

F. W. KORB.
 BUR STAND.
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1,437,596.

Patented Dec. 5, 1922.

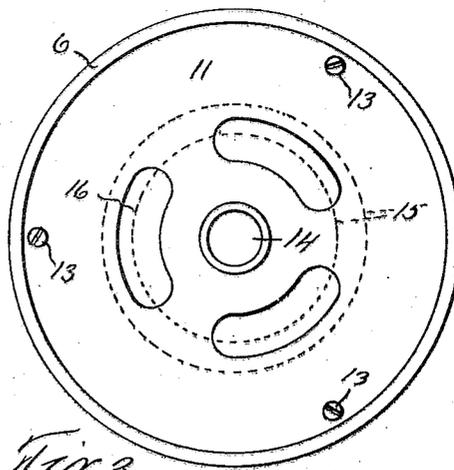
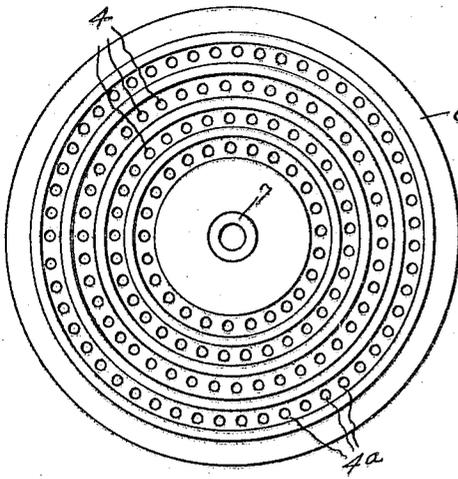
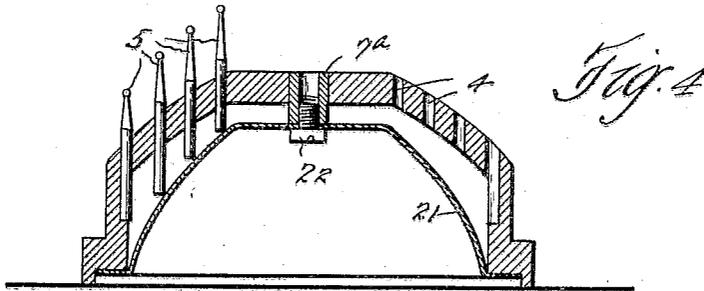
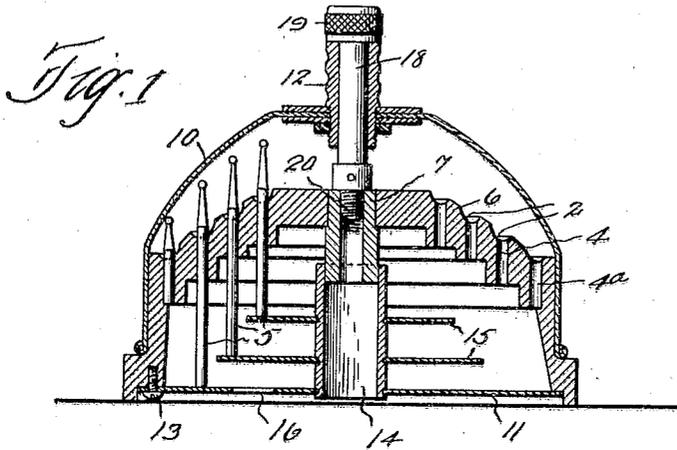


Fig. 2

Fig. 3

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UNITED STATES PATENT OFFICE.

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BUR STAND.

Application filed October 7, 1921. Serial No. 506,035.

To all whom it may concern:

Be it known that I, FREDERICK W. KORB, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Bur Stands, of which the following is a specification.

This invention relates to bur stands particularly adapted and intended for the use of dentists, for holding certain tools such as burs and the like. In some respects the stand is an improvement on the stand shown in my U. S. Patent No. 1,357,063, dated Oct. 26, 1920. The stand shown in said patent, as well as other stands with which I am familiar, employ a base consisting of a solid block, which is objectionable for various reasons. The object of the present invention is to provide a stand with a hollow block which may be cast of aluminum or other light metal, and which is provided at the inside with a spider or support for holding the burs when they are inserted in the block.

