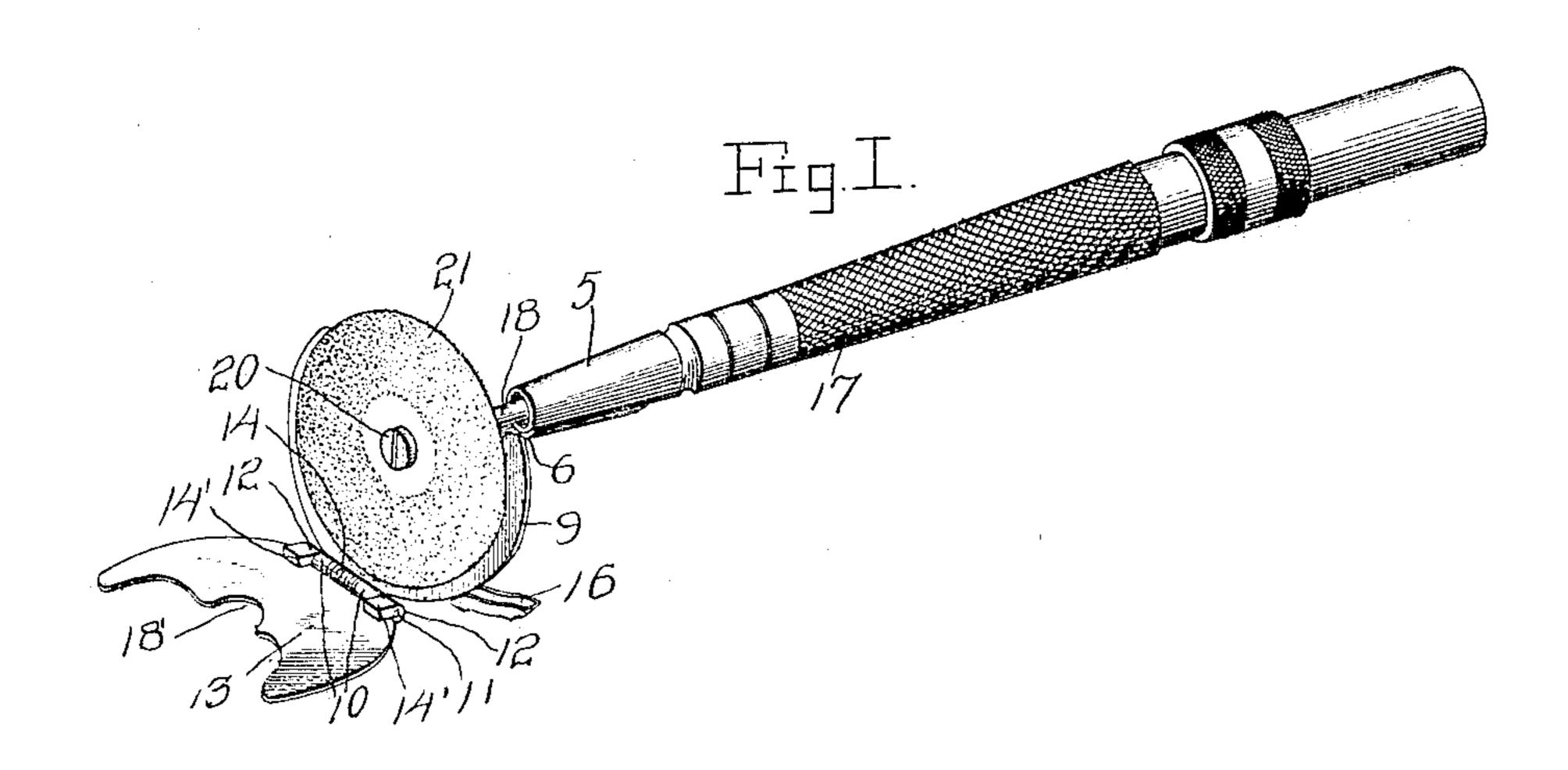
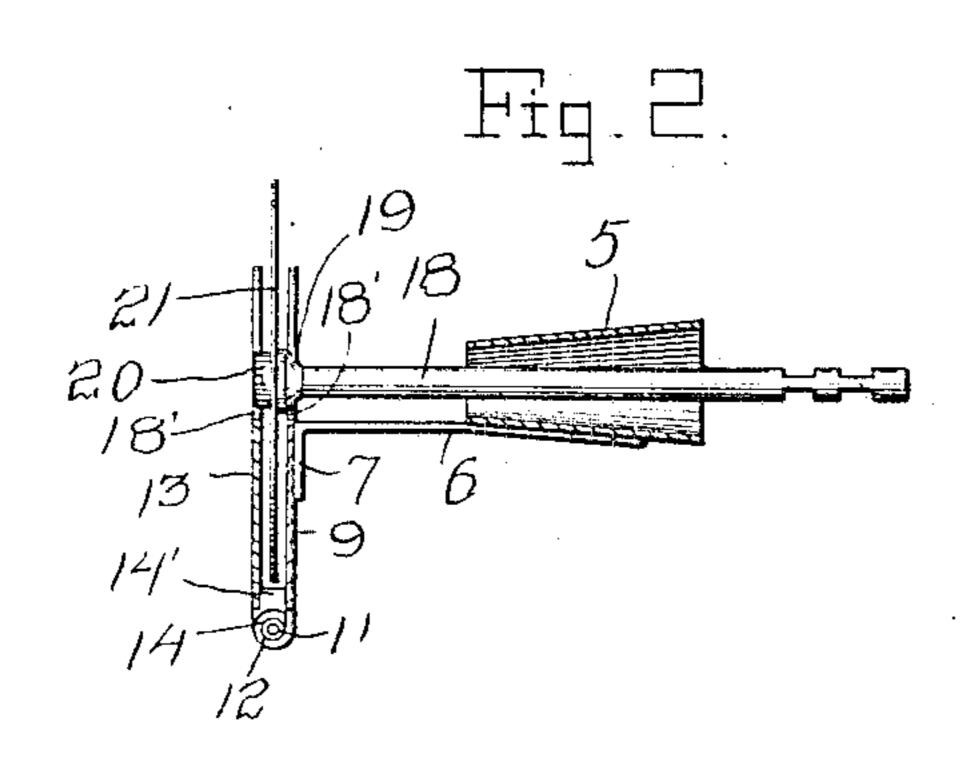
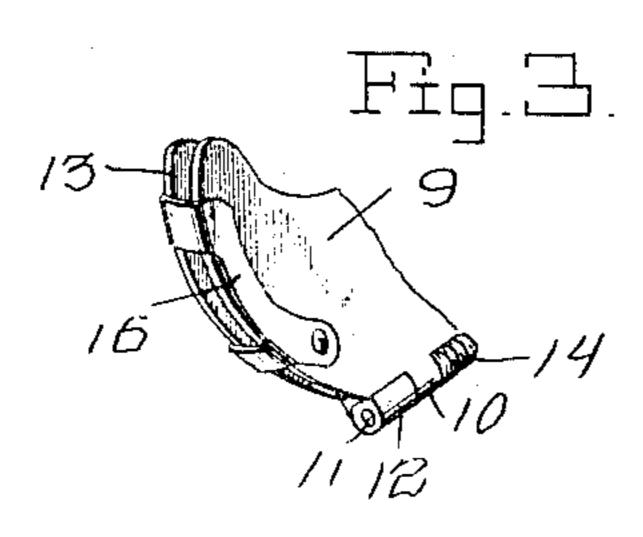
W. F. GREEN. DENTAL DISK SHIELD. APPLICATION FILED AUG. 24, 1904.







