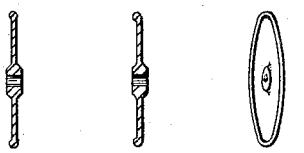
R. ARTHUR.
Dental-Tools.

No. 205,462. Patented July 2, 1878.

Fig.1 Fig.2. Fig.3



Attest

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ROBERT ARTHUR, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN DENTAL TOOLS.

Specification forming part of Letters Patent No. **205,462**, dated July 2, 1878; application filed April 12, 1878.

To all whom it may concern:

Be it known that I, ROBERT ARTHUR, M. D., of Baltimore, in the county of Baltimore and State of Maryland, have invented an Improvement in Implements Employed in the Art of Dentistry, of which the following is a specification:

My invention is an improvement in disks for the removal and arrest of decay of the proximate surfaces of the teeth.

Letters Patent No. 133,617 were granted to me for a disk of certain form and dimensions, duly set forth in the specification of said Letters Patent, for separating the teeth for the object above stated. This disk has been from the time of its introduction extensively employed for the purposes stated. It is flat, or nearly so, with a thin edge or periphery, and, while it is highly useful for the purpose indicated within certain limits well known to dental operators, fails to accomplish objects which, subsequent to the application for said Letters Patent, experience and further investigation have shown to be important.

For the purposes of this specification the object of the present improvement will be made sufficiently clear by the following statement: If the decayed portions of the proximate surfaces of teeth affected by this disease are entirely cut away, smooth surfaces left, and permanent separations made, the decay will usually be arrested. When the decay is confined to the surfaces of the affected teeth, slight separations with a thin disk will readily effect the object in view, and even after it has made further progress, within certain limits well understood by dentists, the decay may be removed with a thicker flat disk; but after it has advanced still farther into the dentine a flat disk sufficiently thick for the purpose would destroy so much of the sound portions of the teeth as to be injurious.

It has been found also that the contracted or wedge-shaped spaces made with the disks now in use favor the lodgment and impacting of extraneous substances between the separated teeth, in this way rendering much more liable the recurrence of decay at the parts from which it has been removed.

To obviate the difficulties stated I have devised my present improvement. It consists in making the disk somewhat larger at the periphery than at the center. This may be accomplished by giving it a wedge shape, with the thicker part at the periphery, or preferably by confining the enlargement to the parts at or near the periphery, as represented in the annexed drawing.

Figure 1 represents a section of the disk, with the periphery enlarged on both sides. In Fig. 2 the enlargement is shown to be confined to one side. Fig. 3 is a perspective view of the improved disk.

No exact proportions can be stated, as slight variations within useful limits must be determined by the requirements of special cases. By means of disks of the form described, varied slightly at the periphery to suit special demands, any desirable curve may be given to the most important part of the separation without removing any portion of the teeth not essential to the object in view.

The disk may be made by well-known methods of any grinding or cutting material or substance, or combination of substances, suitable for the purpose.

Having described my improvement, what I claim is—

As an article of manufacture, a disk for the separation of the teeth, when formed with a thickened periphery, as and for the purpose set forth.

ROBERT ARTHUR, M. D.

Witnesses:

WM. H. ARTHUR,

UPTON SCOTT.