

No. 750,639.

PATENTED JAN. 26, 1904.

J. C. GRAFT.

METHOD OF MANUFACTURING ATTRITION DISKS AND
THE PRODUCT THEREOF.

APPLICATION FILED JULY 11, 1903.

NO MODEL.

Fig. 1.

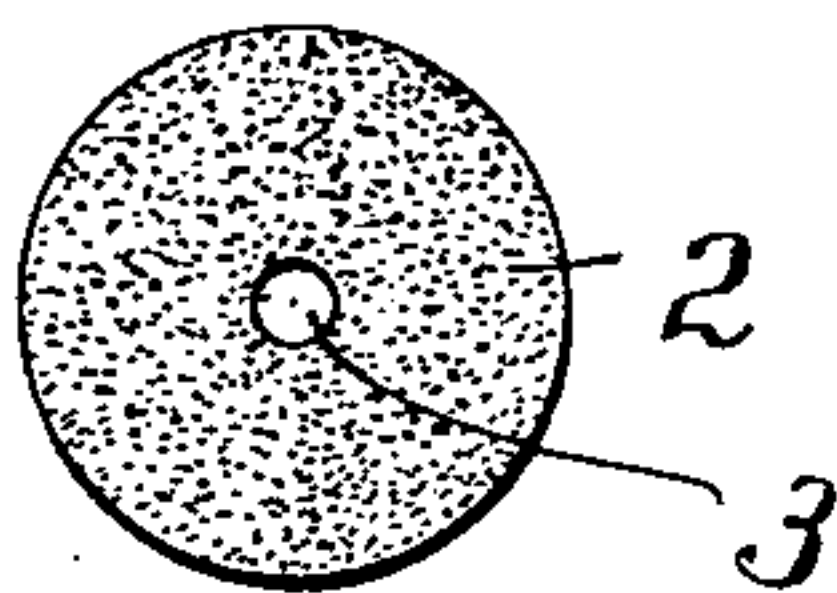


Fig. 2.

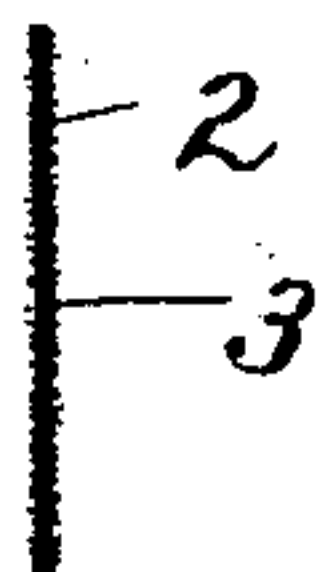
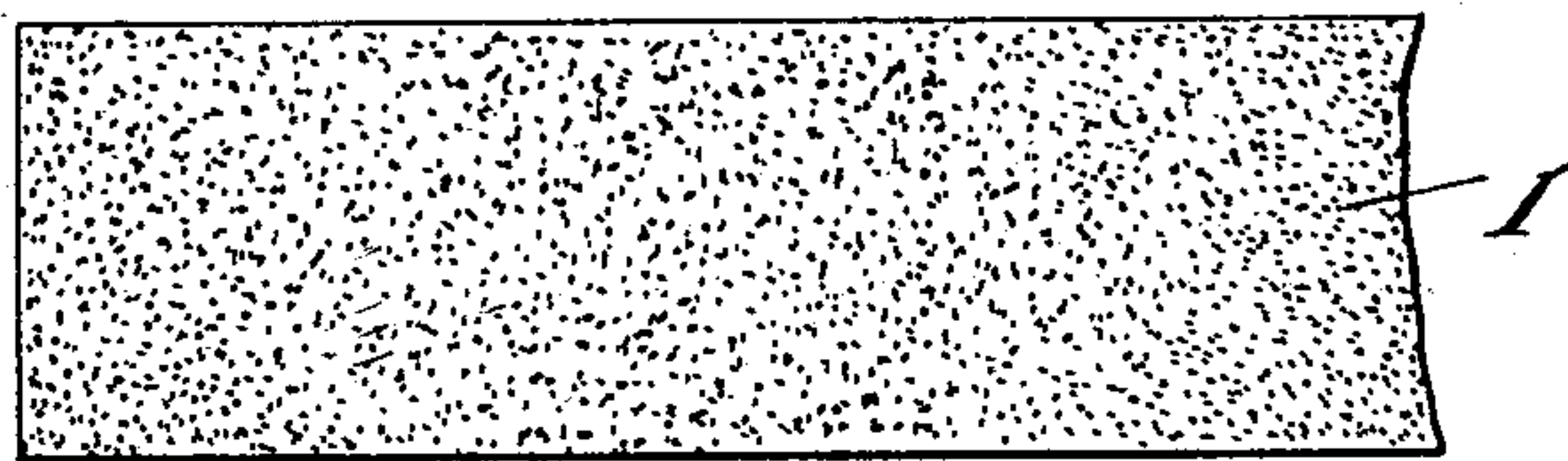


