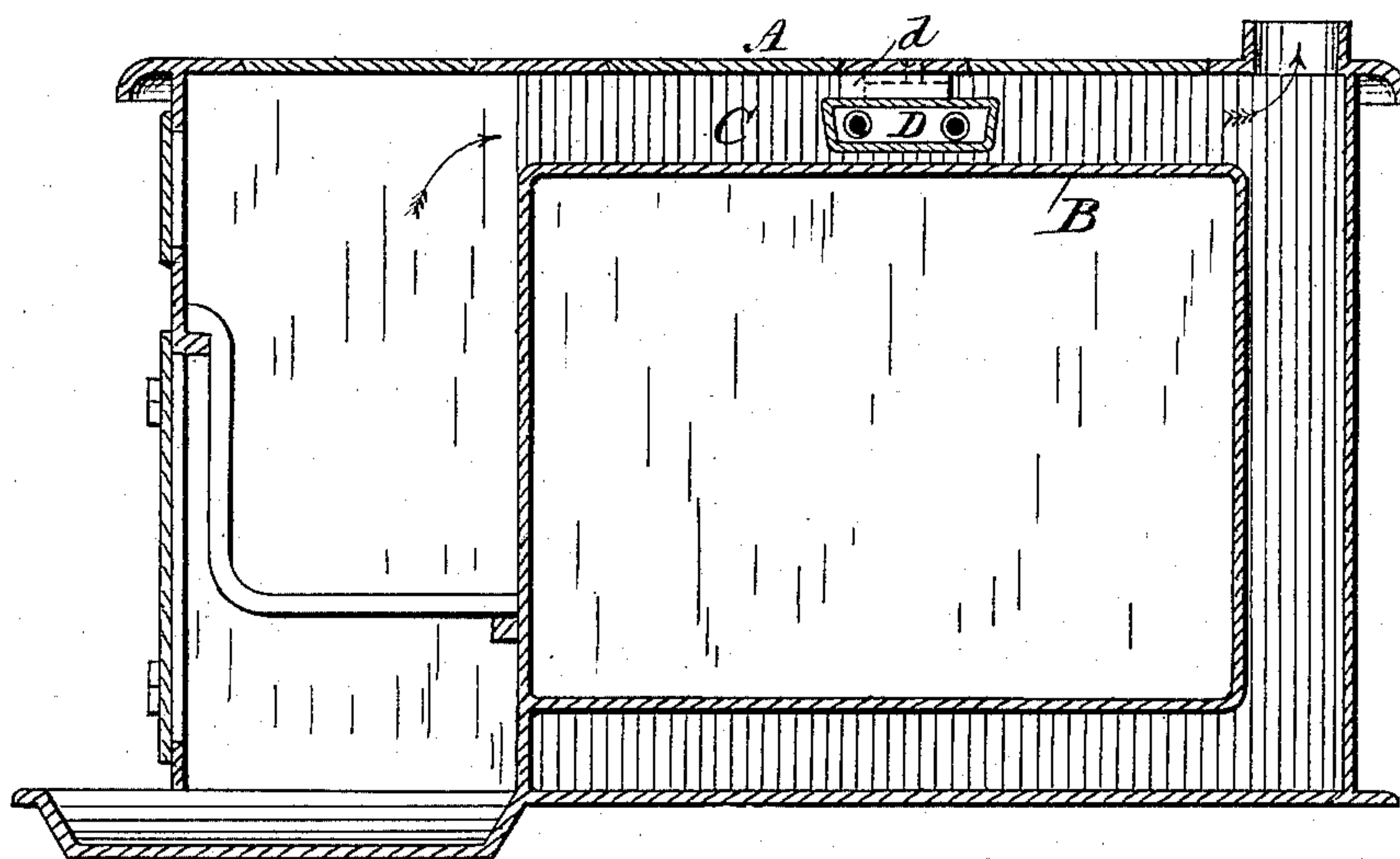
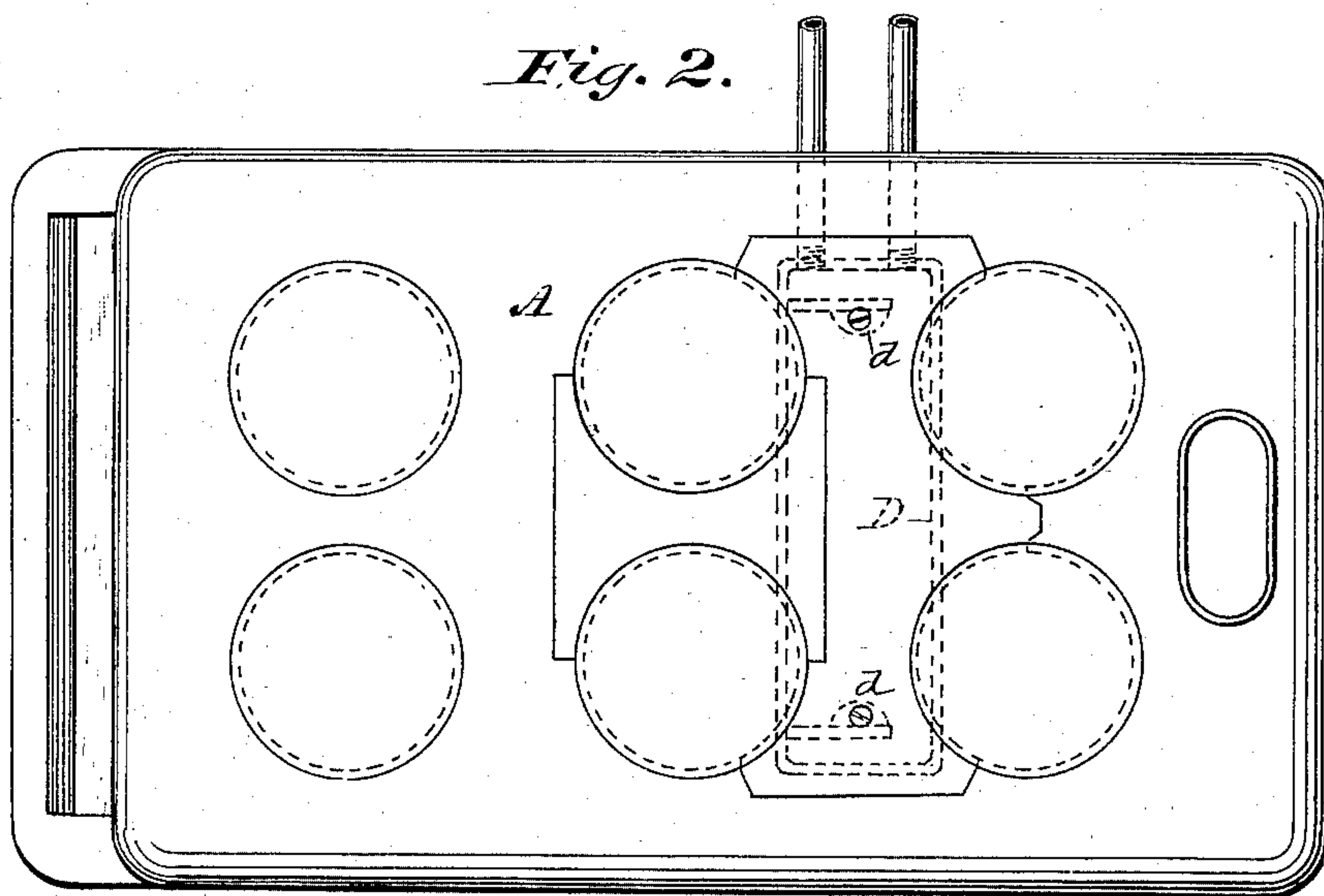


