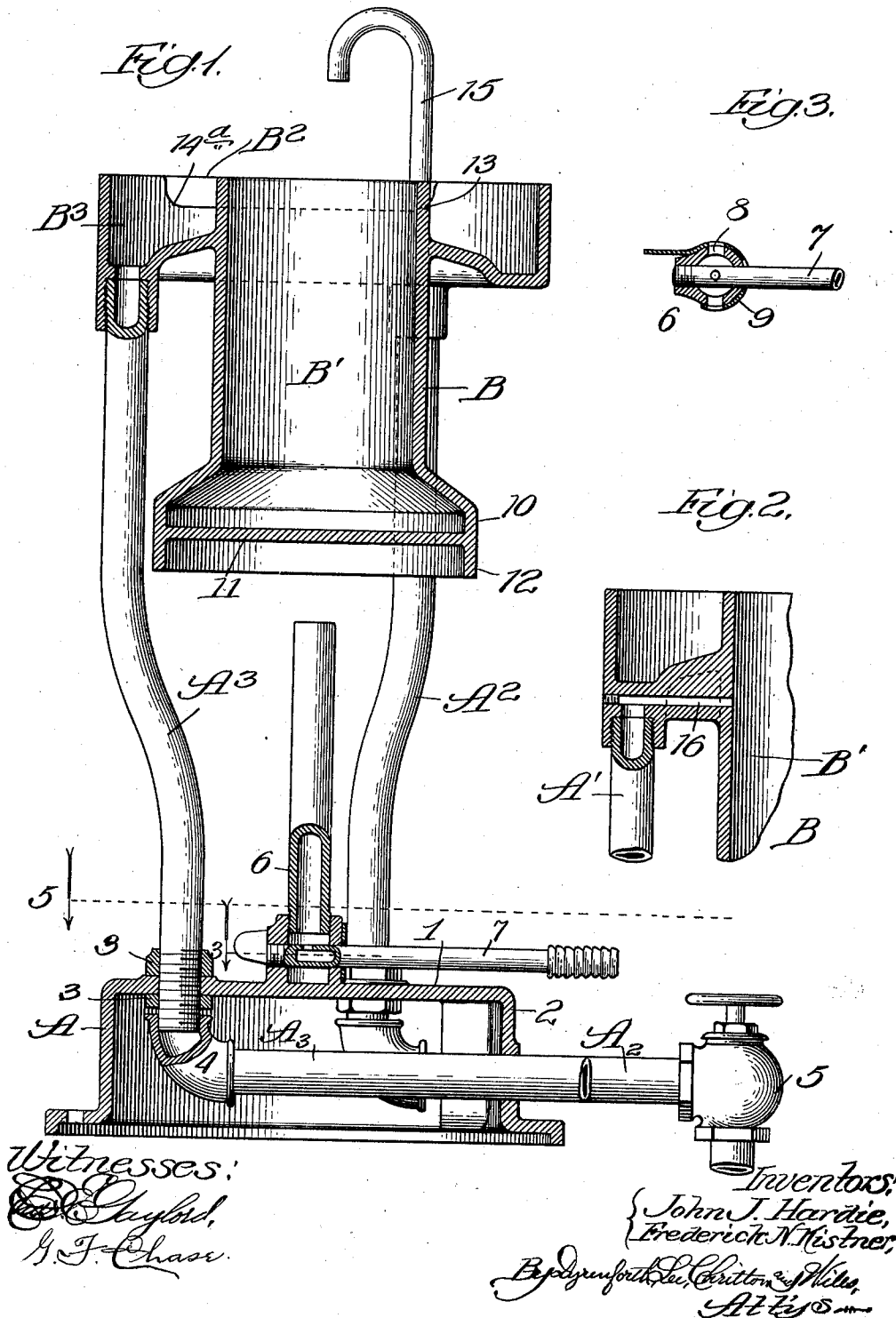


J. J. HARDIE & F. N. KISTNER.
STERILIZING DEVICE.
APPLICATION FILED MAY 18, 1912.

1,036,837.

Patented Aug. 27, 1912.
2 SHEETS—SHEET 1.



