

(No Model.)

A. I. F. BUXBAUM.
DEVICE FOR MEASURING TOOTH ROOTS.

No. 510,325.

Patented Dec. 5, 1893.

Fig. 1.

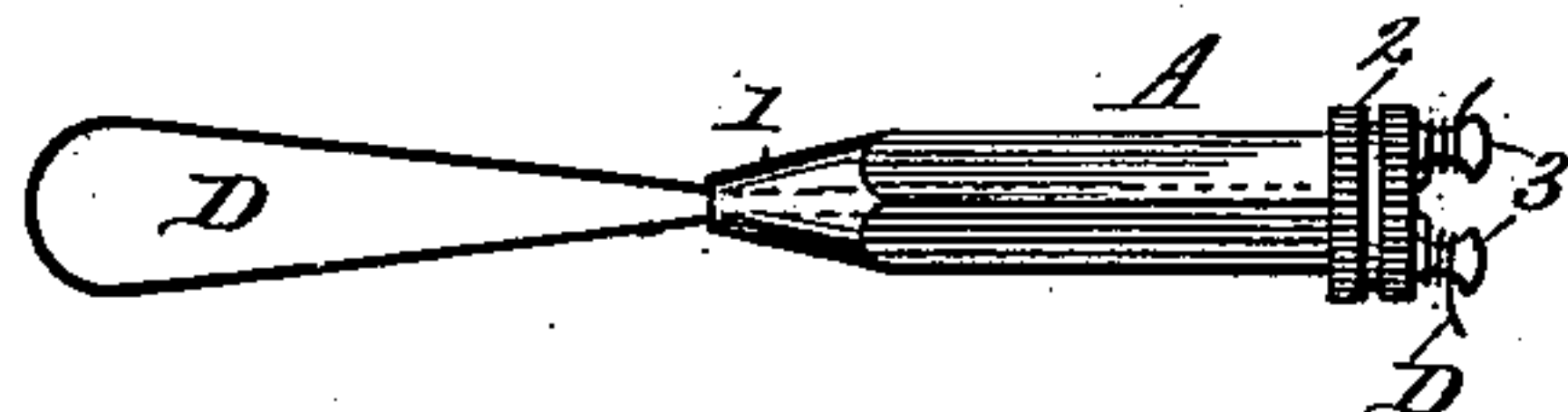


Fig. 2.

