

T. S. WATERS.
 Combined Burr-Holder and Spirit-Lamp.
 No. 222,107. Patented Nov. 25, 1879.

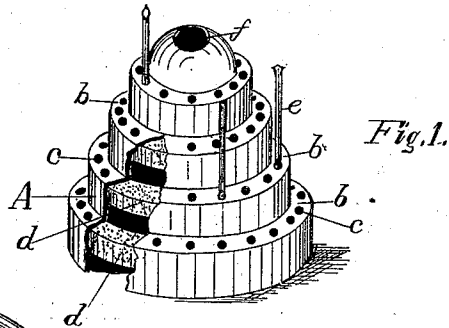


Fig. 1.

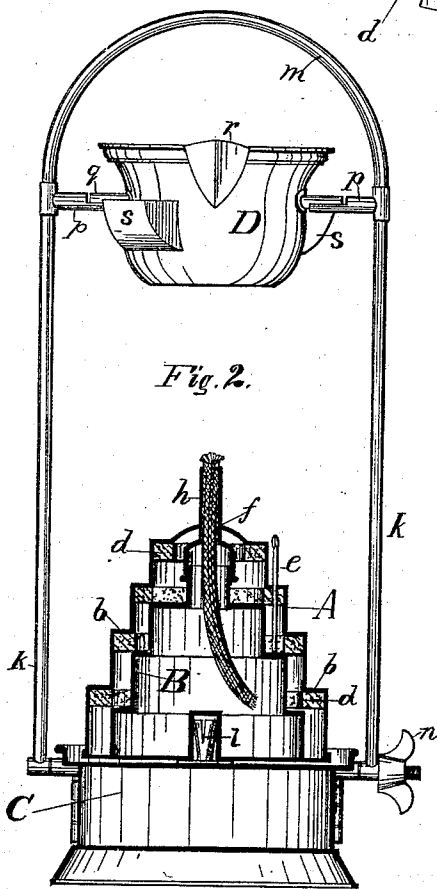


Fig. 2.

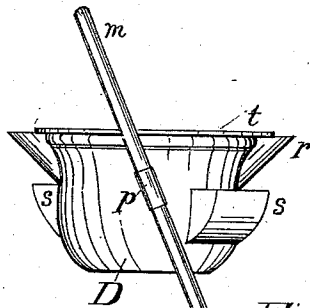


Fig. 3.

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UNITED STATES PATENT OFFICE.

THOMAS S. WATERS, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN COMBINED BURR-HOLDER AND SPIRIT-LAMP.

Specification forming part of Letters Patent No. **222,107**, dated November 25, 1879; application filed September 9, 1879.

To all whom it may concern:

Be it known that I, THOMAS S. WATERS, of the city of Baltimore and State of Maryland, have invented a new and useful Improvement in Burr-Holder and Spirit-Lamp for Dentists' Use, of which the following is a specification.

My invention has for its object to provide an improved burr-holder in which steel burrs or drills used by dentists may be inserted, and which shall have such construction that the shank of the burr will be protected from oxidation.

A further object is to give to the burr-holder such form as will adapt it to be placed as a sort of jacket about a spirit-lamp such as dentists use, thereby avoiding the use of space on the bracket or shelf which a separate device would require.

In the drawings hereto annexed, Figure 1 is a view of the burr-holder, a part being broken away. Fig. 2 is a view of the combined devices, the burr-holder and lamp being in section. Fig. 3 is a transverse view of same.

The letter A designates the burr-holder, which, preferably, is made of thin metal "spun" up, its general form being that of a cone, but presenting a series of circular steps, *b*, each having on its tread or horizontal face a number of holes, *c*. Within this cone-shaped device an annular pad, *d*, made of woolen felt or other suitable material, is secured to the under side of each circular step. This felt pad is designed to be slightly moistened or saturated with sperm-oil, and it may also be perfumed, if desired.

The shank of a steel burr, *e*, may be inserted in each hole *c* and penetrate the oil-moistened pad *d*. By this means the burr is protected from the rust or oxidation usually resulting from the moisture which these instruments receive from the saliva of the mouth.

The burr-holder being cone-shaped, with its interior concave or hollow, and having an opening, *f*, in the top, it is adapted to fit over and around a spirit-lamp, B, which, in the present example, has steps similar to those on the holder, upon the horizontal faces of which the inner edge of the annular felt pads within the holder may rest. When constructed in this manner the end of the shank of the steel burr may extend below the felt and rest on the cir-

cular step on the lamp. The wick-tube *h* of the spirit-lamp projects through the opening in the holder.

A modification in the form of the burr-holder consists in the metal case being in the exact form of a cone, or semi-globular, without circular steps, but provided with holes for the entrance of the burr-shank and lined with a felt pad molded in a form to fit within the case, so as to leave it hollow, and in like manner the steps on the spirit-lamp may be dispensed with and the lamp be of any form which will permit it to be covered by the burr-holder.

By this combination of a spirit-lamp with a hollow burr-holder no extra space is required on the bracket or table, as would be the case if each device sat on its separate base, and as the ends of the steel burrs rest on the lamp they cannot slip through.

The letter C designates the base of the device, and may be provided with one or more compartments or drawers, *i*, hinged by one corner, so as to adapt them to swing out, as seen in Fig. 3. If it is desired to cheapen the article these receptacles may be dispensed with.

A stud, *l*, is secured to the center of the base and stands in a perpendicular position relative thereto, and a socket is formed in the center of the bottom of the lamp and is adapted to fit over the stud, serving to secure the lamp from movement. Upon each of two diametrically-opposite sides of the base a standard, *K*, is pivoted. The two joining above forms a bail, *m*, adapted to be moved laterally on the pivot. One of the pivots is provided with a set-screw, *n*, by turning which the standards may be clamped so as to retain them at any desired inclination, as shown in Fig. 3, and thereby to swing the water-cup D, hereinafter described, beyond reach of the lamp-flame.

To the upper part of each standard is secured a bearing, *p*, projecting inward toward each other, and each of these receives and supports the trunnion *q*, attached to the water-cup, one on each of two sides. By this means the cup may be tilted to pour the water out, to facilitate which a lip, *r*, is provided. To the outer side of the cup one or more pockets or receptacles, *s*, may be attached, if desired. These serve to receive the mouth-mirror used

by dentists, and they may there be sufficiently heated to prevent the condensation on the glass of the moisture from the breath.

The cup may be provided with a cover, *t*, and a cover may be employed to place over the lamp and burr-holder..

These combined devices constitute an exceedingly useful apparatus for the operative dentist.

Having described my invention, I claim and desire to secure by Letters Patent of the United States—

1. A holder for steel burrs, consisting of a metal case provided with holes through which to insert the shank of the burr, and having a felt pad secured to its inner side, substantially as set forth.

2. A holder for steel burrs, consisting of a metal case having the general form of a cone, but having circular ridges or steps, in which are holes to receive the burr-shank, and provided on the inside with annular-shaped felt pads secured so as to cover the holes, as set forth.

3. The combination, substantially as set forth, of a cone-shaped metal case provided with holes, and having a felt pad secured to its inner side, and a spirit-lamp adapted to fit within the pad of the case, as set forth.

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Witnesses:

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