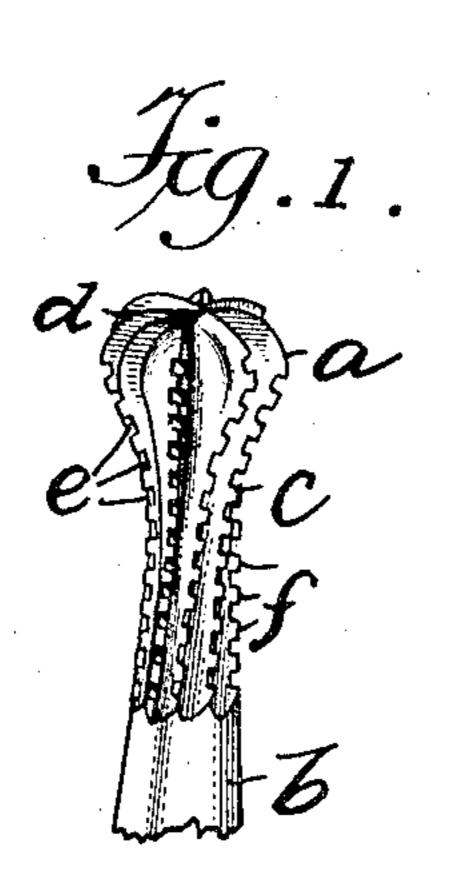
No. 843,273.

PATENTED FEB. 5, 1907.

W. HOMANN.

DENTAL BUR AND EXCAVATOR.

APPLICATION FILED MAR. 29, 1905.



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MITNESSES Appleman Allender

BY Edgar Tale Homann

ATTORNEYS

## UNITED STATES PATENT OFFICE.

WILLY HOMANN, OF DÜSSELDORF, GERMANY.

## DENTAL BUR AND EXCAVATOR.

No. 843,273.

Specification of Letters Patent.

Patented Feb. 5, 1907.

Application filed March 29, 1905. Serial No. 252,621.

To all whom it may concern:

Be it known that I, WILLY HOMANN, a subject of the Emperor of Germany, and residing at Düsseldorf, Germany, have invented 5 certain new and useful Improvements in Dental Burs and Excavators, of which the following is a specification, such as will enable those skilled in the art to which it appertains to

make and use the same.

This invention relates to dental burs; and the object thereof is to provide an improved device of this class which may be used as an ordinary bur and for excavating a tooth and also as a drill and for trimming or cutting the 15 outer edges or corners of teeth and for various other purposes; and with this and other objects in view the invention consists in a device of the class specified constructed as hereinafter described and claimed.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are designated by suitable reference characters in each

25 of the views, and in which-

Figure 1 is a perspective view of a dentistbur made according to my invention; Fig. 2,

an end view thereof.

In the practice of my invention I provide 30 a dentist-bur comprising a spherical head portion a, having the usual shank b, that portion of which adjacent to the head and forming the neck of the bur is slightly reduced in size, as shown at c, and said head portion is sub-35 stantially spherical in form and provided with longitudinally and spirally arranged ribs d, which are extended along and around the neck portion c of the shank b to a predetermined point on said shank. The ribs d 40 are of greater transverse depth on the head portion a than on the shank b and the neck portion c thereof, and the faces of these ribs on one side are in a plane passing centrally through the head a, while the opposite faces 45 thereof are beveled or inclined at an angle

of approximately forty-five degrees. This shape of the ribs d in cross-section is the same on the shank and neck portion c; but the transverse depth of said ribs on these portions is slightly less than on the head a, as 50 hereinbefore described.

The edges of the ribs d from the central transverse portion of the head a to the ends of ribs on the shank b are provided with notches or recesses e, forming corresponding 55 teeth f, and my improved bur is particularly designed for excavating teeth, but may also be used conveniently as a drill, and by forming the ribs d on the shank b and on the neck portion c thereof the device is particularly 69 adapted for use in rimming out the entrance to a cavity or recess excavated in a tooth, and by reason of the teeth f these ribs also adapt the device for use in cutting off or reducing the edges or corners of a tooth.

In the drawings forming part of this specification the various figures are on a much enlarged scale, and it will be understood that my improved bur is in practice of the usual

dimensions.

Having fully described my invention, what I claim as new, and desire to secure by Let-

ters Patent, is—

A dentist-bur, comprising a spherical head provided with a reduced shank or neck por- 75 tion, the curve between the head and the shank or neck portion being gradual, said head and shank or neck portion being provided with longitudinally and spirally arranged cutting-ribs having serrations or teeth 80 except at the outer end of the head portion, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 85

14th day of December, 1904.

WILLY HOMANN.

Witnesses:

WILLIAM ESSENWEIN, PETER LIEBER.