J. L. KELLY.

DENTAL TOOL.

APPLICATION FILED FEB. 17, 1920.

1,356,372. Patented Oct. 19, 1920.

Fig. 1.

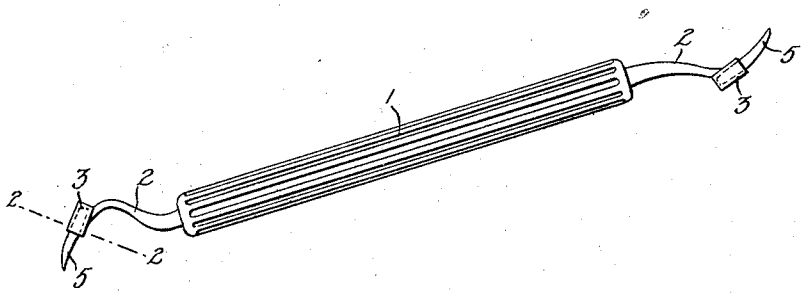


Fig. 3.

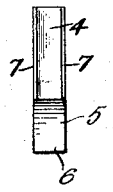


Fig. 2.

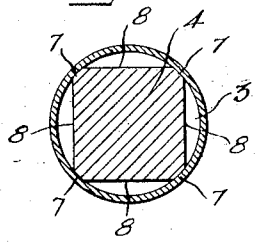
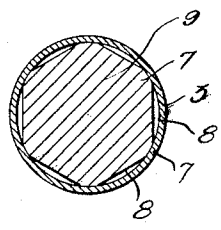


Fig. 4.



WITNESSES

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DENTAL TOOL.

1,356,372. Specification of Letters Patent. Patented Oct. 19, 1920.

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To all whom it may concern:

Be it known that I, JOHN L. KELLY, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county of New York and State of New York, have invented a new and Improved Dental Tool, of which the following is a full, clear, and exact description.

This invention relates to improvements in dental tools, and more particularly to improvements upon the tool disclosed in Patent Number 1003213, granted to F. H. Skinner, September 12, 1911, and assigned to me.

A further object is to provide an improved construction of point with improved mounting therefor.

With these and other objects in view the invention consists in certain novel features of construction, and combinations and arrangements of parts, as will be more fully hereinafter described and pointed out in the claim.

In the accompanying drawings—

Figure 1 is a view in side elevation illustrating a tool embodying my invention;

Fig. 2 is an enlarged view in section on the line 2—2 of Fig. 1;

Fig. 3 is a view in elevation of the polishing point; and

Fig. 4 is a view similar to Fig. 2 illustrating a modification.

1 represents the handle portion of a holder having shanks 2 at its opposite ends, said shanks provided with tapering or truncated conical sockets 3 for the reception of the shanks 4 of my improved polishing points 5. These polishing points 5 are preferably of wood and they are made of the desired shape with thin polishing edges 6 to engage the teeth. These points are commonly dipped in flour of pumice, silex, or precipitated chalk, and are then vigorously rubbed over the necks and other surfaces of the teeth, the general purpose being to remove plaques or other injurious deposits on the surface of the teeth and the points are especially adapted for use in the treatment of pyorrhea.

It will be noted particularly by reference to Fig. 2, that the shank portions 4 of the polishing points 5 are of different shape in cross-section than the shape of the sockets 3, and have no longitudinal taper. One preferable way of shaping the shank is to make it of general square or rectangular form in cross-section with slightly rounded corners 7 engaging the inner wall of the socket and having between said contact points relatively flat surfaces 8 which provide an ample space between the surfaces of the shank and the surfaces of the socket.

In the modification illustrated in Fig. 4, the shank 9, corresponding to shank 4, is of general hexagonal shape. By reason of this construction of shank and socket, the polishing point can be readily adjusted so as to give its proper angular position relative to the tool holder and can be securely held in any position of adjustment. Furthermore, as these points are of wood and are subjected to the moisture of the mouth, they expand considerably and by providing the shanks as above described, ample space is allowed for this expansion without unduly binding the shank in the socket and obviating the danger of breaking the socket or the point when an attempt is made to adjust or separate them.

With the ordinary form of conical shank and socket, such as illustrated in the patent above referred to, the binding action of the shank in the socket is excessive when the point swells due to the moisture of the mouth, and it is difficult to adjust the point in the socket and extremely difficult to remove or adjust the point without danger of breaking the socket. By constructing the shank as above explained with a plurality of contact surfaces or points with spaces between said points to allow for expansion, there is no danger of breakage and the adjustment and manipulation of the parts is greatly facilitated.

Various slight changes might be made in the general form and arrangement of parts described without departing from the invention, and hence I do not limit myself to the precise details set forth, but consider myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of the appended claim.

I claim:

A tooth polisher of the character described, consisting of a handle, a conical metal socket on the handle, a polishing point composed of wood, and a shank on said point adapted to be forced into the socket, said shank having a plurality of contact points engaging the inner face of the socket and between said contact points forming spaces between the shank and the socket.

JOHN LAWRENCE KELLY.