

(No Model.)

T. MILLER.
HOT WATER URN.

No. 301,511.

Patented July 8, 1884.

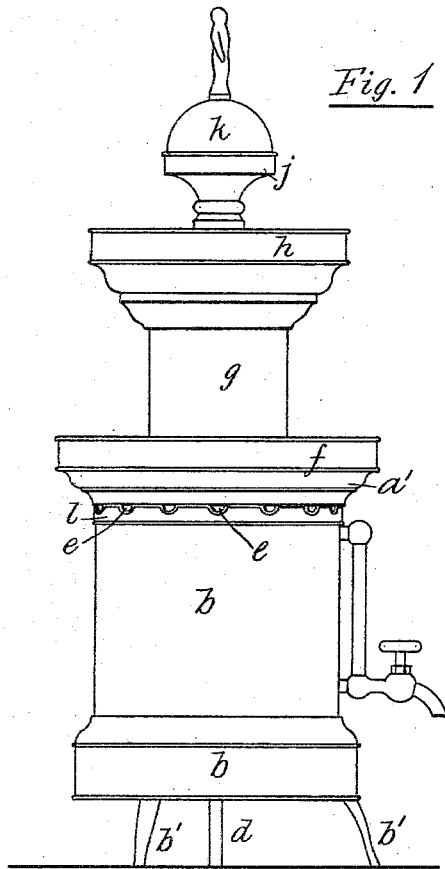


Fig. 1

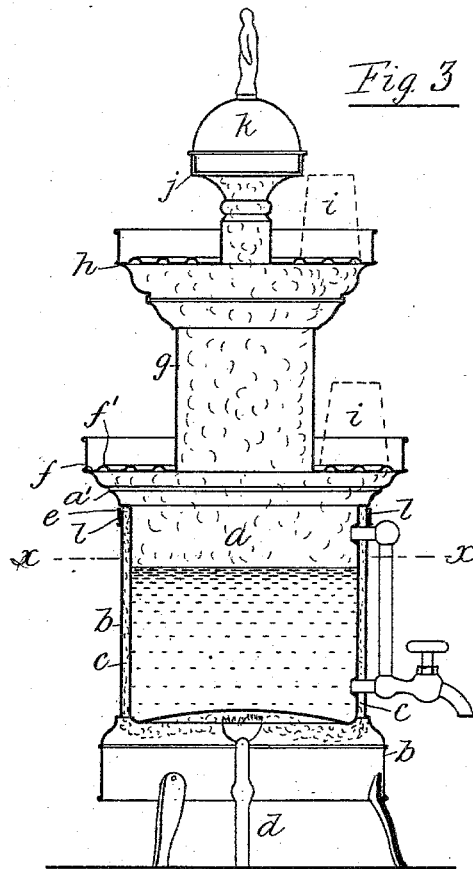


Fig. 3

Fig. 2

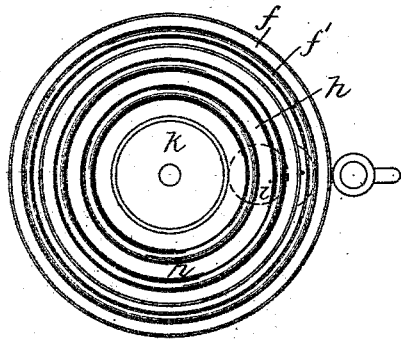
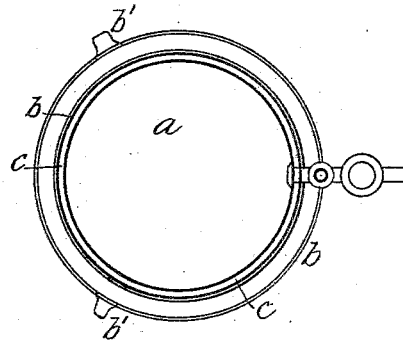


Fig. 4



Witnesses

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UNITED STATES PATENT OFFICE.

THOMAS MILLER, OF JERSEY CITY, NEW JERSEY.

HOT-WATER URN.

SPECIFICATION forming part of Letters Patent No. 301,511, dated July 8, 1884.

Application filed October 29, 1883. (No model.)

To all whom it may concern:

Be it known that I, THOMAS MILLER, a citizen of the United States, and a resident of Jersey City, county of Hudson, State of New Jersey, have invented certain new and useful Improvements in Hot-Water Urns, of which the following is a specification.

Hot-water urns, as heretofore made, have been adapted to have the heat applied to the bottom only, the sides of the water-chamber being exposed to the air; consequently considerable heat is lost. To overcome this objectionable feature by placing an extra jacket outside the water-chamber, leaving an air-space between the outer wall of the chamber and the jacket, so that the heat from the flame, after passing over the bottom of the water-chamber, passes up its sides, and the products of combustion leave said air-space through holes formed in the upper end of the outside jacket. Urns so constructed, besides this advantage as water-heaters, are adapted to be used as water-coolers in hot weather, by reason of the non-conductivity of the air-space, thus greatly economizing the ice placed in the chamber; and to prevent circulation of the air in said air-space, when it is desired to use the urn as a water-cooler, I provide means for closing the holes in the outside jacket.

