G. W. LEVIN.

Automatic Dental-Plugger.

No. 166,709. Patented Aug. 17, 1875.

Fig. 1.

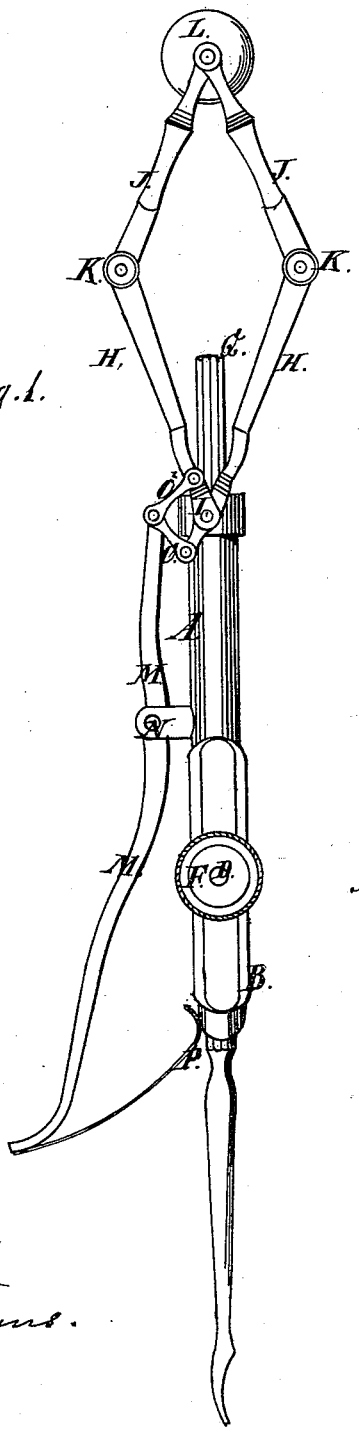


Fig. 3.

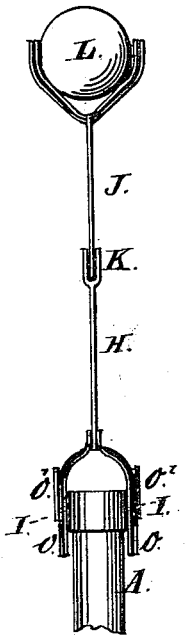


Fig. 3.

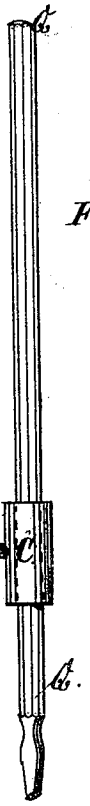
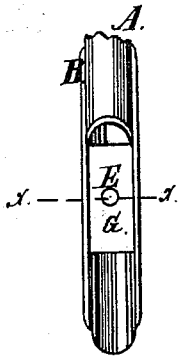


Fig. 4.

Fig. 2.



Witnesses:
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Heinrich F. Bruns.

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atty.

UNITED STATES PATENT OFFICE.

GEORGE W. LEVIN, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF HIS RIGHT TO JOHN S. SWARTLEY, OF SAME PLACE.

IMPROVEMENT IN AUTOMATIC DENTAL PLUGGERS.

Specification forming part of Letters Patent No. **166,709**, dated August 17, 1875; application filed January 19, 1875.

CASE B.

To all whom it may concern:

Be it known that I, GEORGE W. LEVIN, of Chicago, in the county of Cook and State of Illinois, have invented an Automatic Mallet, of which the following is a specification:

The object of my invention is more particularly to provide a suitable holder and mallet, to be used by dentists in filling teeth, and for other analogous uses where the instrument requires care and adjustment in holding, and slight sharp blows while doing its work.

My invention consists in the combination of levers, and mallet, and tool-holder, as hereinafter described, whereby the operator, by pressing the lever M, operates the mallet; and it also consists in the mechanism by which the instrument is secured in the holder, the special point being that an instrument of any-sized shank can be readily secured therein.

In the accompanying drawing, Figure 1 represents a side elevation of my improvement, with the dental instrument in place. Fig. 2 represents a section of the stock or instrument-holder. Fig. 3 represents a side elevation of the stem of the instrument, with the detachable part of the holder; and Fig. 4 represents a section taken at the line *x x* in Fig. 2.

A represents the socket or instrument-holder of the mallet. B represents a side piece, forming a sort of recess for the band C, which clasps the instrument, and to which the screw D is attached. The shank of the instrument passes through the band C and into the socket A, and the screw D passes through the hole E in the piece B. The thumb-nut F is screwed upon the screw D, and draws the band C down upon the shank of the instrument, and holds it more or less securely. It makes little difference what the size of the shank of the instrument is, providing it will pass through the band C, from the fact that it is held in place by its being drawn by the band C, by means of the screw D and thumb-nut F, down upon one side of the holder A in the receptacle G. H are jointed levers, pivoted to the holder A at I, and also pivoted at the other end to pieces J at K. The upper end of the pieces J carry the ball or mallet L. M is a lever, with its fulcrum at N. To the short end of this lever are pivoted the pieces O O′, which are pivoted to the levers H, as shown. P is a spring, placed under the long end of the lever M, in such manner as to keep the lever continually in the position shown in Fig. 1, which holds the mallet suspended, as shown.

By pressing down the long end of the lever M, the pieces O O′ operate the lever H and throw their upper end suddenly out, which brings down the mallet L, and causes it to strike with a sudden blow upon the shank Q of the instrument. By releasing the long end of the lever, the spring P restores it to the position shown, and raises the mallet ready for another blow.

The levers H are operated so as to move the mallet on account of their being connected to these levers upon opposite sides from their pivotal point, as shown.

I claim—

1. The combination of the lever M, case A, connecting-pieces O O′, the levers H, pieces J J, and mallet L, substantially as described.

2. The combination of the lever M, case A, and spring B, for restoring the mallet to position, as described.

3. The holder A, the recess-piece B, band C, with the screw D, and thumb-nut F, substantially as and for the purpose specified.

GEORGE W. LEVIN.

Witnesses:

L. A. BUNTING,

HEINRICH F. BRUNS.