

(No Model.)

J. V. SVENSON.

BURNER FOR COOKING STOVES OR SOLDERING APPARATUS.

No. 500,781.

Patented July 4, 1893.

Fig. 1.

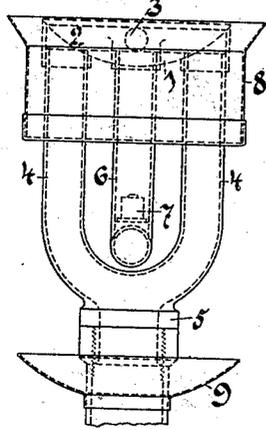


Fig. 2.

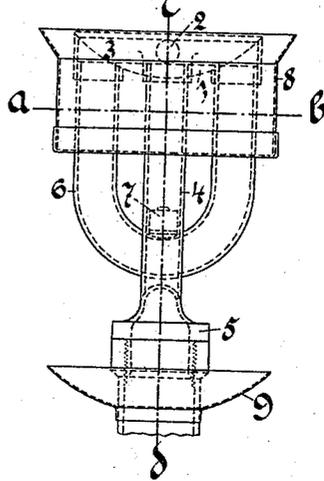


Fig. 3.

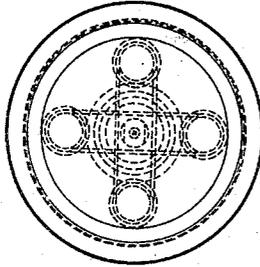


Fig. 4.

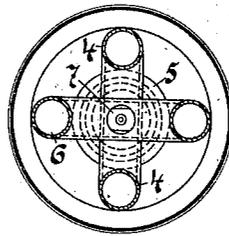


Fig. 5.

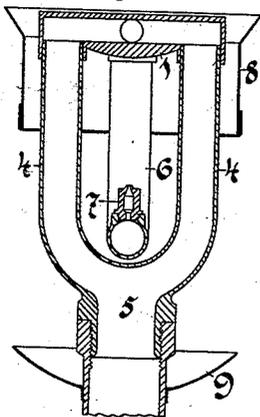
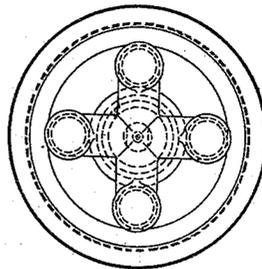


Fig. 6.



Witnesses:

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By

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# UNITED STATES PATENT OFFICE.

JOHAN VICTOR SVENSON, OF STOCKHOLM, SWEDEN.

## BURNER FOR COOKING-STOVES OR SOLDERING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 500,781, dated July 4, 1893.

Application filed November 28, 1892. Serial No. 453,387. (No model.) Patented in Sweden February 25, 1892, No. 3,944.

*To all whom it may concern:*

Be it known that I, JOHAN VICTOR SVENSON, blacksmith, a subject of the King of Sweden and Norway, and a resident of Stockholm, Sweden, have invented an Improved Burner for Cooking-Stoves and Soldering Apparatuses, (for which I have obtained a Swedish patent, No. 3,944, dated February 25, 1892,) of which the following is a specification.

This invention relates to cooking stoves, which are composed of a vessel and a system of tubes connected therewith (and above usually bent to a coil), into which petroleum or the like contained in the vessel can be forced up by means of a pump or some other forcing-device, in order thence to stream forth in the form of gas through a small hole in the burner placed at the upper part of the system of tubes, the burner thus being heated by the flame formed by the ignition of the gas streaming forth and encircling the greater part of the burner. Such burners however are almost impossible to clean from the carbon depositing itself in great quantities in their interiors; they are also entirely destroyed, if the cleaning-wire, when introduced into the fine outlet-hole of the burner, by chance breakoff and remains sticking in it.

My invention, which has for its object to remove these inconveniences is illustrated in the accompanying drawings in side views in Figures 1 and 2, in plan view in Fig. 3, in horizontal section along the line *a-b* (Fig. 2) in Fig. 4 and in a vertical section along the line *c-d* (Fig. 2) in Fig. 5.

This burner consists of a plate 1, the interior of which contains two passages 2, 3 crossing each other; the former of these passages at both its ends communicates with the upper ends of two tubes 4, which below open into a short tube 5 intended to be screwed upon another tube rising directly from the petroleum vessel. Both ends of the passage 3 are also connected with both ends of a bent tube 6, the lower part of which lies above the joining-point of the two tubes 4. On the upper side of this tube 6 and under the middle of the plate 1 the outlet-opening for the gas is placed. This opening does not as usual consist only of an opening, but into it a small mouth-piece 7 is screwed, the channel of which communicates below with the said opening and opens above into a small hole,

through which the petroleum converted into gas escapes. After the ignition this gas encircles and heats the plate 1 with the petroleum, which has entered there through the tube 4, this petroleum being thus converted into gas, which passes through the tube 6 to the outlet opening of the burner. The deposition of the petroleum and the deposition of carbon resulting therefrom takes place in the tubes 4, which can be cleaned by screwing off the burner, the interior of the tubes 4 being thus accessible for cleaning through the short tube 5. In the tube 6 on the other hand no deposition of carbon takes place. If the cleaning-wire should break at the use and should remain sticking in the mouth-piece 7, the latter can be unscrewed and the remaining part of the wire sticking in it can be taken out, without it being necessary to destroy the burner.

8 is a cap surrounding the burner and 9 is a small plate for the alcohol, which it is necessary to use for the heating of the burner at the ignition.

The plate 1 can also, as shown in Fig. 6, be replaced by a cross-formed piece containing the two passages 2, 3, in which case the burner is particularly well suited for soldering-apparatuses. Of course also more than two passages (2, 3) crossing each other in the burner, can be used, in which case some of these passages are connected with the tube 5 and the others with the outlet opening for the gas.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

In combination, the tubes 2 and 3 crossing each other centrally and at right angles, the tubes 4 depending from the ends of the tube 2 and having their lower ends joined into an inlet 5, the tubes 6, depending from the ends of the tube 3, and having the nipple 7, at their junction above the junction of the tubes 4, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHAN VICTOR SVENSON.

Witnesses:

H. TELANDER,  
T. RISBERG.