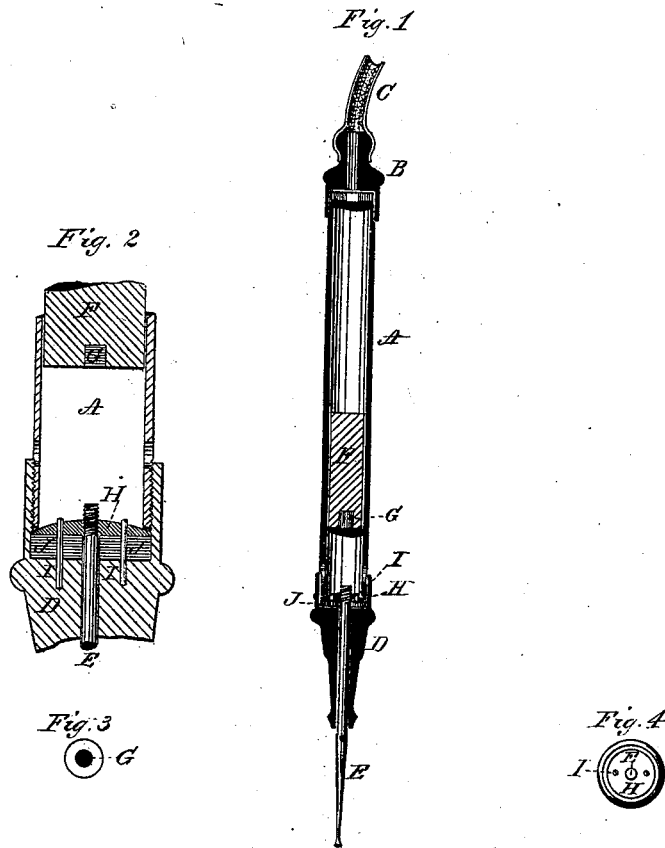


W. H. DIBBLE.
Dental-Plugger.

No. 211,652.

Patented Jan. 28, 1879.



Witnesses.

Amnell R. Curtis

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Inventor.

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UNITED STATES PATENT OFFICE.

WILLIAM H. DIBBLE, OF MIDDLETOWN, CONNECTICUT.

IMPROVEMENT IN DENTAL PLUGGERS.

Specification forming part of Letters Patent No. **211,652**, dated January 28, 1879; application filed November 4, 1878.

To all whom it may concern:

Be it known that I, WILLIAM H. DIBBLE, of Middletown, in the county of Middlesex and State of Connecticut, have invented certain new and useful Improvements in Dental Pluggers; and I do hereby declare that the following is a full, clear, and exact description thereof, whereby a person skilled in the art can make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Like letters in the figures indicate the same parts.

My invention relates to an instrument automatically operated by alternate pressure and exhaustion of air within a cylinder, so as to strike a succession of blows with a weight or hammer upon the end of the tool by which metallic foil is compressed and driven into the cavity of a tooth.

Similar instruments have heretofore been made upon which my present invention is an improvement. Such instruments have either had the plugging-tool inserted in a sliding head or socket, upon which the blow was struck by the hammer, usually controlled by an interposed spring, or have had the tool firmly set in the end of the cylinder itself, so that the whole moved together. The hammer has also been made of solid metal.

The object of my invention is to give a lighter and more readily graduated blow when desired, and to strike directly upon the tool without any intermediate parts; and it consists in the mechanism hereinafter described.

In the accompanying drawings, Figure 1 is a longitudinal section through my improved implement. Fig. 2 is an enlarged section of the part more especially embodying my improvements. Fig. 3 is an end view of the hammer. Fig. 4 is a top view of the part into which the end of the tool is inserted.

A is a hollow cylinder. At its upper end, as shown in the drawing, it has the cap B, furnished with an opening, communicating by

means of a flexible pipe, C, with any suitable apparatus or pump, for alternately injecting and withdrawing the air. At the opposite end is the cap D, forming a socket for the tool E, in which it can slide freely.

F is the hammer, operating in the customary manner back and forth in the cylinder A. It has a socket in its end, into which is inserted the rubber packing G, where the hammer comes in contact with the head of the tool E. This tool extends within the cylinder, and is struck directly by the hammer.

H is a button or washer, forming a nut, into which the end of the tool is screwed, and above which it slightly projects.

I and I are screws or pins fastened into the cap D, and passing through holes in the button H, for preventing it from turning when the tool is screwed in or removed. Under this button, between it and the cap D, is the elastic washer J, for permitting a slight movement of the tool, when struck by the hammer, independent of the shell A B D.

By means of my improved construction a very much better and more easily graduated blow can be given to the tool than when it is inserted in a heavy sliding socket or attached directly to the end of the cylinder. The elastic packing in the end of the hammer also operates directly upon the end of the tool, and gives a more elastic blow, without the sharp jar usually experienced, and is far less disagreeable to the person operated upon. The whole implement can also be made much lighter and more easily handled.

What I claim as my invention is—

The combination of the button H, through which the end of the tool E is screwed, the pins I I, and the elastic cushion J, arranged for holding the tool in a dental plugger, substantially as herein described.

WILLIAM H. DIBBLE,

Witnesses:

S. A. ROBINSON,
SYLVESTER EASTON.