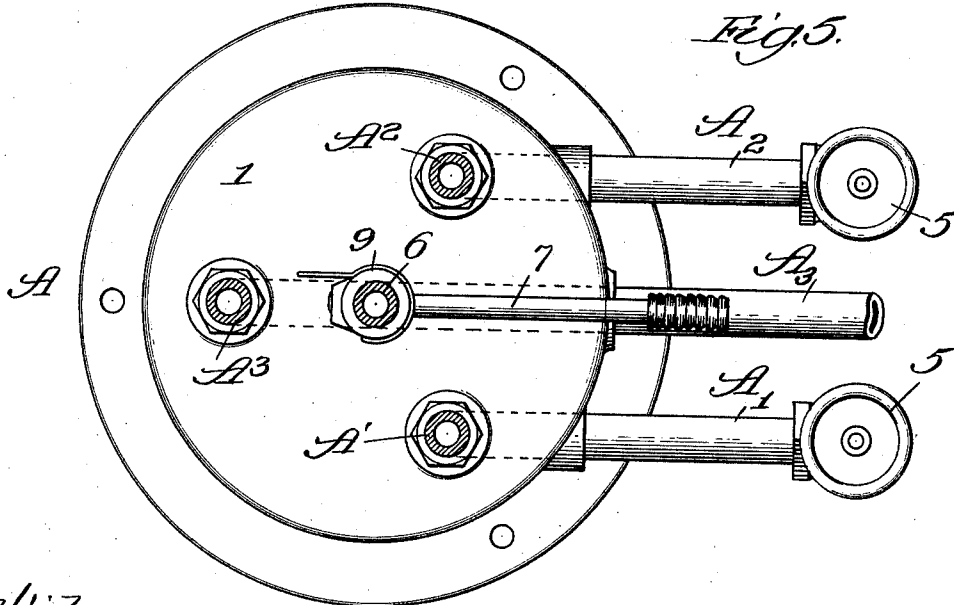
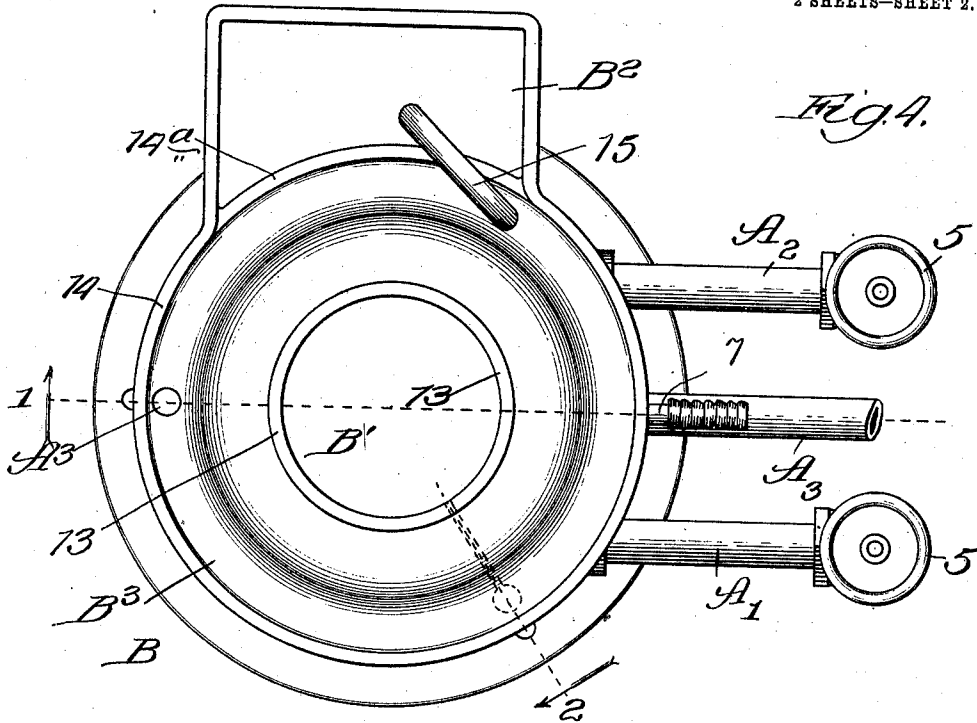
J. J. HARDIE & F. N. KISTNER.
STERILIZING DEVICE.

APPLICATION FILED MAY 18, 1912.

1,036,837.

Patented Aug. 27, 1912.

2 SHEETS—SHEET 2.



Witnesses:
E. J. Daylord.
M. J. Chase.

Inventors:
John J. Hardie,
Frederick N. Kistner,
By *Deputy*, *Sec.*, *Crutton & Miles*,
Attys.

UNITED STATES PATENT OFFICE.