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

FRANK ARMSTRONG, OF BRIDGEPORT, CONNECTICUT.

WATER-BACK.

SPECIFICATION forming part of Letters Patent No. 324,515, dated August 18, 1885.

Application filed December 21, 1883. (No model.)

To all whom it may concern:

Be it known that I, FRANK ARMSTRONG, a citizen of the United States, residing at Bridgeport, Connecticut, have invented new and useful Improvements in Water-Backs, of which the following is a specification.

My invention relates to an improvement in "water-backs" for stoves and ranges, and has for its object to secure an entirely unobstructed contact of the heated gases and other products of combustion with the water-containing vessel through which the water passes and in which it is heated.

The object of my invention is to produce a water-back which may be attached to a stove of ordinary construction without requiring any special construction for its reception; and with this object in view my invention consists of a drum or chest provided with projections which extend upward and then at an angle, said projections being provided with openings for the reception of devices for securing them to the stove as described.

In order that those skilled in the art may know how to make and use the same, I will now proceed to describe my improved water back or heater in connection with the accompanying drawings, in which—

Figure 1 shows a central longitudinal section of an ordinary range, showing my heater in proper position. Fig. 2 is a plan view of a stove, showing the heater in dotted lines.

A represents the top of the stove, and B the top wall of the oven, between which two parts is left a space, C, of sufficient size to accommodate my heater, D. This may be made of any suitable material, and of a size to leave sufficient space around it for the free passage of smoke, &c. It is formed of a box, preferably rectangular in contour, and is provided with projections *d*, for securing it in place. There

may be any suitable number of these projections, and they may be arranged to extend in any desired direction from the water-box, in order to be fastened to a convenient part of the stove. In the drawings I have shown these extensions as formed with and extending upwardly from the top of the water-box, and having perforated horizontal continuations which lie close to the top of the stove, and have securing bolts or screws passed through them to hold them in position.

It will be understood that I do not limit myself to this specific manner of securing the box in place, as any other well-known means may be employed.

The heater is provided with the ordinary inlet and outlet openings, provided with nipples for attaching the supply and conducting pipes.

I am aware that it is not new to place a water-reservoir in the path of the discharge of the products or combustion from a stove, and therefore do not wish to be understood as broadly claiming that idea.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In combination with the top of a stove, the drum or chest provided with the projections which extend upward and then at an angle, said projections being provided with openings for the reception of devices for securing them to the stove, as described.

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

FRANK ARMSTRONG.

Witnesses:

GEORGE A. STAPLES,
FRANK T. STAPLES.