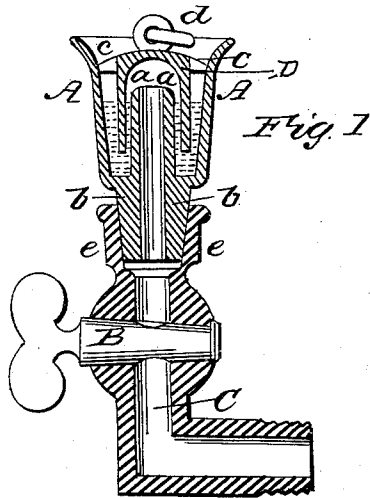
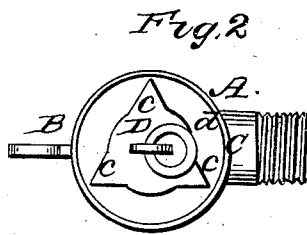


H. GUILD.

Siphon for Feeding Gas Retorts

No. 27,711.

Patented April 3, 1860.



Witnesses
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UNITED STATES PATENT OFFICE.

HARVEY GUILD, OF NEW ORLEANS, LOUISIANA.

SIPHON ATTACHED TO GAS-RETORTS.

Specification of Letters Patent No. 27,711, dated April 3, 1860.

To all whom it may concern:

Be it known that I, HARVEY GUILD, of New Orleans, in the parish of New Orleans and State of Louisiana, have invented a new and Improved Siphon for Feeding Oil, Rosin, or other Fluid Substances to Gas-Retorts; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1, is a vertical section of my improved siphon, and the cock and pipe by which it is connected with the retort. Fig. 2, is a top view of the same.

Similar letters of reference indicate corresponding parts in both figures.

My invention consists of a siphon of annular form, constructed in a novel and very simple manner, which enables it to be taken apart very conveniently for cleaning or for any other purpose.

To enable others skilled in the art, to make and use my invention, I will proceed to describe its construction and operation.

A, is an upright metal cup with a closed bottom, having in its center an open, upright tube *a*, which extends upward about or little more than half-way from the bottom of the cup. The mouth of the said cup is made flaring or of funnel-like form and the bottom is made with an externally tapered socket *b*, which is fitted and ground tightly into a corresponding socket *c*, at the upper end of the cock B, that is attached to the feed pipe C.

D, is an inverted cup, whose interior is larger than the exterior of the tube *a*, and its exterior smaller than the interior of the cup A. This inverted cup has projections *e, e, e*, on the sides of its head to rest within the flaring or funnel-like upper portion of the cup A, for the purposes of supporting it at its lower edges at a distance from the bottom of the cup A, and with the interior of its head at a distance from the top of the tube *a*, and of keeping it concentric or nearly so with the cup A, and tube *a*, so that there may be passages between it and the said cup

and tube. The weight of the said inverted cup must be sufficient to overcome the pressure of gas when the cock B, is open. The said cup has attached to the exterior of its head a ring *d*, or other handle for the purpose of lifting it out of the cup D.

The upright cup A, tube *a*, and inverted cup D, constitute the siphon, and the oil, melted rosin or other fluid material fed into the cup A, flows down between the said cup and the cup D, under the edges of the latter up between it and the tube *a*, and over the upper margin of and into the said tube, down which it passes to the feed-pipe C, when the cock B, is opened.

The annular siphon can be thus constructed more cheaply than in the ordinary method with the inverted cup D, fixed and all that is necessary to enable it to be cleaned out or to remove any obstruction is to lift out the inverted cup D.

An important feature of this invention consists in the fitting of the siphon cup A, to the feed pipe by the slip joint, *b, c*, which permits it to be easily detached, for the purpose in making gas from rosin of pouring back the melted rosin from the cup to the rosin pot while it is hot whenever the operation of the retort is suspended. The siphon is then ready for use as soon as the retort is heated again without the necessity of applying fire directly to it (the siphon) to melt the rosin which occurs with the crooked pipe siphon as ordinarily constructed and applied.

What I claim as my invention and desire to secure by Letters Patent is—

The annular siphon composed of an upright cup A, with a flaring or funnel-like mouth and central tube *a*, and a movable inverted cup D, provided with projections *e, e*, by which it is enabled to be supported by the flaring or funnel-like mouth of the cup A, as herein described.

H. GUILD.

Witnesses:

CORNELIUS SULLIVAN,
WILLIAM DEWING.