

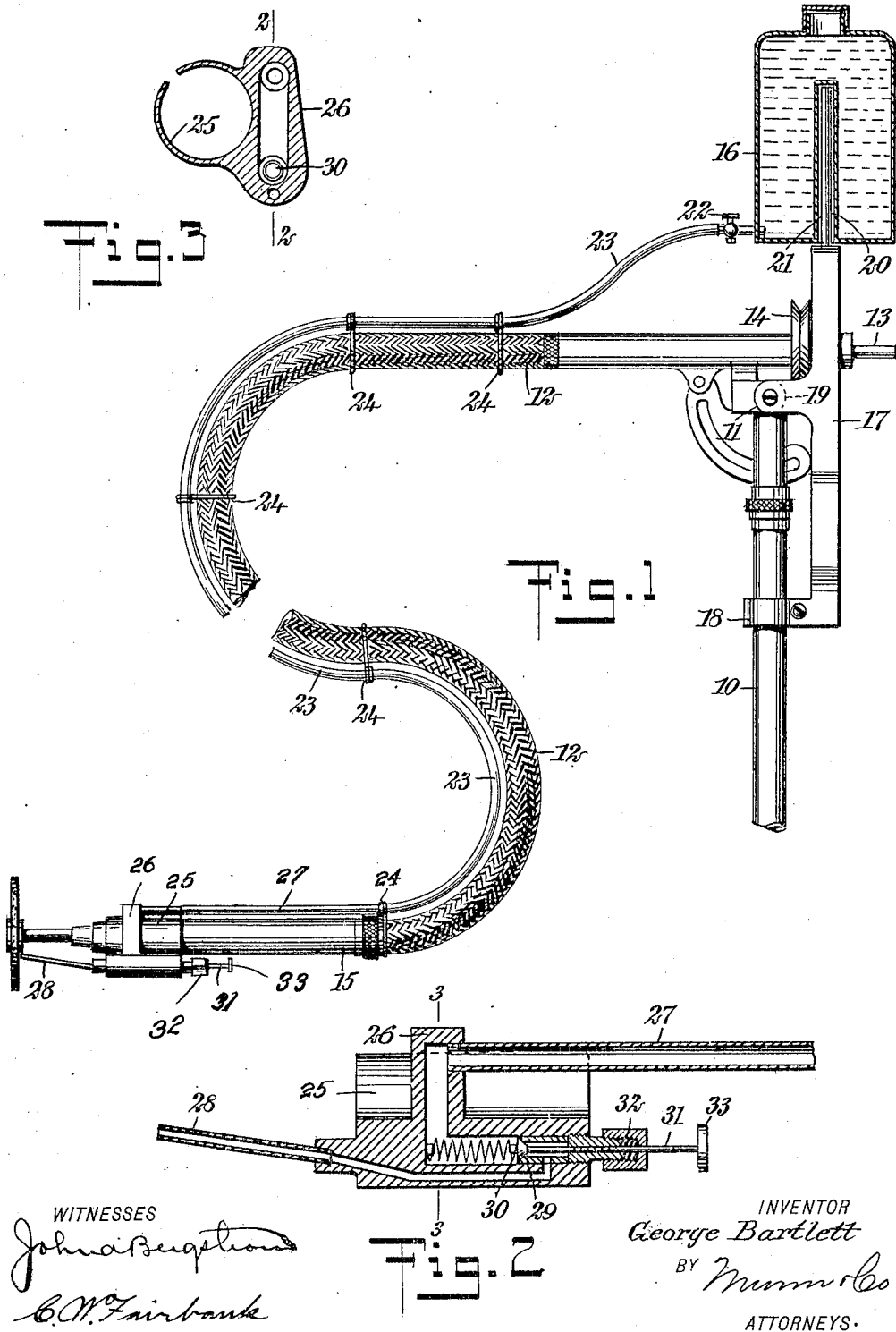
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G. BARTLETT.

MOISTENING ATTACHMENT FOR DENTAL ENGINES.

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UNITED STATES PATENT OFFICE.

GEORGE BARTLETT, OF LENAPAH, INDIAN TERRITORY.

MOISTENING ATTACHMENT FOR DENTAL ENGINES.

No. 851,483.

Specification of Letters Patent.

Patented April 23, 1907.

Application filed February 12, 1907. Serial No. 356,964.

To all whom it may concern:

Be it known that I, GEORGE BARTLETT, a citizen of the United States, and a resident of Lenapah, District No. 3, Indian Territory, have invented a new and Improved Moistening Attachment for Dental Engines, of which the following is a full, clear, and exact description.

This invention relates to certain improvements in dental engines, and more particularly to means for moistening the disks, burrs or drills while they are being used.

