S. BABCOCK & C. E. MASON.

DENTAL TOOL.

No. 190,115. Patented May 1, 1877.

Fig. 1.

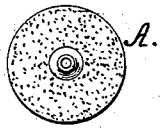
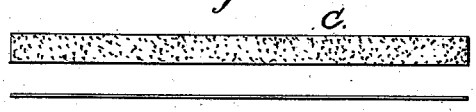


Fig. 2.

Fig. 3.

Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

SANFORD BABCOCK AND CHARLES E. MASON, OF SPRINGFIELD, ILLINOIS.

IMPROVEMENT IN DENTAL TOOLS.

Specification forming part of Letters Patent No. **190,115**, dated May 1, 1877; application filed November 29, 1876.

To all whom it may concern:

Be it known that we, SANFORD BABCOCK and CHARLES E. MASON, of the city of Springfield, county of Sangamon and State of Illinois, have invented certain new and useful Improvements in Operative and Mechanical Dentistry; and we do declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of these specifications, in which—

Figure 1 represents a face view of the wheels or disks. Fig. 2 represents a cross-section through the center of the same. Fig. 3 represents a side view of the polishing-points. Fig. 4 represents one of the metallic strips or ribbons.

Our invention relates to certain new and useful improvements in dental tools; and it consists of soft metallic disks or wheels, points, and strips or ribbons, provided upon their face or working-surfaces with particles of diamond-dust or powder, reduced to the desired state of fineness, and applied to the soft metallic surfaces by means of pressure, all as will be hereinafter more fully described, and pointed out in the claim.

Referring to the drawings, A represents the wheel or disk, and B the points constructed of soft copper, or other suitable metal, and provided upon the faces or working-surfaces with particles of finely-pulverized diamond, which is rolled or pressed into the soft metal by pressure applied between hard steel rollers, or by other suitable means, so that the said particles of diamond are securely embedded in the metal.

The wheels or disks A and the points B are attached to an ordinary dental lathe or engine, and rotated with great speed, for separating and polishing natural teeth, and finishing fillings, and for grinding or polishing the eeges of either natural or artificial teeth, and also for grinding and fitting the joints of sections of teeth in the same manner as has been done heretofore with steel cutters and wheel-disks and points of corundum or other composition.

The metallic strips or ribbons C are constructed in the same manner as hereinbefore described, and are used by hand for the purpose of polishing approximate fillings, or for working between teeth.

By means of our improved construction we are enabled to furnish a polishing or grinding surface that possesses the advantages of making the requisite separations of natural teeth in a manner less painful to the patient, and in a much shorter time than has been heretofore accomplished by other well-known means; and, further, they are more durable and less liable to break, and can be made much thinner than any other wheel or disk now in use, leaving the teeth and fillings highly polished, doing away with the polishing-powders, &c.

Having thus described our invention, we claim as new and useful—

A dental polishing or grinding tool, formed of thin soft metal, in which diamond-dust is permanently embedded by pressure, all as described.

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Witnesses:
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