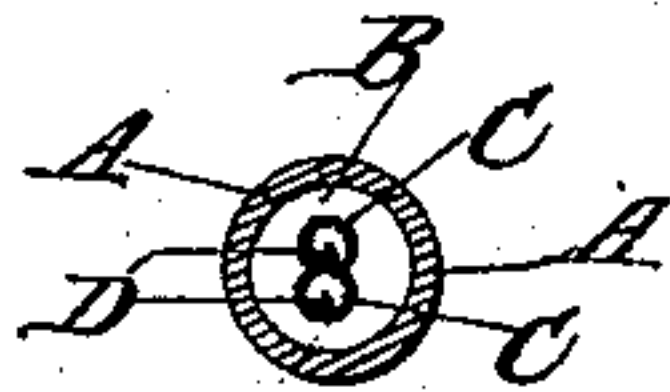
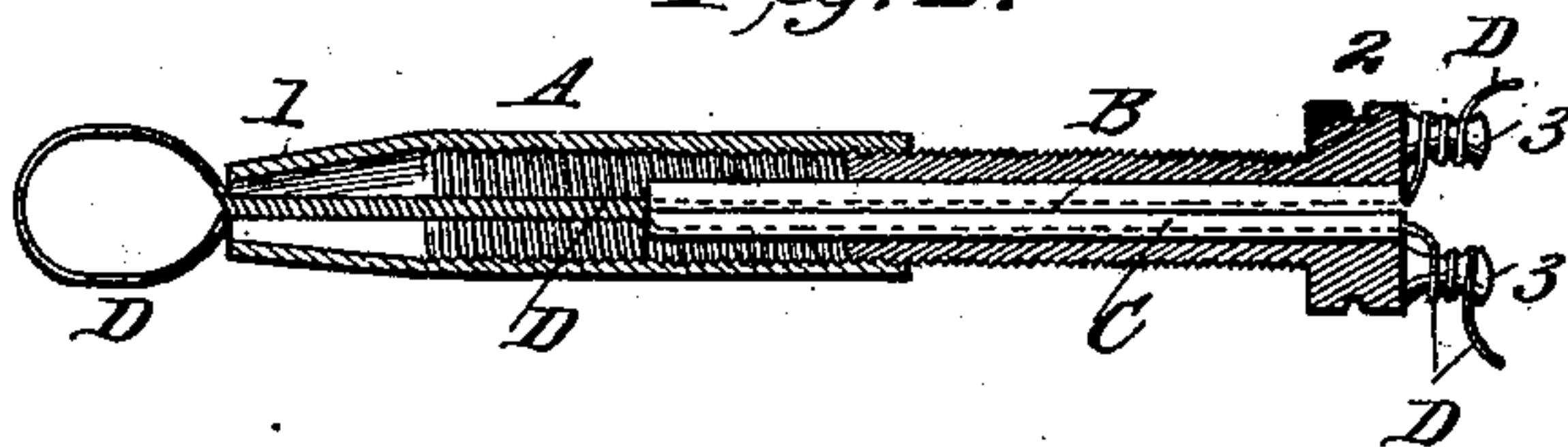
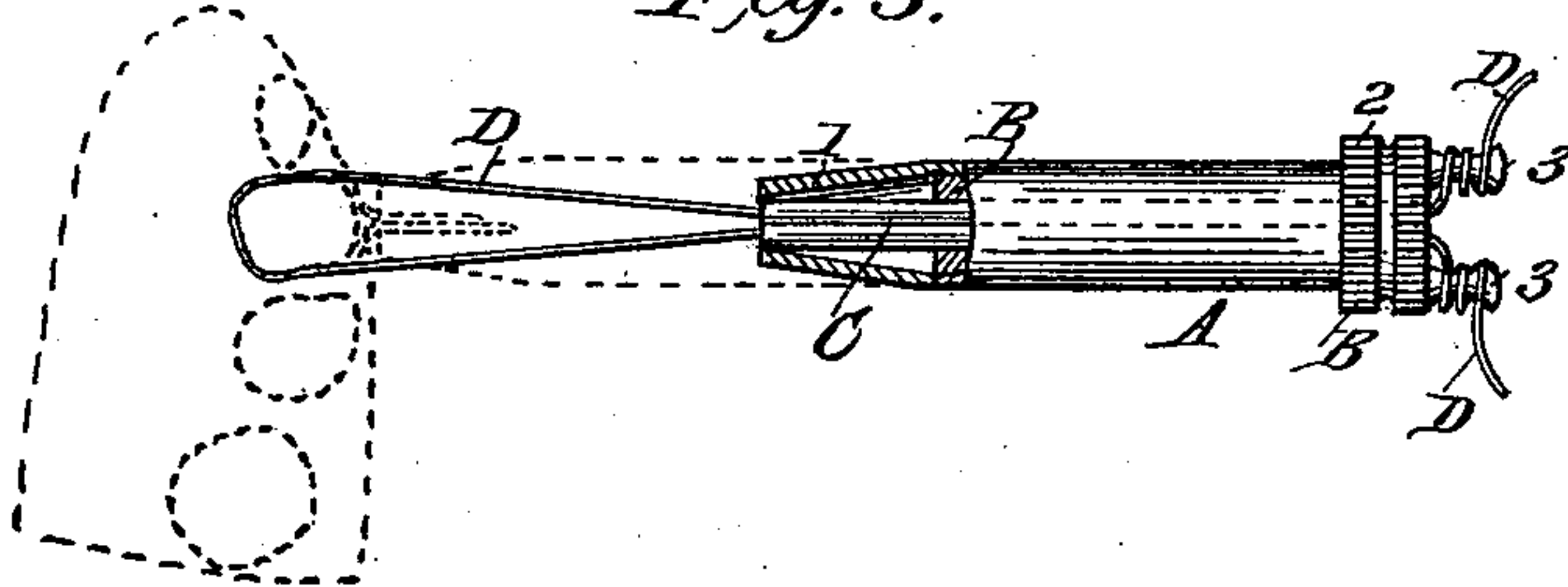


Fig. 3.



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DEVICE FOR MEASURING TOOTH-ROOTS.

SPECIFICATION forming part of Letters Patent No. 510,325, dated December 5, 1893.

