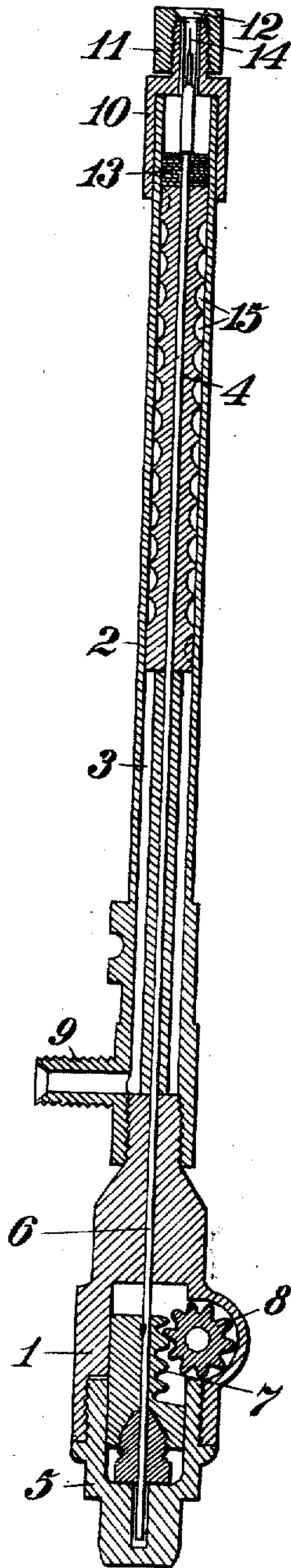


E. HUBERT.
VAPORIZER FOR LIQUID COMBUSTIBLES.
APPLICATION FILED MAY 1, 1906.

910,685.

Patented Jan. 26, 1909.



WITNESSES

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UNITED STATES PATENT OFFICE.

EMIL HUBERT, OF BUDAPEST, AUSTRIA-HUNGARY.

VAPORIZER FOR LIQUID COMBUSTIBLES.

No. 910,685.

Specification of Letters Patent.

Patented Jan. 26, 1909.

Application filed May 1, 1906. Serial No. 314,730.

To all whom it may concern:

Be it known that I, EMIL HUBERT, a subject of the King of Hungary, residing at 64 Arena-ut, Budapest, Austria-Hungary, have invented new and useful Improvements in Vaporizers for Liquid Combustibles, of which the following is a specification.

This invention relates to a vaporizer for liquid combustibles which conforms with those hitherto in use in so far as it affords a very long heated passage for the liquid combustible and provides for a very complete vaporization and superheating, in that it retains the solid particles, which may be deposited in the vaporizer, by a filter arranged in front of the nozzle and is provided with a nozzle cleaning needle in the event of an obstruction of the nozzle.

This invention consists of a special form of construction of such vaporizer. The long passage for the combustible is formed in the usual and preferable manner by the interior of the tube being of spiral form and the filter formed by several layers of wire gauze. As compared with the usual construction of the vaporizer, the solid spiral grooved spindle is particularly adapted for the reception of the thin needle as it, like the wire-gauze, is provided with a fine central aperture through which the needle extends.

The vaporizer shown in the accompanying drawing in longitudinal vertical section consists of a tube 2 screwed on to the casing 1. This tube forms the preheating chamber 3 and is adapted to receive the spindle 4. A cap 5 is screwed on to the bottom hollowed end of the casing 1 and in this cavity is fitted a rack 7 which incloses the needle spindle 6 in the vaporizer. The said rack is operated by a pinion 8 mounted in a bulged part of the casing.

The vapor tube proper is provided below with a lateral tube fitting 9 for communicating with the feed pipe and by interposing a guide sleeve 10, the vapor tube is closed above with a cap 11 having an outlet aperture 12. A filter 13 comprising a series of gauzes placed over one another is fitted on the upper end of the spindle 4 provided in

the interior of the tube over the preheating chamber 3. The needle 14 is provided on the upper end of a needle spindle 6 extending below in the casing 1 and above in the sleeve 10.

The needle or needle spindle is operated or the cleaning of the outlet aperture is effected in such a manner that the pinion 8 is reciprocated externally, whereupon by the engagement of the rack 7, the spindle 6 connected to the latter is moved up and down. In this vaporizer, the liquid passing out of the fuel receptacle through the tube fitting 9 will rise in the preheating chamber 3 to the spindle 4 and while being vaporized, it will pass around this spindle into the spiral chamber 15. The vapor will pass out of this chamber to the filter 13 and through the latter to the outlet aperture 12. The gas flowing through this passage will be excessively heated and all the particles of carbon deposited, so that the gas completely purified will pass through the filter to the outlet aperture, thereby considerably increasing the illuminating power of the gas.

If the opening 12 should become obstructed after a very long use of the vaporizer, a simple cleaning in the above described manner is sufficient for putting the vaporizer in good working condition again.

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 and wish to secure by Letters Patent is:

A tubular vaporizer for liquid combustibles comprising, a casing, a nozzle at its upper end, a solid spiral grooved inner part in the casing and a filter 13 formed of layers of wire gauze between the end of the part 4 and the nozzle, said inner part and filter having a guiding axial bore and a nozzle cleaning needle in said bore.

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

EMIL HUBERT.

Witnesses:

JOSEPH WILKINSON,
F. E. MALLETT.