

(No Model.)

H. H. SISSON.
DENTAL DISK HOLDER.

No. 399,350.

Patented Mar. 12, 1889.

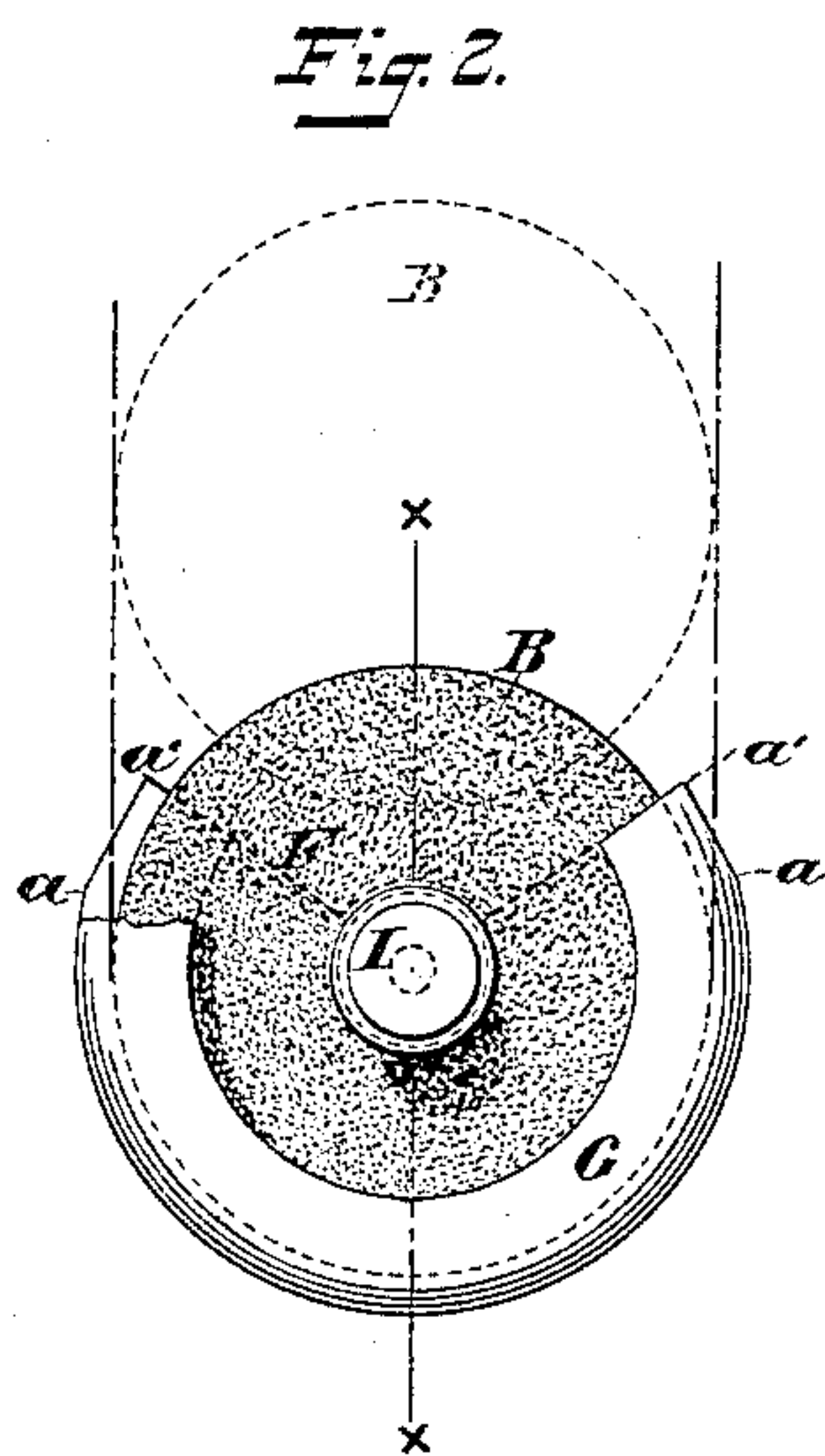
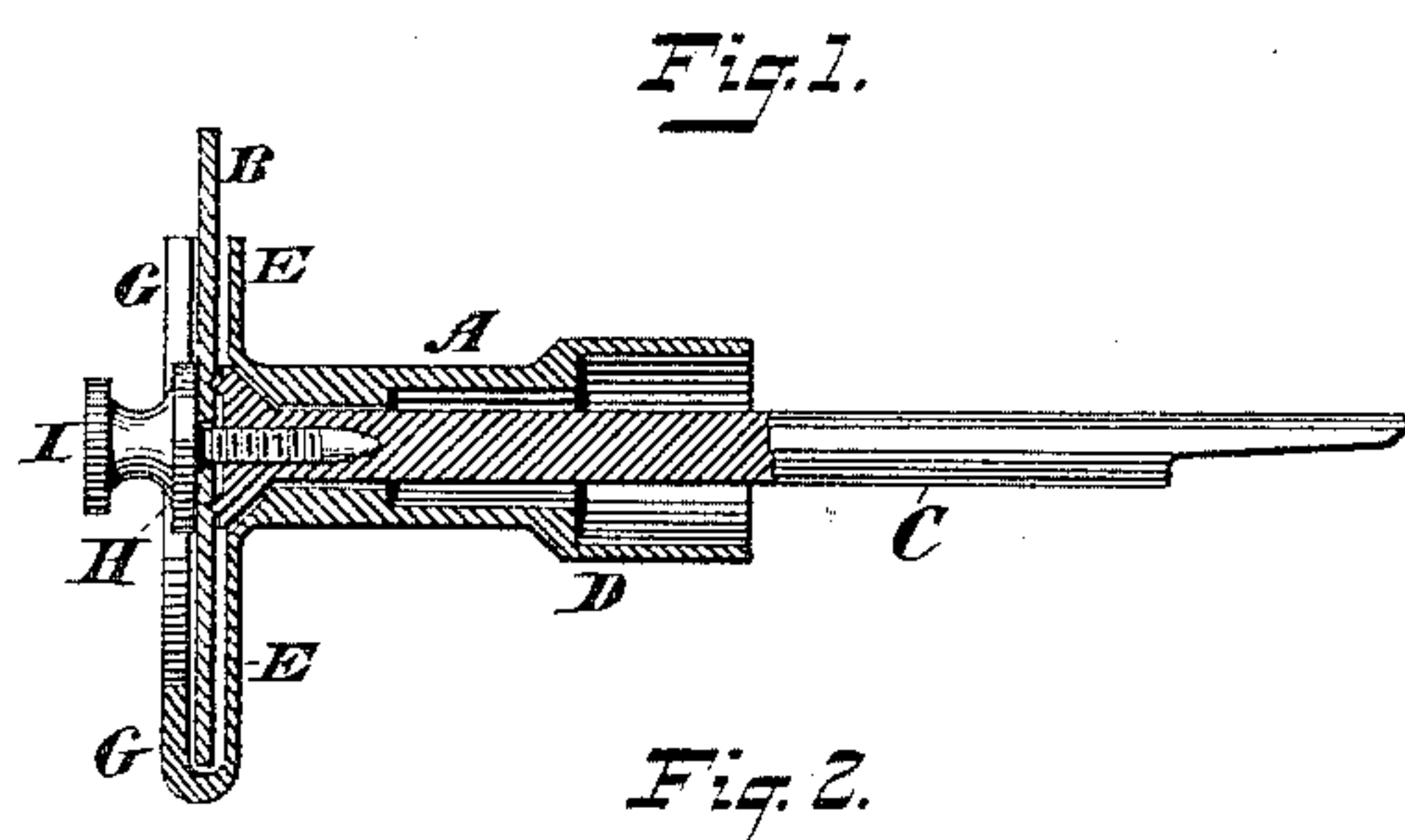
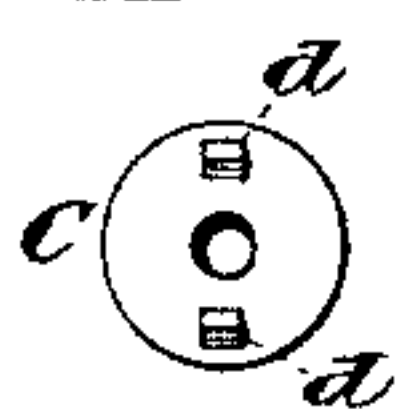


