

B. M. FELL.
 GUARD FOR DENTAL GRINDING TOOLS.
 APPLICATION FILED JAN. 20, 1910.

994,829.

Patented June 13, 1911.

Fig. 1.

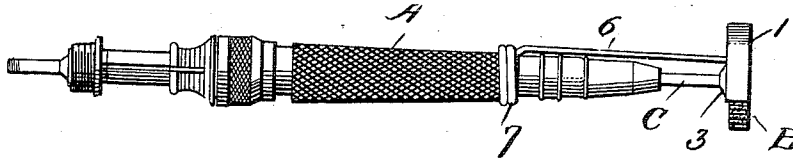


Fig. 2.

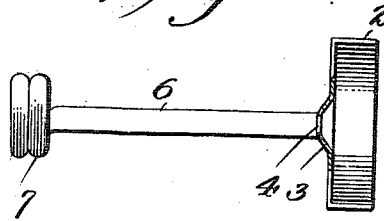
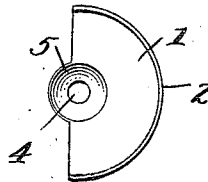


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

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GUARD FOR DENTAL GRINDING-TOOLS.

994,829.

Specification of Letters Patent. Patented June 13, 1911.

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To all whom it may concern:

Be it known that I, BYRON M. FELL, a citizen of the United States, residing at Doylestown, in the county of Bucks and State of Pennsylvania, have invented certain new and useful Improvements in Guards for Dental Grinding-Tools, of which the following is a specification.

My invention relates to the rotary grinding tools commonly used by dentists on dental machines, and has for its object the provision of a guard to shield a part of one of the sides and the edge of the disk, and that is constructed so that it can be readily attached to and detached from any style of hand piece commonly in use on dental engines.

My invention will be described in detail hereinafter and illustrated in the accompanying drawings in which—

Figure 1 is a view of a hand piece of a dental engine showing a grinding disk in place and my improved guard in use, Fig. 2, a side view of the guard removed from the hand piece, and Fig. 3, an end view.

In the drawings similar reference characters indicate corresponding parts in all of the views.

A indicates a hand piece of a dental engine in which a grinding disk B is secured in the usual manner by means of the mandrel C.

My invention as stated above contemplates the provision of hood or guard for the disk B to protect the cheek, tongue and parts of the mouth other than the tooth being operated on from contact with the tool, and consists of a substantially semicircular plate 1 having a lateral flange 2 of sufficient width to cover the edge of the disk B extending from its curved edge. The straight edge of the plate 1 is formed with an outwardly curved portion 3 in its middle and a hole 4 is formed centrally of said curved portion to receive the mandrel C in securing the tool in position, the part surrounding said hole 4 being depressed as shown at 5 to form a socket to receive the conical outer end of the mandrel as generally constructed.

6 indicates the support for the guard consisting of a piece of wire secured to the plate 1 adjacent to the hole 4 and having its inner end formed with a laterally extending coil 7 to engage the barrel of the hand piece A, said coil consisting of any desired number of convolutions though I have found that a coil of two convolutions work satisfactorily, the purpose of said coil being to provide for fitting the guard to hand pieces having barrels of different diameters. I do not, however, limit myself to a coil of two convolutions as their number may be increased or diminished as desired without altering the spirit of my invention. It will also be apparent that my improved guard is adapted for use with a rotary saw as commonly used with dental engines as well as the grinding disk shown and described above, and that different sized guards will be provided for saws and disks of different diameters. It will also be understood that the grinding or sawing tool may be removed and replaced as desired without removing the guard, and the construction of my guard admits of using either flat-surface or the edge of the grinding disk as desired.

Having thus described my invention what I claim is:—

A guard for dental grinding tools comprising a plate substantially semi-circular in shape, and having one edge straight, an outwardly curved portion in the middle of the straight edge having a hole therein concentric with its curved edge, the plate surrounding the hole formed with a depression, the curved edge of the plate bent to form an outwardly extending flange, a strand of wire secured at one end to the plate, and an integral laterally extending coil on the free end of the wire.

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

BYRON M. FELL.

Witnesses:

T. J. MURPHY,
EDWARD HEMMERLY.