(No Model.)

W. CAILLÉ, Jr.

TOOL MOISTENING DEVICE FOR DENTAL HANDPIECES.

No. 576,722. Patented Feb. 9, 1897.

Fig. 1.

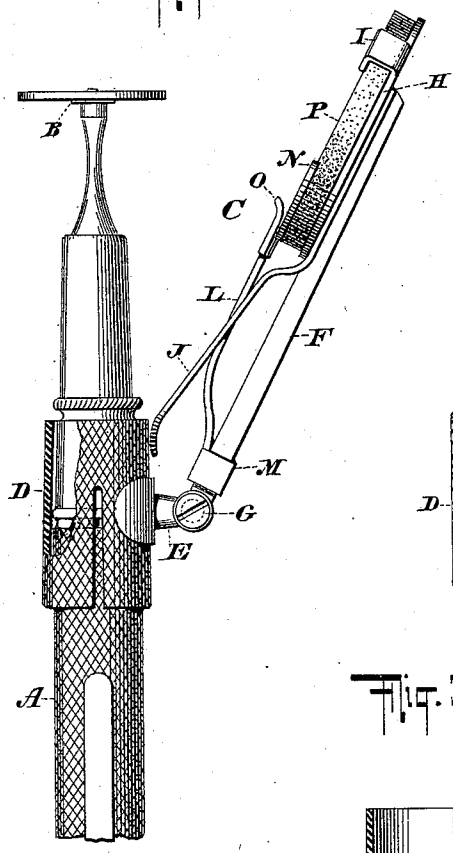


Fig. 2.

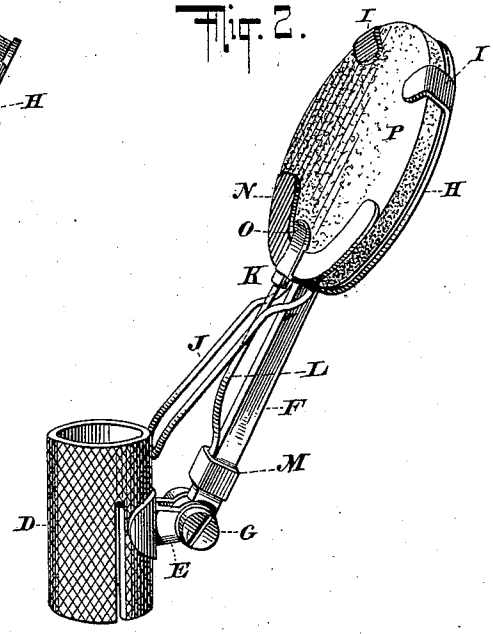


Fig. 3.

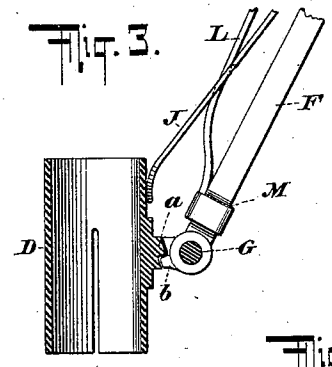


Fig. 4.

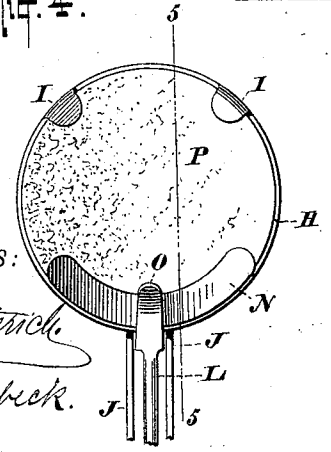
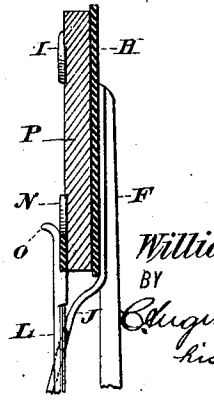


Fig. 5.



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UNITED STATES PATENT OFFICE.

WILLIAM CAILLÉ, JR., OF NEW YORK, N. Y.

TOOL-MOISTENING DEVICE FOR DENTAL HANDPIECES.

SPECIFICATION forming part of Letters Patent No. 576,722, dated February 9, 1897.

Application filed October 15, 1896. Serial No. 608,907. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM CAILLÉ, Jr., a citizen of the United States, residing at the city of New York, in the county and State of New York, have invented certain new and useful Improvements in Tool-Moistening Devices for Dental Handpieces, of which the following is a full, clear, and exact specification.

My invention relates to certain improvements in apparatus for lubricating and cleaning grinding and polishing wheels when in use in a dental handpiece; and said invention has for its object to provide a simple and efficient device for the purposes specified which may be readily attached to the handpiece when the operator desires to use a grinding or polishing wheel therein and when so attached be normally out of contact with the periphery of said wheels and which may be again as readily removed from said handpiece when the operator desires to use other tools or implements therein.

