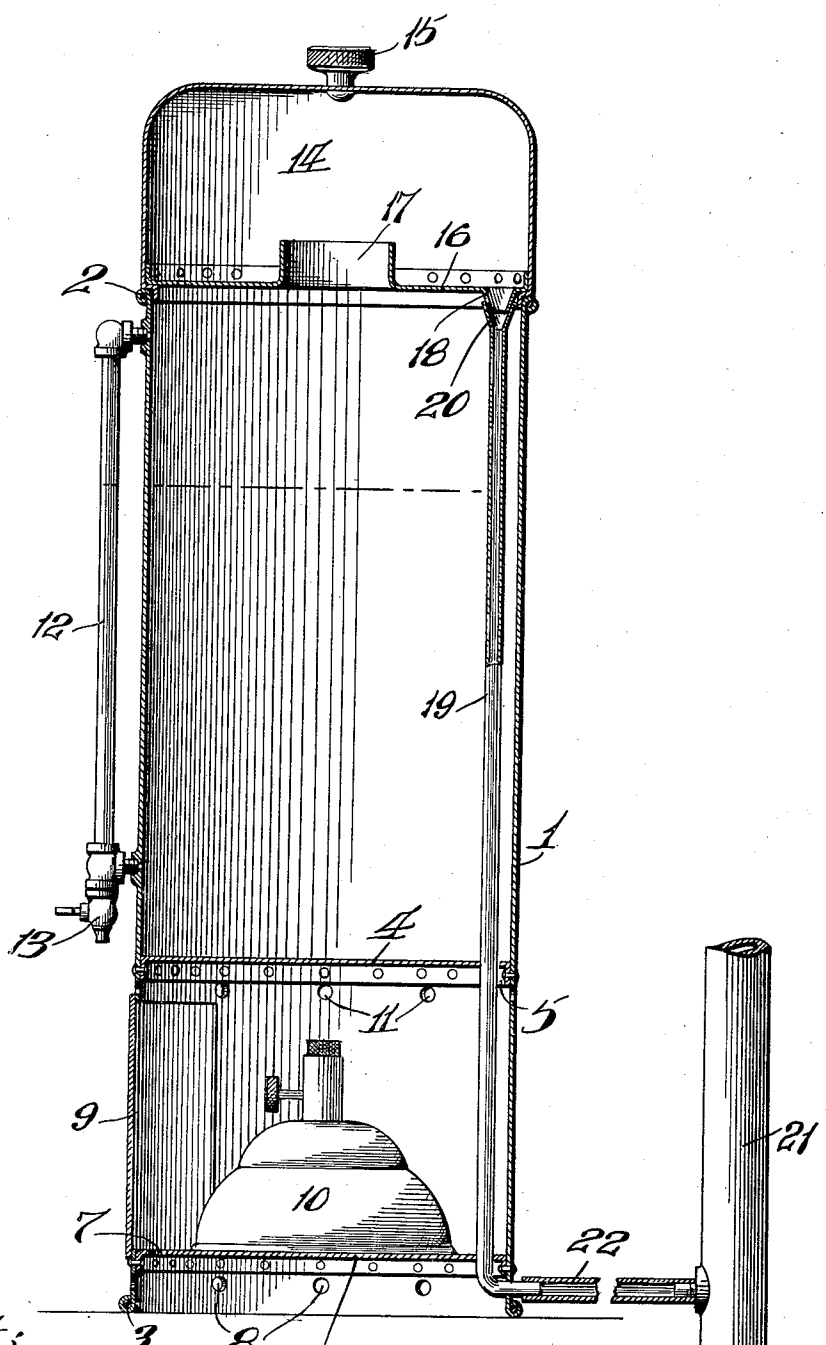
F. RODGERS.

STERILIZING APPARATUS.

APPLICATION FILED DEC. 27, 1909.

1,007,238.

Patented Oct. 31, 1911.



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UNITED STATES PATENT OFFICE.

FRANK RODGERS, OF ST. LOUIS, MISSOURI.

STERILIZING APPARATUS.

1,007,238. Specification of Letters Patent. Patented Oct. 31, 1911.

Application filed December 27, 1909. Serial No. 535,130.