Application filed February 17, 1893. Serial No. 462,717. (No model.)

To all whom it may concern:

Be it known that I, ASHER I. F. BUXBAUM, residing at Walnut Hills, in the city of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Devices for Forming Wire Loops for Measuring Teeth and Teeth Roots, of which the following is a specification.

In practical dentistry, it is often necessary to take accurate measurements of teeth or roots, by means of a wire loop, as an aid in preparing gold crowns and bands, or other metal crowns and bands for pivot-teeth, bridge-work, &c. I have devised and practically perfected a device which is of great service in effecting such measurements, it being adapted to draw a wire tightly around a tooth and to twist the same so as to form a permanent loop.

The construction and manner of using my device are as hereinafter described, and shown in the accompanying drawings, in which—

Figure 1 is a side view of the device, normal size. Fig. 2 is a central longitudinal section, on an enlarged scale, showing the parts of the same in the position they occupy when a wire has been drawn around a tooth and a permanent loop formed by twisting its strands together. Fig. 3 illustrates the practical application of the device to a tooth.

The device is formed practically of the parts A, B and C. The body A, is a tube, or cylinder, threaded interiorly, tapered, or conical, at one extremity, 1, and having, preferably, a polygonal exterior. The second part, B, is a hollow screw, having an enlarged head, 2, provided with two knobs, or studs, 3, 3; and the third part, C, consists of two small, parallel tubes, C, which are soldered within the screw, extending through it and projecting from its inner end. Practically, the length of these tubes, C, is the same as the cylinder, A. The head of the screw is milled for the same purpose that the body of the tube, A, is made polygonal, exteriorly, namely: to enable it to be conveniently held between the thumb and finger, as required for the operation hereinafter described.

To prepare the device for use in measuring the circumference of teeth, the parts A, B, are adjusted to the relative positions shown in

Fig. 1; that is to say, the screw, B, being screwed into the body, A, so that its inner end is contiguous to the conical end 1, and its milled head rests on the opposite end of the body, A. In such case, the inner ends of the small tubes, C, are flush with the conical end, 1, of the body, A. The ends of a thin wire, D, of five to eight inches in length, are then passed through the said tubes, C, and wound around the knobs 3, 3, thus leaving the middle portion of the wire projecting as a large loop from the conical end, 1, of the device. This looped portion of the wire, D, is then placed over the tooth to be measured—as shown in Fig. 3—and the screw, B, rotated by the thumb and index finger of one hand while the tube, A, is held stationary by the corresponding fingers of the other hand. The effect of this operation is to draw the wire closely about the tooth and also twist together the portions of the strands which intervene between the tooth and conical end 1 of the device. When the loop is drawn tightly, the conical end, 1, of the tube, A, will approximate or abut against the tooth, and the twist of the wire will lie within the tube—as shown in Figs. 2 and 3. The operation being thus complete, it is only necessary to detach the device from the wire, which is easily effected, by unwinding the ends of the latter from the knobs 3, 3, and straightening them, so that they will pass readily through the tubes, C, as the device is drawn away, leaving the wire loop attached to the tooth. The loop is then worked up on the tooth, and thus removed, in which operation the twist of its strands prevents the loop from enlarging, so that when detached it has practically the same circumference as the tooth. In this use of my device, the wire does not slip on the tooth while being twisted, and the soft tissue of the gum is not lacerated and caused to bleed, while a great saving of time is effected, since the operation ordinarily requires but from thirty seconds to two minutes.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A device for forming a wire loop for measuring the circumference of teeth or roots of teeth, which consists of a tube or hollow

body, and a portion through which the wire passes, and which is rotatable on the said body, for twisting the wire to form the loop, substantially as shown and described.

5 2. A device for the use specified, which is composed of a tube or hollow body screw-threaded interiorly, a hollow screw adapted to work in said body, and having two passages for a wire, and adapted for attachment
10 of the ends of the wire, substantially as shown and described.

3. In a device for the purpose specified, the combination, with the hollow interiorly-

threaded body having a conical point, of a hollow screw adapted to fit and work in said 15 body, and having an enlarged head provided with knobs, and two smaller tubes arranged side by side within the screw and extending to the extremity of the conical point, substantially as shown and described for the pur- 20 pose specified.

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Witnesses:

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