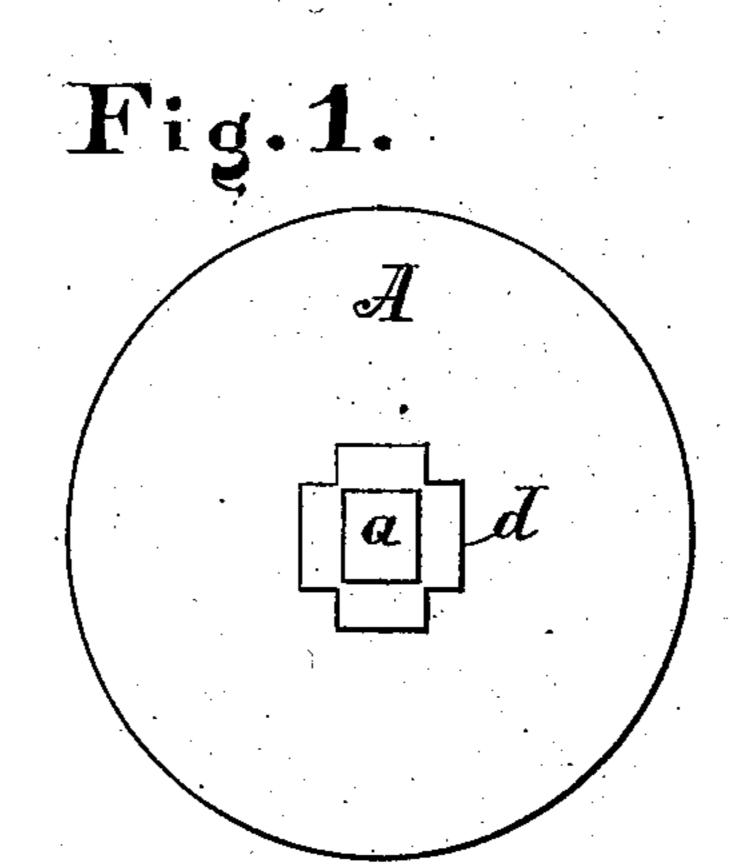
(No Model.)

C. W. F. HOLBROOK.

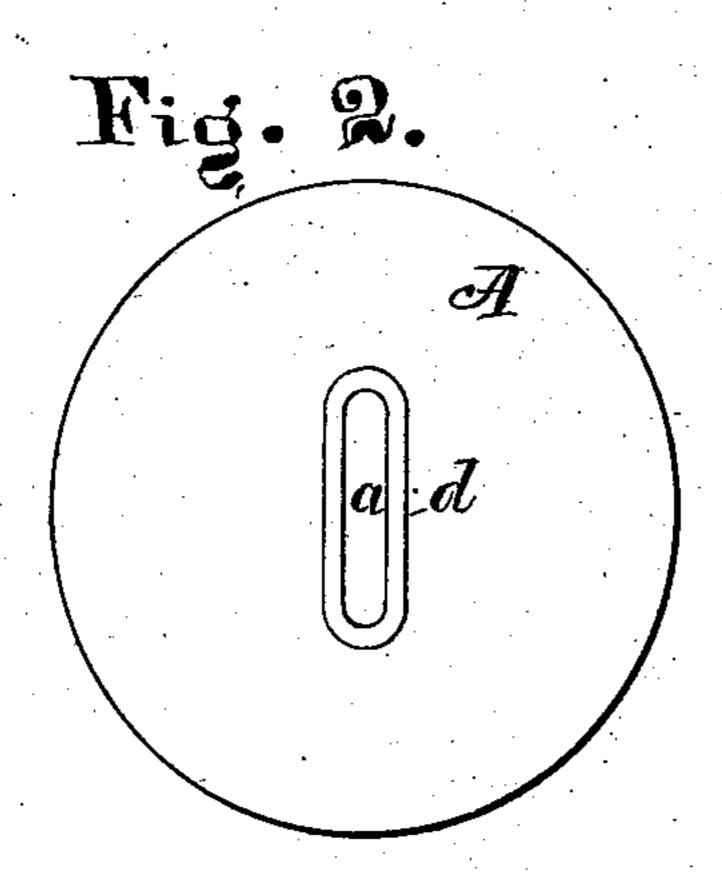
DENTAL ABRADING DISK.

No. 382,609.

Patented May 8, 1888.







Witnesses. A. Cory 7. R. Keys,

Inventor,

By This Ottorneys Rogers of Cong

## United States Patent Office.

CHARLES W. F. HOLBROOK, OF NEWARK, NEW JERSEY.

## DENTAL ABRADING-DISK.

SPECIFICATION forming part of Letters Patent No. 382,609, dated May 8, 1888.

Application filed January 20, 1888. Serial No. 261,376. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. F. HOL-BROOK, a citizen of the United States, residing at Newark, in the county of Essex and State of 5 New Jersey, have invented certain new and useful Improvements in Dental Disks; and I do 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 10 it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to dental tools; and it consists in an abrading disk, of paper or other suitable material, provided with a central open-

ing having re-enforced metal sides.

Heretofore tags have had a string-hole, re-en-20 forced or bound around the hole on both sides of the tag by separate pieces of material, and shoes have been eyeleted; but dental disks have not had the central apertures bound or re-enforced, but have been made with openings 25 of regular or irregular shape to fit the heads of the carriers; but always these openings, where come the greatest strain and wear, have been frayed and worn out before the disk was worn, and the dentist has been put to great 30 inconvenience and loss of time as well as of disks.

The object of my invention is to obviate this difficulty by making a disk having a central opening of such size and shape as shall fit the 35 disk, and having it re-enforced by metal, so that that part which fits the disk-carrier will be the last to give way by wear. I attain this object by stamping or cutting the central opening of the disk coincidently with cutting the 40 disk. The edges of the central opening are then re enforced by metal binding upon both sides around the opening, using but a single

piece of metal, so that the edges are bound and the metal laps over on the upper and lower faces of the disk a sufficient distance to 45 securely hold the binding, preserving the contour of the edges, so that when in place the disk will snugly fit the head of the disk-carrier and be retained in place while being operated without wabbling.

Figure 1 is a plan view of disk having a square metal-bound opening. Fig. 2 is a plan view of disk having an elongated oval opening, a modification. Fig. 3 is a detail view, in section, of the bound edge of the opening in the 55

disk for the mandrel head.

A represents a dental disk; a, the central opening; d, the metal re enforcement. c illustrates in cross-section the disk with the metal binding passed around the edge of the central 60 opening and pressed firmly to the sides of the disk.

I preferably use openings in the shape of a tetragon, designed to fit my disk-holder patented January 17, 1888, and numbered 376,654, 65 but do not limit myself thereto, as the opening should conform to the shape of the head of the mandrel or disk-carrier.

Having thus described my invention, what I desire to claim and secure by Letters Patent 70

15-

In a dental disk, an opening shaped to fit the head of the mandrel or disk-carrier, re-enforced by a metal binding composed of a single piece of metal lapping over the edges and 75 pressing both the upper and lower face of the disk.

Intestimony whereof I affix my signature in presence of two witnesses.

CHARLES W. F. HOLBROOK.

Witnesses:

C. A. LONGFELLOW,

L. P. Betzer.