

C. REMHOF.
Atomizer.

No. 159,278.

Patented Feb. 2, 1875.

Fig. 1.

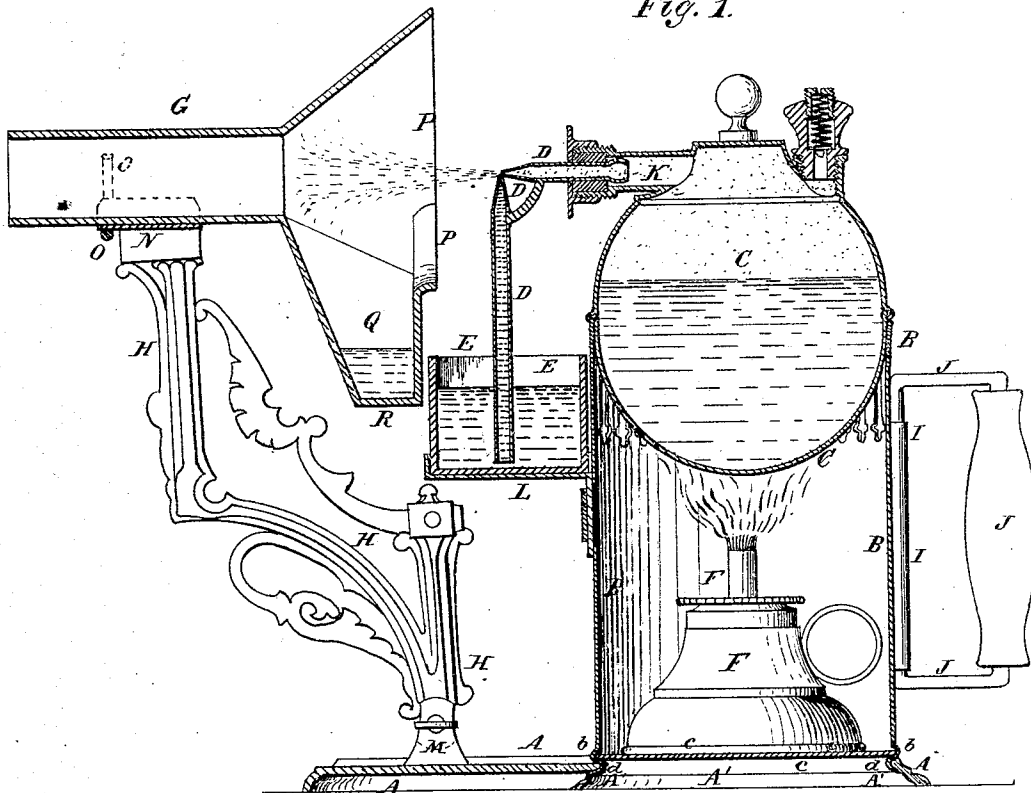
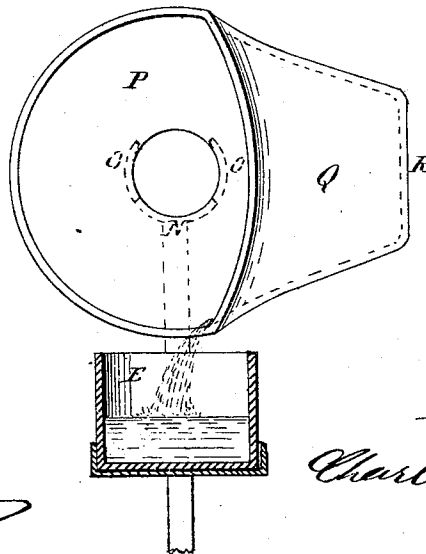


Fig. 2.



Witnesses.

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CHARLES REMHOF, OF BROOKLYN, E. D., NEW YORK.

IMPROVEMENT IN ATOMIZERS.

Specification forming part of Letters Patent No. **159,278**, dated February 2, 1875; application filed September 5, 1874.

