

J. P. MERTES.
DENTAL TOOL.

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1,111,603.

Patented Sept. 22, 1914.

Fig. 1.

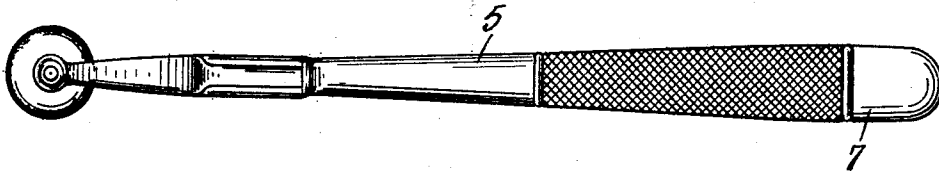


Fig. 3.

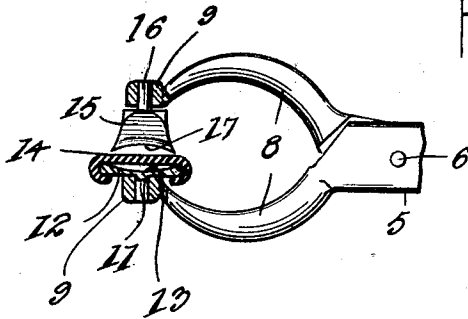


Fig. 2.

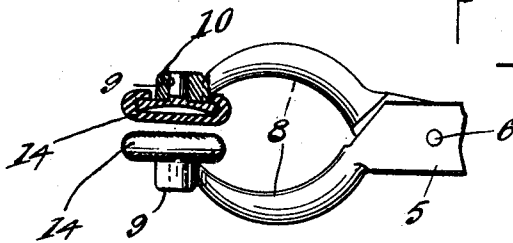
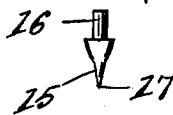


Fig. 4.



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UNITED STATES PATENT OFFICE.

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DENTAL TOOL.

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To all whom it may concern:

Be it known that I, JOSEPH P. MERTES, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented certain new and useful Improvements in Dental Tools; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention comprehends improvements in dental tools and relates more particularly to a tool having interchangeable contact elements for engagement with a tooth, to permit of the tool being used either as a bridge remover and tooth extractor or as a crown splitter.

One of the objects of the invention is to provide an instrument in the form of a pair of forceps, the jaws of which are provided with contact elements or heads including disk portions which are preferably covered with removable pads, the opposed faces of the disks being concave.

Another object of the invention is to provide a dental tool of this nature having one jaw provided with a knife which may be fixed at different angles thereto, and the other jaw being provided with a head, the knife being for the purpose of slitting a crown to facilitate its removal from a tooth, or root of a tooth, and the head coöperating with the knife to permit the latter being forced against a crown.

The invention also aims to generally improve instruments of this nature to render them more useful, practical and commercially desirable.

With these and other objects in view as will become more apparent as the description proceeds, the invention consists in certain novel features of construction, combination and arrangement of parts as will be hereinafter more fully described and claimed.

For a complete understanding of my invention reference is to be had to the following description and accompanying drawings in which—

Figure 1 is a top plan view of my improved dental tool, Fig. 2 is a fragmentary side elevation partly in section, showing a pad covered head secured to each of the jaws, Fig. 3 is a fragmentary side elevation partly in section, showing the tool when equipped with a knife for use as a crown

splitter, and Fig. 4 is an edge elevation of the knife or cutter.

Referring in detail to the drawings by numerals, 5 designates as an entirety a pair of forceps of a common construction, and consisting of a pair of crossed levers pivotally connected to each other, as indicated by the numeral 6 and forming the handles 7 and jaws 8. These jaws are curved, as shown in the drawings and have their extremities enlarged, as indicated by the numeral 9 and said enlarged portions being formed with alined openings 10 extending entirely therethrough. When the tool is to be used for removing gold crowns or bridges and extracting loose teeth, each of the jaws is provided with a contact element or head which comprises a shank 11 and a disk 12, the shank being received within one of the openings 10. The disks have their opposed faces concaved, as indicated by the numeral 13 and said faces are preferably covered by a pad of rubber or other suitable material, designated by the numeral 14. These pads act as cushions and are secured in their position by having their edges turned so as to engage the outer sides of the disks. The concave faces of the disks permit of their obtaining a good grip upon a tooth or crown, and the rubber pads 14 prevent the disks slipping, and also prevent the member, which is being operated upon, being scratched or marred in any way. I have found from experience that this tool is admirably adapted for removing bridges as well as loose teeth and gold crowns. When the pads 14 become worn or damaged, they may be easily removed and replaced by others.

To make the tool useful as a crown splitter, I provide one of the jaws 8 with a knife 15, said knife having a shank 16 which is received within one of the openings 10. This knife is somewhat wedge shape and has a concave cutting edge 17 which is pointed at each extremity. The knife may be turned at different angles to the jaws so as to permit of its properly engaging crowns upon different teeth. This rotational movement is permitted by having the knife secured in position by the shank 16 which is held in position by frictional engagement only. When the tool is used as a crown splitter, the head, which operates with the knife, will prevent the device from slipping.

From the foregoing description taken in

connection with the accompanying drawings, it will be seen that I have provided a very simple, practical and useful dental tool having interchangeable elements which permit of the tool being used as a tooth extractor, crown and bridge remover or as a crown slitter.

While I have shown and described the preferred embodiment of my invention, it will be understood that minor changes in construction, combination and arrangement of parts may be made without departing from the scope and spirit of the invention as claimed.

Having thus described my invention, I claim:—

1. A dental tool comprising a pair of forceps, the jaws of said forceps being provided with apertured enlargements, a cylindrical stem, a head formed integral with the cylindrical stem, the outer surface of the

head being concave, and a yieldable cushion element adapted to be secured to the concave head to form a tooth holding member.

2. In a device of the character described, a pair of pivoted handles, segmental extensions formed on the handles, enlargements formed at the free ends of the segmental extensions, said enlargements being provided with alining apertures, a stem adapted to be inserted in one of the apertures, a head formed integral with the stem, and a cushion member removably secured to the head and adapted to form a jaw to hold the article which is being operated upon when the device is in use.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH P. MERTES.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."