To all whom it may concern:

Be it known that I, FRANK RODGERS, a citizen of the United States, and resident of St. Louis, Missouri, have invented certain new and useful Improvements in Sterilizing Apparatus, of which the following is a specification containing a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to improvements in sterilizing apparatus, the object of my invention being to construct an apparatus designed primarily for use as a means for sterilizing dental tools, which apparatus is provided with means for conducting and carrying off vapors and odors arising from the apparatus to and through a waste pipe.

In the accompanying drawing the figure is a vertical, sectional elevation of the complete apparatus, certain parts being broken away for purposes of clear illustration.

Referring by numerals to the accompanying drawing: 1 designates the body portion of the apparatus which is preferably cylindrical in form and is provided with reinforcing wires 2 and 3 at its upper and lower ends respectively.

4 designates a partition intermediate the ends of the body portion which is preferably provided with an integral, annular flange 5 which flange is secured by rivets or the like to the body portion 1.

Located adjacent the lower margin of the apparatus is a partition 6 which is of substantially the same construction as the partition 4 and is secured in a like manner to the body portion 1. The partition 6 is provided with perforations 7 and the body portion 1, immediately under the partition 6, is perforated at 8.

9 designates a door which provides access to the interior of the body portion between the partitions 4 and 6.

Resting upon the partition 6 is a burner 10 which is of a size to permit its being inserted, when the door 9 is open, into the chamber formed between the partitions 4 and 6.

Immediately beneath the partition 4 and formed through the body portion 1 are the perforations 11 which perforations co-act with the perforations 7 and 8 to supply the proper circulation of air for the burner.

The partition 4 is arranged near the lower margin of the apparatus and is secured to the walls of the receptacle in a fluid tight manner.

Carried by the body portion 1 is a water glass 12 having a drain-cock 13. Removably positioned over the top of the body portion 1 is an inverted bowl-shaped cap 14 having a handle 15. Secured within the cap adjacent its lower margin and resting upon an annular flange formed at the lower end of the cap is a condensate-collecting partition 16 having an opening 17 therethrough, and carried by and preferably formed integral therewith is a funnel-shaped extension 18.

19 designates a tube which is extended through the partitions 4 and 6 and is provided at its lower extremity with a right angled bend which projects through the wall of the body portion 1 beneath the partition 6. Secured to the upper extremity of the tube 19 is a funnel-shaped extension 20 which is designed to overlie the funnel-shaped extension 18 of the partition 16.

21 designates a waste or drain pipe which may be connected with a fountain cuspidor or the like, and connecting the waste pipe with the tube 19 is a flexible hose 22.

In practical operation the sterilizer is partially filled with water above the partition 4 and the lamp 10 is ignited and the cap 14 is placed in position. After the water, held in the receptacle, has reached a boiling point, for sterilizing or other purposes, it will be noted that the steam and odors arising from the sterilizing chamber will be carried off through the tube 19 and waste pipe 21, the action of the water running through the waste pipe 21 creating a suction which draws the vapors from the cap.

By the construction and arrangement of parts as contemplated by applicant, the vapors and odors arising from the sterilizing chamber will not be permitted to exhaust into the atmosphere but are carried off through the waste pipe 21. Heretofore in sterilizing apparatus of this kind, all vapors and odors arising from the apparatus were discharged into the room occupied by the operator.

While I have shown and described a means connected with an apparatus for sterilizing dental tools and the like for carrying off the odors and vapors arising therefrom, it is obvious that, with slight modifications, the same may be applied to other apparatuses

from which volatile matter arises and it is apparent that means other than a waste pipe in which there is flowing water for creating the suction required to withdraw the volatile matter may be employed without departing from the spirit of my invention.

I claim:

1. In a sterilizer, a cylindrical body portion, partitions arranged within the body portion, a burner positioned between the partitions, a tube extending throughout the length of the apparatus, a funnel-shaped extension at the top of said tube, a cap loosely mounted upon the cylindrical body portion, a plate arranged within and adjacent the bottom of the cap, there being an opening through the plate in communication with the body portion, and a funnel-shaped extension formed integral with the plate and projecting into the funnel-shaped extension of said tube.

2. In a sterilizer, a sterilizing chamber, means for heating said chamber, a removable cap for the chamber, a tube extending through the sterilizing chamber, a condensate-collecting partition carried by the cap and partially dividing the cap from the sterilizing chamber, and means for detachably connecting the partition and said tube so as to drain off through a tube the moisture condensed in the cap, substantially as shown and for the purposes stated.

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

FRANK RODGERS.

Witnesses:
E. E. LONGAN,
E. L. WALLACE.