(No Model.)

D. W. CLARK.

DENTAL MANDREL AND DISK.

No. 368,457. Patented Aug. 16, 1887.

Fig. 1.

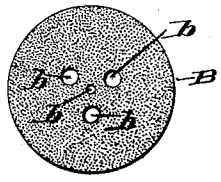


Fig. 2.

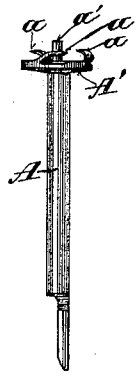


Fig. 3.

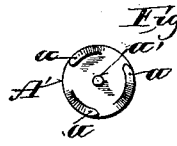


Fig. 4.

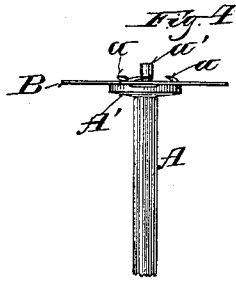
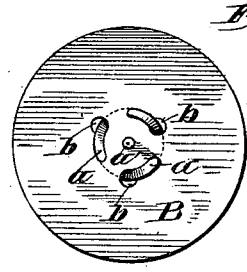


Fig. 5.



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UNITED STATES PATENT OFFICE.

DAN W. CLARK, OF DODGEVILLE, WISCONSIN.

DENTAL MANDREL AND DISK.

SPECIFICATION forming part of Letters Patent No. 368,457, dated August 16, 1887.

Application filed January 29, 1887. Serial No. 225,847. (No model.)

To all whom it may concern:

Be it known that I, DAN W. CLARK, of Dodgeville, in the county of Iowa, and in the State of Wisconsin, have invented certain new and useful Improvements in Dental Mandrels and Disks; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to dental devices; and it consists in an improved emery or sand paper disk and its mandrel or carrier, as will be fully set forth hereinafter.

In the drawings, Figure 1 is a view of one of my improved disks. Fig. 2 is a side elevation of the mandrel or carrier. Fig. 3 is a face view of the said mandrel. Fig. 4 is a side view of the mandrel with a disk in place thereon, and Fig. 5 is a face view of the same. All the figures are enlarged much above the natural size, in order to more clearly exhibit the construction.

A is the mandrel, having a shank of the ordinary construction to enable it to be secured in the hand-piece of a dental engine, and from the face A′ of this mandrel rises a central pin or guide point, *a′*, while from the edge of this face A′ there rise two, three, or more hooks or lugs, *a a a*. The sand-paper or emery disk B is of the usual round shape and provided with a small central hole, *b′*, of a size to exactly receive the pin or point *a′*, and surrounding this are other (and preferably larger) holes, *b b b*, corresponding in number and location to the lugs or hooks *a a a*.

The operation of my device will be readily understood from the foregoing description of its construction. The mandrel is secured in place in the hand-piece of the dental engine, and a sand-paper disk is laid in the palm of the left hand near the thumb. The engine is then started backward, and the guide-point *a′* of the mandrel is forced, with a slight pressure, into the center hole, *b′*, of the disk. The engine is then reversed, and as the mandrel starts in a forward direction its hooks *a a a* will enter the corresponding holes in the disk and engage and hold it securely, all this being done with great rapidity.

To disengage the mounted disk, it is only necessary to start the engine backward and touch the disk with the finger, when it will at once unscrew and drop off. The holes in the disk intended to receive the hooks are preferably an equal distance apart and of the same size.

My device is to be used for separating teeth, polishing fillings, &c., in the same manner as the disks now in use.

I am aware that dental mandrels have been shown having spurs or teeth designed to be forced through the paper disks by the pressure of the recessed head of a clamping-pin, which head comes on the outside of the disk and serves to hold it in place, and such I do not claim, inasmuch as the very object of my invention is to dispense with all clamps or other devices on the side of the disk farthest from the mandrel, and such a device as I have described could not be used with my disks, nor could disks appropriate to such a device be used with my mandrel.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A dental disk having a central hole and a series of holes between that and the edge of said disk, in combination with a mandrel or carrier having a face provided with a central guide-point and a series of hooks or lugs arranged about its edge with their points all projecting in the same direction in the line of a circle, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Dodgeville, in the county of Iowa and State of Wisconsin, in the presence of two witnesses.

DAN W. CLARK.

Witnesses:
R. LANE,
WM. C. MATTHEWS.