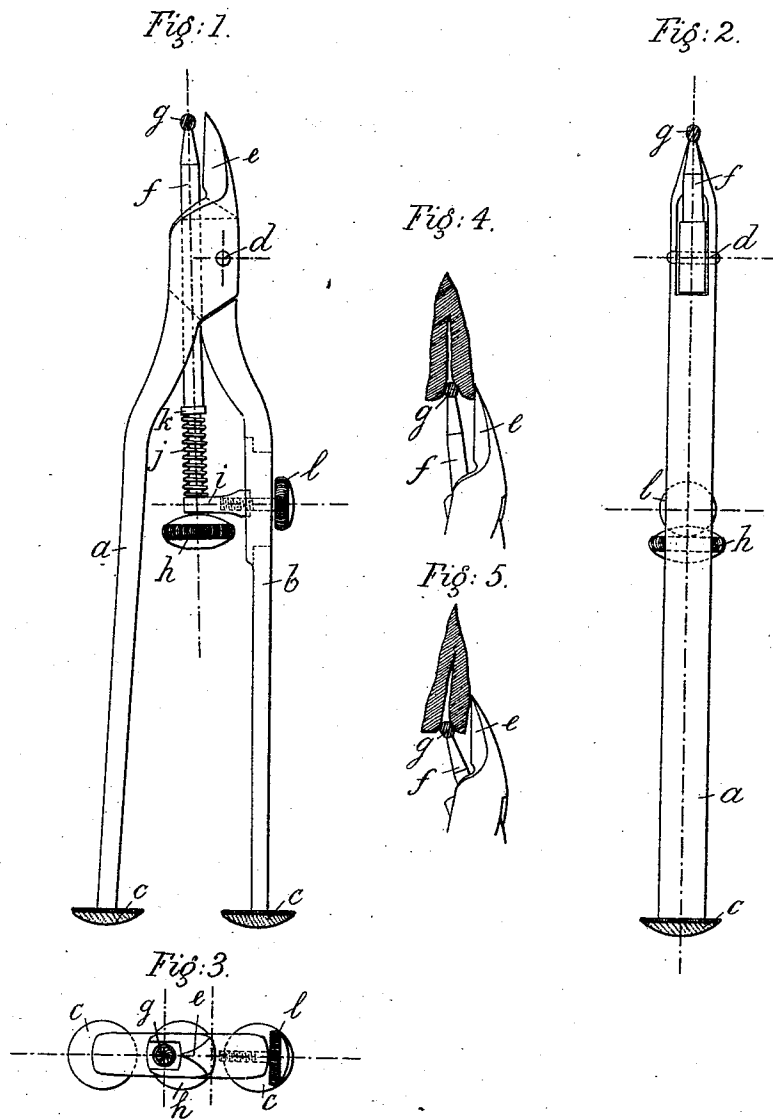


(No Model.)

B. J. BING.
DENTAL TOOL.

No. 425,650.

Patented Apr. 15, 1890.



Witnesses
J. A. Rutherford.
Leroy B. Hills.

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UNITED STATES PATENT OFFICE.

BENJAMIN JAMES BING, OF PARIS, FRANCE.

DENTAL TOOL.

SPECIFICATION forming part of Letters Patent No. 425,650, dated April 15, 1890.

Application filed December 3, 1889. Serial No. 332,444. (No model.) Patented in France February 9, 1889, No. 195,962.

To all whom it may concern:

Be it known that I, BENJAMIN JAMES BING, doctor of dental surgery, of 26 Rue Cambon, Paris, France, have invented certain new and useful Improvements in Root-Trimmers for Dental Purposes, (for which I have obtained a patent in France, No. 195,962, bearing date February 9, 1889,) of which the following is a specification.

The hereinafter-described hand-instrument has been devised for trimming the roots of teeth which are intended to be prepared for receiving what is known as "crown" or "bridge" work.

The instrument comprises two handles, at the end of one of which is a so-called "burr," resting in the root-canal and acting as a fulcrum about which rotates the instrument. The end of the other handle terminates in a knife, which can be made to cut around the root of a tooth at any desired spot thereof projecting beyond the gum. The burr is capable of adjustment, so as to enable the operator to vary and set the knife to the root.

In the accompanying drawings, Figure 1 is a general view of the instrument closed. Fig. 2 is a side view of Fig. 1, and Fig. 3 is a top view of Fig. 1. Figs. 4 and 5 show a root in the act of being operated upon by the trimmer, the latter being in different positions.

a b are the two handles, the lower end of each of which carries a milled knob c c or is so configured as to offer a bearing-surface or non-slipping surface for the palm of the hand. Both handles a b are pivoted to each other on a pin d . The upper end of the handle a terminates in a knife e , while the upper end of the handle b receives a rod f , the one end of which carries a burr g and the other end a milled knob h . The rod f is capable of a longitudinal motion, and is guided at one end by the handle b and at the other end by an adjustable bracket or bearing i .

j is a spiral spring interposed between a shoulder k of the rod f and the bearing i . The bearing i is held to the handle b by a thumb screw or such like screw l , and is capable of sliding in a slot of said handle. By slackening the screw l and lowering the bearing i the rod f , spring j , and knob h are bodily raised and can then be set so as to occupy, for instance, the position shown in Fig. 5 as compared with the knife e .

The action of the instrument will be rendered sufficiently comprehensive from the drawings.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

1. A root-trimmer comprising two handles a b , pivoted together at d , a spring-burr g , and a knife e , arranged as set forth and shown.

2. A root-trimmer comprising two handles a and b , pivotally connected at d , a longitudinally-adjustable bar f , having a burr g at its extremity, and a spring j , coiled on said rod between a bearing i and a collar k , the arm a being provided with a knife e , substantially as described.

3. In a root-trimmer, a burr g , acting as a fulcrum, a spring-rod f , the said rod being fitted to slide endwise in a bracket i , which is capable of adjustment by a set-screw l , for the purpose set forth, as set forth and shown.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

BENJAMIN JAMES BING.

Witnesses:

R. H. BRANDON,
R. G. PRESTON.