Witnesses BK Kirchenbach. Hanny Ellis Clandler. M.F. Green.

Ry

Ottorneys

United States Patent Office.

WILLIAM F. GREEN, OF MODESTO, CALIFORNIA.

DENTAL DISK-SHIELD.

SPECIFICATION forming part of Letters Patent No. 787,981, dated April 25, 1905.

Application filed August 24, 1904. Serial No. 221,976.

To all whom it may concern:

Be it known that I, WILLIAM F. GREEN, a citizen of the United States, residing at Modesto, in the county of Stanislaus, State of California, have invented certain new and useful Improvements in Disk-Shields; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to dental instruments, and more particularly to disk-holders such as are employed for holding sandpaper disks, the object of the invention being to provide an improved form of shield which will completely incase a portion of the disk while leaving the remainder thereof exposed for use in the usual manner.

A further object of the invention is to provide an improved form of shield which will not interfere with application and removal of disks, other objects and advantages of the invention being evident from the following description.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a perspective view showing the holder and the casing, the casing being open to permit of application or removal of the disk. Fig. 2 is a section taken longitudinally of the shaft or spindle, said shaft or spindle being in elevation. Fig. 3 is a detail view showing the fastening for the lid of the casing.

35 the casing. . Referring now to the drawings, the present shield comprises a frusto-conical supporting member or collar 5, from the minor end of which projects a longitudinal arm 6, which is 40 bent laterally at its free end, as shown at 7, and secured against a substantially crescentshaped plate 9, the radius of curvature of which is slightly greater than the largest disk 10 that is to be received in the shield. 45 plate 10 is provided with laterally-spaced ears at the opposite side from its concavity, and these ears receive the pintle 11 of a hinge including said ears and the ears 12 on the convex edge of a second substantially crescent-5° shaped plate 13. A spring 14 is provided for 1

the hinge and serves to hold the two plates in close relation, the movement of the plate 13 in the direction of the plate 10 being limited by the stops or shoulders 14, formed upon the ears of the second plate and which strike 55 the first plate when the two plates assume a parallel position in spaced relation. To hold the plate 13 positively against movement away from the plate 10, a latch is provided and consists of a metal plate 16, which is bent 60 upon itself in substantially **U** shape to engage over the edge portions of the two plates, this latch-plate being pivoted to the plate 10.

The sleeve 5 in practice is engaged upon the end of the chuck 17 of a dental-engine 65 shaft, the disk-spindle 18 passing through the sleeve. At the center of curvature of each of the plates 10 and 13 is a recess 18, which register when with the other and receive, respectively, the head 19 of the spindle and the fastening-screw 20, which is passed through the disk 21 and into the spindle-head to attach the disk to the spindle. In this position the disk lies between the plates 10 and 13 and is free to rotate therein.

In the use of this shield injury to the patient cannot occur from that part of the disk not in use or directly engaged with the work, while the shield may be rested against the teeth of the patient or elsewhere to steady the 80 instrument or otherwise aid in its manipulation. Furthermore, should the disk become bent either intentionally or by accident it will be straightened when the distorting influence is removed by passing through the shield.

It will be understood that in practice modifications of the specific construction shown may be made and any suitable materials and proportions may be used for the various parts without departing from the spirit of the in- 90 vention.

What is claimed is—

1. A disk-shield comprising spaced plates adapted to receive the disk between them, said plates being cut away to expose a portion of 95 the disk and being movably connected to permit of exposure of the entire disk, and means for attaching the shield to the chuck of a dental engine.

2. A disk-shield formed to contain a disk too

and to expose the active part thereof, the members of said shield being movable with respect to each other to expose at times the entire disk, and means for holding the shield in active relation to the disk and against movement therewith.

3. A disk-shield comprising hinged plates adapted to receive a disk therebetween, said plates being cut away to expose a portion of the disk, means for holding the plates with

the disk therebetween, and a sleeve connected to one of the plates and adapted to engage a part of a dental engine.

In testimony whereof I affix my signature in

presence of two witnesses.

WILLIAM F. GREEN.

Witnesses:

F. C. Davis, W. J. Brooks.