The invention consists in the construction and combination of parts to be more fully described hereinafter and particularly set forth in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Referring to the drawings, Figure 1 is a side elevation of a portion of a dental engine provided with my improved attachment, the water supply tank being shown in section; Fig. 2 is a longitudinal section through the controlling means adapted to be attached to the hand-piece, said section being taken on the line 2—2 of Fig. 3; and Fig. 3 is a transverse section on the line 3—3 of Fig. 2.

To more clearly illustrate the construction and operation of my improved attachment, I have illustrated a portion of a dental engine having a standard 10 supporting a head 11 carrying the upper end of the sheath 12 and its enclosed cable. The end of the cable is attached to a shaft 13, and is adapted to be operated by a belt or other suitable means engaging with the pulley 14. The outer or free end of the sheath 12 is connected to the hand-piece, and the cable extending through the sheath is connected to the operating parts of the hand-piece in any suitable manner.

At the upper end of the standard I provide means for supporting a receptacle 16 adapted to contain the moistening fluid, and this supporting means preferably comprises a bracket 17 having oppositely disposed members 18 at its lower end adapted to enclose the standard, and lugs 19 intermediate its ends and adapted to be rigidly secured in any suitable manner to the head 11. The upper end of the bracket 17 is provided with a vertical pivot rod 20 adapted to extend within a cylindrical recess 21 formed in the bottom of the water receptacle 16. By mounting

the water receptacle in this manner, it may be readily rotated or turned to the desired position to prevent it from interfering in any way with the normal operation of the engine. The receptacle is provided with a valve-controlled outlet 22 adjacent its lower end and by which the receptacle communicates with a flexible conduit 23 of a length substantially equal to the sheath 12, and secured at intervals to said sheath by suitable spring clips 24.

Detachably connected to the hand-piece 15, I provide means for controlling the passage of water through the conduit 23 and for delivering said water against the disk, burr or drill operated by the hand-piece. The specific form of this device which I have illustrated in the drawings, comprises a split ring 25 adapted to surround the hand-piece and frictionally engaged therewith to hold the device in place. Secured to the side of the split ring, or integral therewith, I provide a casing 26 having an entrance opening for the pipe 27 constituting an extension of the flexible conduit 23, and also having a fine delivery nozzle 28 adapted to terminate closely adjacent the tool carried by the hand-piece.

In the communicating passage between the nozzle 28 and the supply pipe 27, I provide a valve seat 29 having a spring-pressed valve 30 normally held in engagement therewith and adapted to be operated by a longitudinally movable valve stem 31. This valve stem extends through the packing 32 and is provided with an enlarged head 33, constituting a push button whereby the valve may be readily operated. The valve stem 31 extends substantially parallel to the hand-piece 15, and is supported closely adjacent thereto, as will be noted from an inspection of Fig. 1. The button 33 on the end of the valve stem lies in a position whereby it may be readily operated by the thumb or finger of the dentist while normally employing the engine for drilling or grinding purposes. By slightly opening the valve, water may be delivered to the tool and thus the ground material may be continuously washed away from the tooth operated upon, and the tool may also be prevented from becoming heated to a temperature uncomfortable to the patient.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. The combination with a dental engine having a suitable standard, a hand piece, and

means for operating the same, of a detachable bracket secured to said standard adjacent the upper end thereof, a reservoir pivotally mounted upon said bracket, and means
5 for delivering a fluid from said reservoir to a point adjacent said hand piece.

2. The combination with a dental engine having a suitable standard, a hand piece, and means for operating the same, of a bracket
10 detachably secured to the upper end of said standard and having a pivot rod, a reservoir rotatably mounted upon said pivot rod, and means for delivering a fluid from said reservoir to a point adjacent said hand piece.

15 3. The combination with a dental engine having a suitable standard, a hand piece, and means for operating the same, of a bracket adapted to be detachably secured to the upper end of the standard and having a vertical
20 pivot rod, a receptacle having a recess formed in the bottom thereof and adapted to receive said pivot rod, and means for delivering a fluid from said receptacle to a point adjacent said hand piece.

25 4. The combination with a dental engine

having a suitable standard, a hand piece, and means for operating the latter, of a valve casing having a split ring adapted to encircle said hand piece, a valve within said valve casing, means for delivering a fluid to said
30 valve casing, and a discharge nozzle leading therefrom.

5. The combination with a dental engine having a suitable standard, a hand piece, and means for operating the latter, of a valve casing adapted to be detachably secured to said
35 hand piece, a spring pressed valve located therein, a valve rod operatively connected to said valve and lying adjacent and substantially parallel to said hand piece, means for
40 delivering a fluid to said valve casing, and a discharge nozzle leading therefrom.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE BARTLETT.

Witnesses:

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