My invention also embraces certain improvements in the construction of the tops of hot-water urns, which are often utilized to dry and warm glasses, &c. These consist in forming upwardly-projecting ribs or corrugations on the tops, upon which the edges of the glasses rest, thus preventing the dust accumulated there from adhering to the edges of the glasses, and providing an exit for the steam and vapors in the glasses, which escape through the spaces between the ribs or corrugations, thus allowing the glasses to dry quicker than if they rested on a flat surface.

It further embraces improvements in construction, by which the glass-drying space is greatly increased, which consists in forming a turret-shaped extension fixed to the center of the top of the water-chamber, and having an enlarged top, also ribbed or corrugated for the purpose aforesaid. This turret-shaped extension forms a steam-chamber, and is surmount-

ed by a small heating-cup having a cover, for warming or keeping warm milk, &c.

In the accompanying drawings, forming part of this specification, Figure 1 represents an elevation of my improvement in urns. Fig. 2 is a plan view of the same. Fig. 3 is a vertical central section, and Fig. 4 is a transverse section through the line *x x*.

The water-chamber *a* is supported by the projecting molding *a'* at its upper end, on the upper edge of the outside jacket, *b*, so that an annular air-space, *c*, is left between them. The base of the jacket *b* extends some distance below the bottom of the water-chamber *a*, and is provided with legs *b' b'*. The source of heat *d* is inclosed by the base of the jacket *b*, and the heat from the same as it leaves the bottom is compelled to pass up around the sides of the water-chamber through the annular space *c* between it and the jacket *b*, the products of combustion finally escaping through the holes *e*, made in the upper end of the jacket *b*. By this arrangement the heat of the flame is not only more fully utilized in raising the temperature of the water in the chamber *a* than when it is applied to the bottom only, as in ordinary urns, but a much more perfect combustion is caused, by reason of the draft up the annular air-space *c*, thus greatly economizing the source of heat.

The jacket *b* may be provided with a covering of wood or other non-conducting material, or may be finished by being plated or enameled, as desired.

The top *f* of the water-chamber *a*, which is utilized to dry glasses placed thereon, extends over the air-space between the chamber *a* and the jacket *b*, and is provided with raised ribs or corrugations *f'*, upon which the edges of the glasses rest, thereby causing the same to dry quicker, as the steam or vapor in the glasses passes freely out from the same through the spaces between said ribs, and the liability of dust collected on the top of the urn adhering to the edges of the glasses is avoided.

To the top *f*, concentric therewith, is secured the turret-shaped steam-chamber *g*, the top *h* of which is also ribbed and adapted to hold glasses, as shown by the dotted lines *i*. The dotted lines *i* on the top of the water-chamber

also represent a glass. The top *h* of the turret *g* is detachable therefrom to provide means for supplying the urn with water.

j represents a cup having a hollow stem secured to the top of the turret *g*. This cup is provided with a cover, *k*, and is adapted to warm milk or whatever may be placed in it.

The ring *l*, placed around the upper end of the outside jacket, *b*, has openings corresponding to the holes *e* in the jacket *b*, and is adapted to be partly rotated, so as to close said holes *e*, to prevent a circulation of the air in the annular space *c*, when it is desired to use the urn as a water-cooler. It can also be used to regulate the draft up the air-space *c*, by turning it to partly close the holes *e*, or entirely close the draft, if desired, when used as a water-heater.

I am aware that trays have been provided with ribs as a means for drying tumblers, &c., and also that the tops of stoves have been ribbed to adapt them to be used for broiling.

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

1. In an urn, in combination, a water-cham-

ber, an outside jacket, and an enlarged ribbed top, said top extending over the annular air-space between the water-chamber and the outside jacket, substantially as set forth.

2. In combination, the water-chamber *a*, having ribbed or corrugated enlarged top *f*, and the turret *g*, with its ribbed or corrugated enlarged top *h*, secured concentrically on the top of the water-chamber, substantially as set forth.

3. In combination, the water-chamber *a*, outside jacket, *b*, provided with holes *e*, and the ring *l*, provided with openings corresponding thereto, substantially as set forth.

4. In combination, the water-chamber *a*, having an annular glass-drying top, *f*, the turret *g*, having an annular glass-drying top, *h*, and the heating cup *k* on the top of the turret, substantially as set forth.

In testimony whereof I have hereunto set my hand, at New York, county and State of New York, this 26th day of October, 1883.

THOMAS MILLER.

Witnesses:

ALFRED SHEDLOCK,
H. D. WILLIAMS.