

J. E. MONTELL.

WATER-HEATER FOR STOVES AND RANGES.

No. 178,547.

Patented June 13, 1876.

Fig. 1.

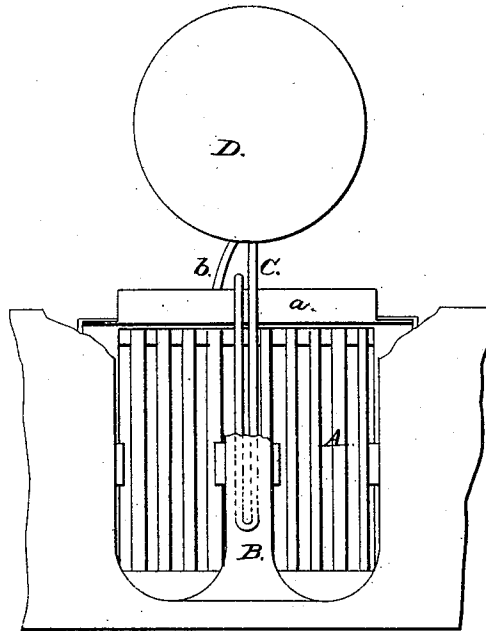
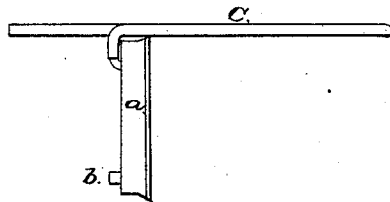


Fig. 2.



Witnesses:
Cornelius Cox
W. H. Wharton

Inventor
James E. Montell
by G. H. M. J. Howard
Attys.

UNITED STATES PATENT OFFICE.

JAMES E. MONTELL, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN WATER-HEATERS FOR STOVES AND RANGES.

Specification forming part of Letters Patent No. **178,547**, dated June 13, 1876; application filed March 5, 1875.

To all whom it may concern:

Be it known that I, JAMES E. MONTELL, of the city of Baltimore, and State of Maryland, have invented certain new and useful Improvements in Means for Heating Water in Ranges, Stoves, &c., of which the following is a specification; and I do hereby declare that in the same is contained a full, clear, and exact description of my said invention, reference being had to the accompanying drawing and to the letters of reference marked thereon.

My invention relates to a novel combination and arrangement of parts, as hereinafter described, whereby the boiler or hot-water receptacle is supplied with hot water, and the central or long division-plate of the range or stove protected from the intense heat to which it is under ordinary circumstances subjected.

In the accompanying drawing, forming a part hereof, Figure 1 is a plan of my invention, and Fig. 2 a side view of a portion thereof.

A is the furnace or fire-pit of the range or stove. B is the central division-plate thereof, extending across the furnace or fire-pit, and supported as shown. C is a return water pipe, commencing at the lower part of the boiler D, to which it is connected, leading over the water-back *a*, immediately under the division-plate B, returning from the front portion of the fire-pit, and entering the rear of

the water-back *a*, as shown. A pipe, *b*, connects the water-back directly with the boiler D. The pipe C, by reason of the manner in which it is placed, offers but slight interference with the draft, and is easily and cheaply connected.

A current of water is brought in contact with a surface directly above the fire, which surface cannot become coated with ashes, but presents at all times a clear and clean heating expedient. The pipe C, which is a comparatively cool body, being in close proximity to the under side of the central division-plate, serves to conduct the heat therefrom, and answers the purpose of a deflector, to prevent the direct contact of the heated gas with the plate aforesaid.

Having described my invention, I claim as new and wish to secure by Letters Patent of the United States—

The combination of the boiler D, return-pipe C running immediately under the plate B, water-back *a*, and pipe *b*, substantially as and for the purposes specified.

In testimony whereof I hereunto subscribe my name this 4th day of March, in the year of our Lord 1875.

JAMES E. MONTELL.

Witnesses:

WM. A. MONTELL,
WM. T. HOWARD.