The objects above set forth I am enabled to attain by means of my invention, which consists in the novel details of construction and the combination, connection, and arrangement of parts hereinafter more fully set forth and then pointed out in the claims.

In the accompanying drawings, forming part of this specification, wherein like letters of reference indicate like parts, Figure 1 is an enlarged side view of a portion of a dental handpiece with my device in position thereon, the latter being partly broken away. Fig. 2 is an enlarged perspective view of the device detached from the handpiece. Fig. 3 is a detail sectional view showing the means for limiting the movement of the pivoted arm. Fig. 4 is an enlarged detail face view of the pad and holder; and Fig. 5 is a section thereof, taken on the line 5 5 of said Fig. 4.

In said drawings, A designates a dental handpiece of the ordinary construction, and B denotes a grinding or polishing wheel secured therein.

C designates the lubricating and cleaning device, comprising a split sleeve D, adapted to be slipped upon said handpiece and be held in position thereon by frictional contact. To the side of said sleeve D is secured a bifurcated projection, forming a bearing E, having a shoulder *a* arranged therein intermediate the two tongues which form the bearing.

F denotes an arm the lower end of which is pivotally secured within the bearing E by means of a screw G and provided with a toe *c*, while the outer or free end of said arm is provided with an enlargement or disk H, having retaining clips or ears I arranged thereon near its top edge.

J denotes a spring having its upper ends secured to the under surface of the enlargement or disk H, to each side of the arm F, and its lower or looped end in contact with the sleeve D to maintain the outer end of the arm F and the enlargement or disk H normally away from the end of the handpiece and out of contact with the wheel carried therein.

K denotes the pad-holding device, comprising a spring L, the lower end of which may be secured to the arm F near its lower end by means of a band M, as shown, or in any other suitable manner, and to the end of said spring L which projects upwardly between the spring J is secured a segmental clamp N, provided upon its upper surface with a suitable knob or figure portion O, whereby said segmental clamp may be raised when a pad is to be placed in position upon the enlargement or disk, and P denotes a suitable disk or pad of absorbent material.

When the operator desires to use a grinding or polishing wheel in the handpiece, the sleeve D is first slipped in position thereon, the wheel B then secured therein, and the pad P saturated with water. To lubricate and clean the wheel, it simply becomes necessary to press the pad against the wheel while the same is rotating.

The degree of contact is capable of delicate regulation by the pressure of the finger upon the arm F and as soon as the said pressure is relaxed the pad will at once be thrown outwardly by the action of the spring J, the outward movement of said arm F and the pad P carried thereby being limited by the toe *b* of the arm F and the shoulder *a* of the bearing E.

It will be observed that in view of the fact that grinding and polishing wheels intended for dental purposes seldom, if ever, exceed one inch in diameter, and as the sleeve D is capable of adjustment upon the handpiece

and the arm F carried by said sleeve adapted to swing in the arc of a circle, the device requires very little if it requires any adjustment at all to bring the surface of the pad P into contact with the edge of any grinding or polishing wheel.

Without limiting myself to the details of construction, which may be varied within the scope of the invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination with a dental handpiece, of a lubricating and cleaning device, comprising a pad, and means for supporting said pad adjacent to the end of the handpiece, and a spring exerting an outward pressure whereby to maintain the pad normally away from the end of the handpiece, substantially as specified.

2. The combination with a dental handpiece, of a device adapted to be attached thereon, an arm having one end pivotally secured thereto, and its other end free and provided with an enlargement, a pad disposed upon said enlargement, a clamping device for holding the pad in position upon said enlargement, and means for maintaining the pad normally out of contact with the implement carried in the handpiece, substantially as specified.

3. The combination with a dental handpiece, of a sleeve, an arm having one end pivotally attached thereto, and its other end free and provided with an enlargement having retaining-clips upon its edge, an absorbent pad disposed upon said enlargement, a spring-actuated clamp adapted for contact with the surface of said absorbent pad to hold the pad in position upon said enlargement, and a spring having one end secured to the enlargement and its other end in contact with the sleeve whereby to maintain the end of the arm and pad carried thereby normally out of contact with the implement carried by the handpiece, substantially as specified.

4. The combination with a dental handpiece, of a split sleeve, a bearing secured thereto, having a shoulder therein, an arm having one end pivotally secured in the bearing aforesaid, and provided with a toe adapted for contact with the shoulder in the bearing, an enlargement or disk provided with retaining-clips arranged upon the outer or free end of said arm, an absorbent pad disposed thereon, a spring having its upper ends secured to under surface of the enlargement or disk to each side of the arm, and its lower or loop end in contact with the surface of the split sleeve, a spring having its lower end secured to arm near its lower or pivoted end, and its other end projecting upwardly through the spring first named, and a segmental clamp, secured to the end of said spring, having a finger portion provided upon its upper surface, substantially as specified.

Signed at the city of New York, in the county and State of New York, this 14th day of October, 1896.

WM. CAILLÉ, JR.

Witnesses:
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