JOHN J. HARDIE AND FREDERICK N. KISTNER, OF CHICAGO, ILLINOIS.

STERILIZING DEVICE.

1,036,837.

Specification of Letters Patent.

Patented Aug. 27, 1912.

Application filed May 18, 1912. Serial No. 698,134.

To all whom it may concern:

Be it known that we, JOHN J. HARDIE and FREDERICK N. KISTNER, both citizens of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Sterilizing Devices, of which the following is a specification.

This invention relates particularly to sterilizing-devices adapted for quite general use, as on soda-fountain counters, in the offices of physicians and surgeons, and in other locations too numerous to mention.

The primary object of the invention is to provide an improved and simplified sterilizing-device which can be manufactured at small expense, which is durable and handy, and which is adapted to serve its purpose without the necessity of constant attention.

The invention is illustrated in its preferred embodiment in the accompanying drawings, in which—

Figure 1 represents a vertical sectional view of a sterilizing device constructed in accordance with this invention; Fig. 2, a broken vertical sectional view taken as indicated at line 2 of Fig. 4 and showing a detail of the connection of the water-supply pipe through which water is supplied to the sterilizing chamber; Fig. 3, a broken horizontal sectional view taken as indicated at line 3 of Fig. 1, and showing the detail of the Bunsen burner employed; Fig. 4, a plan view of the improved sterilizing device; and Fig. 5, a section taken as indicated at line 5 of Fig. 1.

In the preferred embodiment of the invention there are employed a base A, from which rise a water-supply pipe A' which serves to supply the sterilizing-chamber, a water-supply pipe A², which serves to supply the cold-water chamber, and a waste-pipe A³, which serves to drain an overflow chamber; and a vessel B, which is supported by the pipes mentioned and is provided with a sterilizing-chamber B¹, a cold-water chamber B², and an annular overflow-chamber B³.

The base A is preferably formed hollow, comprising a disk 1 having a downturned flange 2. The structure generally is in the form of a tripod, the three pipes A¹, A² and A³ being equally spaced and serving as legs

or standards for the body or vessel B. The lower ends of the pipes mentioned are threaded and pass freely through openings in the top disk 1 of the base, where they are fitted with nuts 3, which serve to secure the pipes to the base. To the lower ends of the pipes are connected by unions or elbows 4, horizontally-disposed pipes A₁, A₂, A₃, respectively, which extend out through openings in the vertical flange 2 of the base, the pipes A₁ and A₂ being fitted with valves 5 adapted to control the inflow of water.

Mounted centrally on the base is a Bunsen burner 6, which is thus disposed beneath the sterilizing-chamber B¹. The Bunsen burner has a gas-supply pipe 7 and air-inlets 8 controlled by a sleeve or register 9.

The chamber B¹ is in the form of a cylindrical member provided with an enlarged base-portion 10 and a bottom 11, from the peripheral portion of which depends a flange 12. The overflow chamber B³ encircles the cylindrical upper portion of the chamber B¹. Thus, the upper portion of the wall of the chamber B¹ forms an inner flange or wall 13 for the overflow-chamber B³. The pipe A³ connects with the bottom of the annular chamber B³, as shown in Fig. 1. The walls of the chamber B³ are cast integrally with the walls of the chamber B¹; and the chamber B² projects laterally from the outer wall of the chamber B³. The outer wall of the chamber B³ affords an annular flange 14, and this flange is cut down or reduced somewhat, as shown at 14^a, to permit water to overflow from the chamber B² to the overflow-chamber B³. With the upper end of the supply-pipe A² communicates a goose-neck tube 15, through which cold water is delivered to the rinsing or cooling-chamber B². The pipe A¹ is connected at its upper end with the wall of the overflow-chamber B³ and communicates, through a passage 16, with the interior of the sterilizing-chamber B¹.

The manner of using the device may be explained briefly. A flame is maintained beneath the chamber B¹ by means of the Bunsen burner 6. Water is admitted through the pipe A¹ to the sterilizing-chamber B¹, where it is kept boiling; and in case of excess of water, as where the valve of the pipe A₁ is left slightly open, the wa-

ter will overflow the flange 13 into the chamber B³ and pass off through the waste-pipe A³. Water is supplied to the chamber B² through the pipe A²; and, if desired, the valve 5 of the pipe A₂ may be left slightly open to maintain a constant flow of water into the chamber B², from which the overflow passes over the flange 14^a into the annular chamber B³. Spoons or implements may be dipped in the boiling water in chamber B¹ and then rinsed or cooled in the cooling-chamber B². In fact, the chamber B² may serve as a tray to hold the spoons or implements until their use is required, although, preferably, the tray is purposely made so small that the spoons or implements will ordinarily be returned to the sterilizing-chamber. It may be added that the gutter of the overflow chamber is purposely removed from the wall of the sterilizing-chamber, so that the cold water overflowing from the chamber A² will not cool the sterilizing-chamber.

