

(No Model.)

W. P. SWARTZ.  
DISTILLING APPARATUS.

No. 454,778.

Patented June 23, 1891.

Fig. 1.

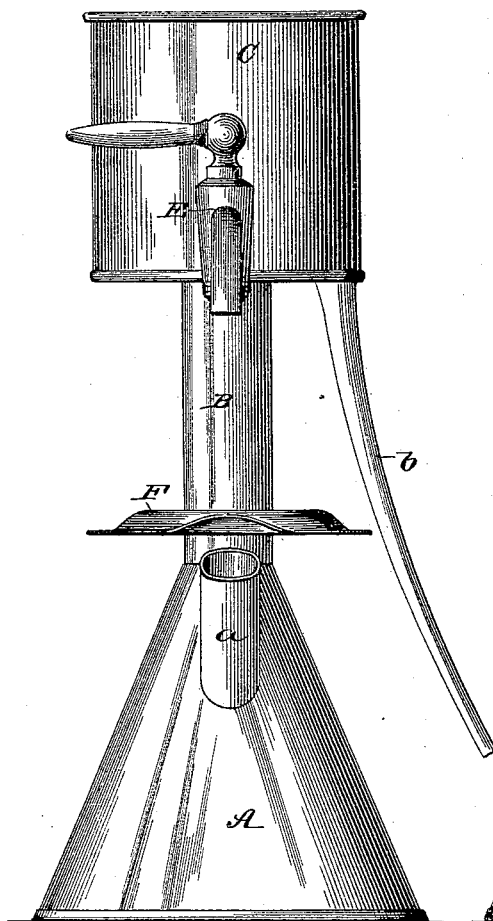
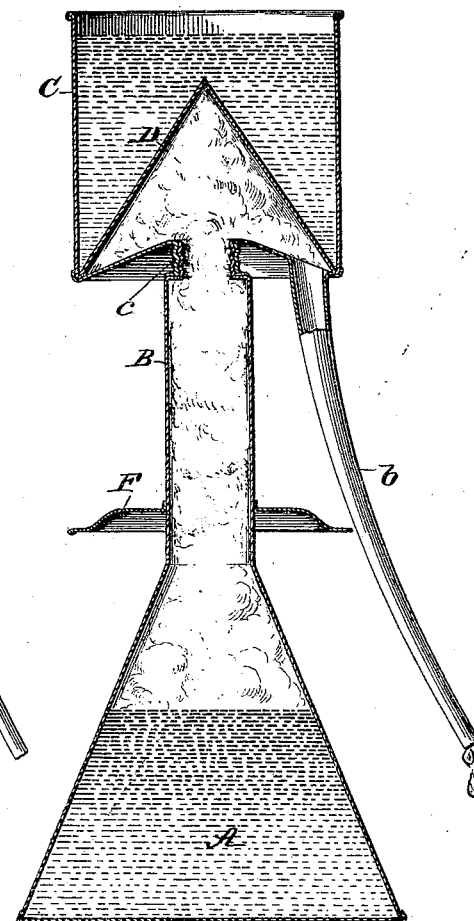


Fig. 2.



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# UNITED STATES PATENT OFFICE.

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## DISTILLING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 454,778, dated June 23, 1891.

Application filed November 22, 1890. Serial No. 372,298. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM P. SWARTZ, of Telluride, in the county of San Miguel and State of Colorado, have invented a new and useful Improvement in Distilling Apparatus, of which the following is a specification.

The object of my invention is to provide a simple and convenient apparatus for distilling water and other liquids, being designed mainly for the use of druggists and chemists, but applicable also to general use.

Figure 1 is a side elevation, and Fig. 2 a vertical section, of the apparatus.

In the drawings, A represents the boiler or receptacle for containing the water or other liquid to be distilled. This is preferably made conical, so as to give it as large a heating-surface as possible in proportion to its contents. This boiler is provided on one side with a filling-tube *a*, through which the charge of water is introduced. Rising from the top of this boiler is a vertical stand-pipe B, which is surmounted by a water-tank C. In the bottom of this tank is formed a conical chamber D, which communicates with the boiler through the stand-pipe. The tank C is designed to receive cold water, whose cooling effect on the conical chamber below serves to condense the vapor or steam into water again. This conical chamber, it will be seen, affords a large surface to the cooling influence of the water above, and thus greatly facilitates condensation. As the vapor condenses in this conical chamber it trickles off

to a receptacle for the distilled water through the long spout *b*.

E is a spigot placed in the water-tank C, by which hot water may be drawn off from the tank when desired for the use of the druggist, or for the purpose of refilling the tank with colder water to facilitate condensation.

F is a flange or collar secured to the stand-pipe. The object of this flange is to protect tank C from heat rising from the boiler and afford a means of sustaining the apparatus from the projecting arms of a druggist's stand when a stove is not available and a Bunsen burner is employed for vaporizing the water.

To permit the upper and lower parts of the device to be separated for cleaning the same, the pipe B, is detachably united to the parts C D by a separable screw-joint *c*.

Having thus described my invention, what I claim as new is—

A distilling apparatus consisting of a conical boiler A, with filling-tube *a*, the stand-pipe B, rising from the boiler and provided with flange F, the conical condensing-chamber D, communicating with the upper end of the stand-pipe and having spout *b*, and the water-tank C, surmounting and surrounding the conical chamber and provided with spigot E, substantially as shown and described.

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Witnesses:

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