A further object of the invention is to provide a stand in which the burs can be sterilized without removing the same from the stand, the hollow construction permitting steam or hot air to circulate through the stand and reach all parts of the burs.

The present stand is preferably made entirely of metal, so it will not be affected by heat, while retaining the advantage of lightness in consequence of the hollow construction.

Various other advantages will be apparent from the following description and the accompanying drawings in which Fig. 1 is a vertical section of the stand. Fig. 2 is a top plan with the cover removed. Fig. 3 is a bottom plan. Fig. 4 is a section of a modification.

In the drawings, 6 indicates the base or body of the stand which will be more fully described hereinafter. On this fits a cover 10 held in place by a pin 18 provided at the top with a knurled head 19, the pin working through a bushing 12 set in the cover and having a threaded extension 20 which screws in a bushing 7 set in the top of the block, this construction being practically identical with that shown in my former patent above referred to, and therefore having the advantages indicated in said patent.

The base block 6 comprises preferably a hollow inverted cup-shaped metal casting

the top of which has a series of annular steps 2 provided with holes 4 to receive the shanks 5 of the tools or burs. These holes extend completely through the block, except the outer row of holes 4^a which are not drilled entirely through, sufficient metal being left to hold the outer row of burs at the proper height when inserted in said holes.

To support the burs or tools at the proper height and in stepped relation I provide an inner spider or structure consisting of a base plate 11 which is fastened to the bottom of the block by screws 13, and this base plate supports a tube or ferrule 14 which extends upwardly within the block and fits at its upper end around the lower end of the bushing 7. This tube supports circular plates 15 which vary in diameter and vertical position according to the corresponding rows of holes, so that when burs of the inner rows are inserted through the holes they will rest upon these plates as shown. The bottom plate 11 has a number of openings 16 through which hot air or steam may enter into the interior of the block, and these holes also permit the removal of any burs which may drop through the holes, if accidentally inserted into the wrong holes.

In the modified form shown in Fig. 4 the hollow block is slightly different in form, but the main feature of difference is the provision of a support within the block, said support consisting of a sheet metal inverted cup 21 which is secured in the block by a screw 22 tapped through the same and into a bushing 7^a set in the top of the block. The sides of this cup or support are inclined so that the lower ends of the burs rest against the same when they are inserted in the holes 4 as shown. The main parts of this structure may be cheaply produced in cast and stamped metal, and both forms provide an all-metal stand which is very light, and which has the advantage that it can be placed as a whole, with the burs therein, in a sterilizing cabinet and subjected to heat to sterilize the tools without injuring the stand. The lightness is an important feature of convenience in such stands.

With the form shown in Fig. 1, the cover may be removed and placed under the stand, as described in my said patent, with the bushing 12 fitting in the tube 14, permitting the block to be rotated.

I claim:

1. An all-metal stand for burs or the like,

comprising a hollow metal block having holes extending through the same, and a metal support enclosed in the hollow of the block and having a supporting connection to the top of the block and adapted to support burs inserted in said holes.

2. A stand for burs or the like comprising a hollow block having rows of holes extending through the top and means within the hollow of said block to support burs at different elevations when inserted in said rows respectively, said means consisting of a series of stepped plates within the block.

3. A stand for burs or the like comprising a hollow block having holes through the top thereof to receive the burs, and a support for said burs in the hollow of the block, and including a central tube.

4. A stand for burs or the like comprising

a hollow block having holes to receive the burs, a central tube in the hollow of the block, and a stepped series of plates projecting from said tube and adapted to support burs placed in said holes.

5. A stand for burs or the like comprising a hollow block having holes to receive the burs, a central tube in the hollow of the block, and a stepped series of plates projecting from said tube and adapted to support burs placed in said holes, the lowest plate having openings therein.

In testimony whereof, I affix my signature in presence of two witnesses.

FREDERICK W. KORB.

Witnesses:

JOHN A. BOMMARDT,
BESSIE F. POLLAK.