The sterilizing device of the character described is an exceedingly handy device, thoroughly adapted to its purpose, and it may be manufactured at low cost.

The foregoing detailed description has been given for clearness of understanding, and no undue limitation should be understood therefrom, but the appended claims should be constructed as broadly as permissible in view of the prior art.

What we regard as new, and desire to secure by Letters Patent, is—

1. A sterilizing-device comprising a sterilizing-chamber, an overflow-chamber at the upper portion thereof, means for applying heat to the sterilizing-chamber, means for supplying water to the sterilizing-chamber, and means for conducting water from the overflow-chamber.

2. A sterilizing-device comprising a sterilizing-chamber, an overflow-chamber encircling the upper portion of the sterilizing-chamber, a cold-water chamber provided with an overflow, means for conducting water from the overflow-chamber, means for supplying water to the cold-water chamber, means for supplying water to the sterilizing-chamber, and means for supplying heat to the sterilizing-chamber.

3. A sterilizing-device comprising a base, water-pipe rising therefrom, and a body supported by said pipes and comprising a sterilizing-chamber and an overflow-chamber, the sterilizing-chamber communicating with one of said pipes, and the overflow-chamber communicating with another of said pipes.

4. A sterilizing-device comprising a base, pipes rising from said base, a body supported on said pipes and comprising a sterilizing-chamber, an overflow-chamber encir-

cling the upper portion of the sterilizing-chamber, and a cold-water chamber adjacent the overflow-chamber and communicating at its upper portion therewith, said pipes communicating, one with the sterilizing-chamber, and one with the overflow-chamber, and the third one serving to supply the cold-water chamber.

5. A sterilizing-device comprising a sterilizing-chamber, an overflow-chamber encircling the upper portion of the sterilizing-chamber, a tray projecting laterally from the overflow-chamber, and provided with an overflow, means for supplying water to said tray and to said sterilizing-chamber, and means for conducting water from the overflow-chamber.

6. A sterilizing-device comprising a sterilizing-chamber having an annular overflow-chamber encircling and cast integrally with its upper portion, a base, pipes rising from said base and connected with the base portion of said overflow-chamber, one of said pipes communicating with the overflow-chamber at its bottom, and another of said pipes communicating through the base wall of the overflow-chamber with said sterilizing-chamber.

7. A sterilizing-device comprising a sterilizing-chamber having an annular overflow-chamber cast integrally with its upper portion and equipped with a lateral extension affording a tray, a base, pipes rising from said base and connected with the base wall of said overflow-chamber, one of said pipes communicating with the lower portion of the overflow-chamber, another of said pipes communicating with the upper portion of the sterilizing-chamber, and the other of said pipes serving to supply water to said tray, and means for applying heat to the sterilizing-chamber.

8. A sterilizing-device comprising a base, a Bunsen burner rising centrally therefrom, a pair of water-supply pipes and an overflow-pipe rising from said base, a body supported on said pipes and comprising a sterilizing-chamber, an overflow chamber encircling the upper portion of said sterilizing-chamber, and a tray projecting laterally from said overflow-chamber, one of said pipes communicating with the lower portion of the overflow-chamber, another of said pipes communicating with the upper portion of the sterilizing-chamber, and the third pipe serving to supply water to said tray.

9. A sterilizing-device comprising a base, a burner supported thereon, three pipes rising from said base and having their lower ends threaded and extending through the base and equipped with nuts securing the pipes to said base, and a body supported on said pipes comprising a sterilizing-chamber, an overflow-chamber encircling the upper

portion of said sterilizing-chamber, and a
tray projecting laterally from said overflow-
chamber, one of said pipes communicating
with the lower portion of the overflow-cham-
ber, another of said pipes communicating
5 with the upper portion of said sterilizing-
chamber, and the third pipe serving to sup-

ply water to said tray, for the purpose set
forth.

JOHN J. HARDIE.
FREDERICK N. KISTNER.

In the presence of—

GEORGE L. McNEIL,
FRANK R. CURDA.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."