To all whom it may concern:

Be it known that I, CHARLES REMHOF, of the city of Brooklyn, E. D., in the county of Kings and State of New York, have invented certain Improvements in Steam-Atomizing Apparatus for Inhaling Medicine, of which the following is a specification:

This invention relates to the construction in steam-atomizing apparatus of a peculiar elevated reversible drip-cup above the medicine-cup, combined and formed on the mouth-piece, so that by that means the condensation of the vapors in said mouth-piece and its flange shall collect in said drip-cup formed thereon, and that by partly reversing the same the said condensation is caused to empty into the medicine-cup, and the amount of condensed vapors thereby determined. The said condensation is conveniently, partly or wholly, emptied into the medicine-cup during the operation of atomizing, and the manipulation and construction of the apparatus are simplified and facilitated.

In the annexed drawings, Figure 1 represents a vertical longitudinal section of the apparatus with my improvements. Fig. 2 is a detached face view of the flange and drip-cup of the mouth-piece in position while emptying into the medicine-cup.

A represents the base of the apparatus; B, the boiler-stand; C, the boiler; D, the atomizing-tubes; E, the medicine-cup; F, the lamp for heating the boiler; G, the mouth-piece, and H its standard. The base A has a large opening, A', which is nearly semi-circular; and the boiler-stand B is made of sheet metal and with a bead, *b*, near its bottom end, in which the bottom *c*, for supporting the lamp F, is secured. The outside of said bead rests upon the base A around its opening A', and the end *d* of the stand passes through said opening, and is spread out tightly in and around said opening and underneath the base, whereby it is firmly secured to the base. The boiler-stand is made cylindrical above the base A, and of the proper dimension to receive in its top aperture the boiler C, which has a bead around its central portion to rest upon the top edge of the stand. The side of the stand is provided

with a sheet-metal vertical loop, I, in which the handle J is inserted and permitted to turn, so as to fold against the stand and allow its convenient packing for transportation. By means of the handle J the apparatus is conveniently carried about, especially when required to be used. The boiler C has a horizontal discharge-pipe, K, in which the atomizing-tube is secured steam-tight. The boiler-stand has a small horizontal metal cup, L, secured to its side, which supports the medicine-cup E, into which the suction-tube of the atomizing-tube projects. The base A has a slotted upright post, M, cast thereto; and in this post the lower end of the standard H is fitted, and is pivoted to allow the standard to yield outward. The top part of the standard has a small base, N, in which the bottom side of the mouth-piece G is rested, and is held to bear upon it by means of a spring, O, arranged on said base N. The mouth-piece G has a large nearly semi-conical receiving-aperture, P, into which the atomizing-tubes D discharge; and the portion between the aperture P and the cylindrical or tubular portion of the mouth-piece is made and formed with an eccentrically-extending cup, Q, the front of which is somewhat depressed from the front of the said aperture. The remaining sides taper toward the bottom R of the cup, to empty with facility through the said aperture in partly reversing or turning the cup upward, as shown in Fig. 2.

When the apparatus is in operation the vapors condensing in the mouth-piece flow readily into the cup Q. The cup being turned down, as shown in Fig. 1, the quantity of vapors condensing is readily observed. The aperture P is above the medicine-cup, and projects sufficiently over the same, so that, when turned, as shown in Fig. 2, it will empty into the medicine-cup. The cup Q may be conveniently partly or wholly emptied during the operation of atomizing, and the liquid of said condensation is gently poured into the medicine-cup without splashing the fluid.

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

1. The boiler-stand B, with the bead *b* and

bottom *c* and end *d*, to provide for securing the said stand to the base A, and to support the lamp F, substantially as herein stated.

2. The boiler-stand, furnished with the folding handle, substantially as and for the purpose herein stated.

3. The base A, constructed with the stationary post M, in combination with the standard H, pivoted therein, substantially as and for the purpose herein described.

4. The arrangement of the mouth-piece G,

its aperture P, and the cup Q with the atomizing-tubes D and medicine-cup E, to operate substantially in the manner and for the purpose herein mentioned and shown.

In witness whereof I hereunto set my hand this 12th day of May, 1874.

CHARLES REMHOF.

In presence of—

FRED. RIEHN,

CARL A. MERTZ.