Fig. 3.



WITNESSES:

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JOHN C. GRAFT, OF EAST ORANGE, NEW JERSEY.

METHOD OF MANUFACTURING ATTRITION-DISKS AND THE PRODUCT THEREOF.

SPECIFICATION forming part of Letters Patent No. 750,639, dated January 26, 1904. *

Application filed July 11, 1903. Serial No. 165,069. (Model.)

To all whom it may concern:

Be it known that I, JOHN C. GRAFT, a citizen of the United States of America, residing at East Orange, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Methods of Manufacturing Attrition-Disks and the Product Thereof, of which the following is a specification.

My invention has reference to improvements in attrition-disks for dental engines and also to a process for manufacturing the same, it having for its object essentially the production of a disk adapted to be attached to the mandrel of the dental engine and possessing great durability, together with a high attrition effect.

To this end my invention consists, essentially, in a process for manufacturing dental attrition-disks and the like, consisting in coating a sheet of plastic material, such as celluloid, with a cement and pulverulent material and then subjecting the combined mass to heat and pressure and also in a dental attrition-disk or the like composed of a body of plastic material, such as celluloid, a coating of cement, and a pulverulent attrition material having its particles embedded in said body and held thereto at and near their bases by the cement within the cavities in the body.

The nature of my invention will best be understood when described in connection with the accompanying drawings, in which—

Figure 1 represents a face view of an attrition-disk embodying my invention. Fig. 2 is a section through the same. Fig. 3 shows a sheet from which the disks are punched or cut.

Similar numerals of reference designate corresponding parts throughout the several views of the drawings.

In carrying out my invention I take a sheet 1 of material which becomes plastic under heat to a sufficient extent to permit pulverulent material—such as emery, sand, quartz, corundum, carborundum, and the like—to become embedded therein and subject the com-

bined mass to heat and pressure, first coating the surface of the sheet with a cement. From the sheet 1 so prepared I cut the disks 2, circular in form, providing the same with a central opening 3 to adapt them to be fitted to the mandrel of a dental engine in the usual manner.

It will be readily understood that the disk so prepared not only possesses more stiffness than the ordinary sand or emery paper disk, but at the same time the attrition material does not fall off so readily as in the ordinary emery or sand paper disk, and thus does not cause as much inconvenience to the patient as heretofore, and is also more durable than the disks heretofore used.

It will be noticed that when the pulverulent attrition material is pressed into the sheet of plastic material the cement is carried down into the said body and on hardening firmly holds the particles to said body at and near their bases, thus preventing the same from becoming detached or separated from the body when the disk or the like is used.

What I claim as new is—

1. The herein-described process for manufacturing dental attrition devices consisting in coating a sheet of plastic material such as celluloid with a cement and pulverulent attrition material, and then subjecting the combined mass to heat and pressure.

2. As a new article of manufacture, a dental attrition device composed of a body of plastic material, such as celluloid, a coating of cement, and a pulverulent attrition material having its particles partially embedded in said body and held thereto at and near their bases by the cement within the cavities in the body, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JOHN C. GRAFT.

Witnesses:

WM. S. BECHTOLD,
A. FABER DU FAUR, Jr.