Fig. 3.



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DENTAL DISK-HOLDER.

SPECIFICATION forming part of Letters Patent No. 399,350, dated March 12, 1889.

Application filed December 17, 1888. Serial No. 293,809. (No model.)

To all whom it may concern:

Be it known that I, HENRY H. SISSON, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Holders for the Disks of Dental Engines, of which the following is a specification.

The invention relates to improvements in disk-holders for dental engines; and it consists in a novel device adapted to be applied to the tool-holder of the engine, and embracing a receiver for the disk of sand-paper or other material, said receiver supporting the main body of the operating-disk and exposing the edge at one point only, whereby all necessary pressure may be applied at said point and the main body of the disk remain firmly supported and protected from contact with the mouth.

Referring to the drawings, Figure 1 is a central longitudinal section through a holder incorporating the elements of my invention. Fig. 2 is an end view of same, a portion of the outer flange of the holder being broken away to illustrate the method of introducing the disk; and Fig. 3 is a face view of the shank of the disk, which passes through the holder and enters a socket in the tool-holder.

In the drawings, A designates the holder; B, the disk, and C the shank, which enters the socket of the tool-holder of the engine in the customary manner, and through which a rotary motion is imparted to the disk B. The disk-holder A has a cylindrical shank, D, which fits upon the end of the tool-holder, (not shown,) being there secured by any desirable means, and having upon its end the sheet-metal disk E, which is of circular outline, except at one side, where it is cut away, forming an angular opening, F, as shown more clearly by dotted lines in Fig. 2. The disk E has upon its periphery the inwardly-extending flange G, which terminates at the edges of the opening F, adjacent to which the periphery of the disk E is slit between the points $a' a'$ and $a a$, for the purpose of permitting the convenient introduction of the disk B between the flange G and the main body of the disk E, the diameter of the disk being some-

what greater than the distance between the points $a' a'$. The outer end of the shank C is cone-shaped and seated in a correspondingly-formed socket in the holder A, as shown in Fig. 1, and in the end of the shank is formed an internally-threaded opening to receive the screw H, having a head, I, by which the disk B may be pressed against said cone-shaped end of the shank.

In order to insure the firm contact of the disk B with the end of the shank C, and to insure regularity of rotation in the disk, I preferably provide upon the cone-shaped end of the shank C small projecting lugs or pins d , which, upon the action of the screw-head I, will be pressed into the surfaces of the disk and insure the firm union of the latter with the shank. It will be observed that the disk B is effectually protected around its edges by means of the flange G, and is firmly supported throughout, owing to the disk E, with the exception of that portion of the disk B which is exposed at the opening F.

The invention is particularly adapted for holding disks of sand-paper for use in dental operations, and, owing to the flexibility of the paper, it is of the utmost importance that the disk B have a given amount of rigidity and at the same time be prevented from coming into contact with the mouth of the patient. When disks of sand-paper are used in the holder which is the subject of this application, they will be inserted, as shown by dotted lines in Fig. 2, between the disk E and flange G at the opening F, and after being arranged in place they are there held by means of the screw H passing through their center and entering the shank C, as indicated in the drawings. That portion of the sand-paper disk exposed at the opening F may then be used, and while pressure is brought against the edge of the paper thus exposed the main body of the disk will be stiffened and prevented from unduly bending or breaking by its contact with the walls formed by the inner faces of the disk E and the flange G, and also by the pressure of the screw-head I against its center. Either side of the sand-paper disk B may be placed outward, and hence the instrument may be conveniently

used, no matter what the position of the tooth to be operated upon may be and without danger of injuring the mouth.

It is obvious that the disk B to be used in the holder may be of any desirable substance, such as dental surgeons are compelled to use; but the invention is particularly applicable for holding disks of sand-paper, and of permitting their use in a more effectual manner than it has been heretofore possible to use sand-paper in dental operations. The dental engine to which the disk-holder is to be applied may be any of the well-known forms, the shank C, at its inner end, being adapted for the customary socket in the tool-holder for said engines.

By means of the invention dentists are enabled to use sand-paper in the form of disks as readily as any other tool applied to dental engines, and this is of the utmost importance in dressing down the filling of teeth and polishing the same. The sand-paper disks are fully protected between the facing sides of the disk E and flange G, and are not only thereby stiffened and rendered more durable, but are effectually prevented from becoming moist by contact with the mouth, and also

prevented from catching on the rubber sheet or napkin used in dental operations.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The disk-holder for dental engines, consisting of the shank A, having upon its outer end the disk E and flange G, a portion of the disk being removed, forming an opening, F, at which the operating-disk is exposed, combined with the shank C, adapted to enter the tool-holder of the engine, and means for holding the disk in position, substantially as and for the purposes set forth.

2. The holder for disks of dental engines, consisting of the shank A and disk E, having the flange G and being cut away at F, combined with the central shank, C, and screw H, the operating-disk being held between the head of the screw and the end of the shank C, substantially as set forth.

Signed at New York, in the county of New York and State of New York, this 14th day of December, A. D. 1888.

HENRY H. SISSON.

Witnesses:

CHAS. C. GILL,
HERMAN GUSTOW.