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DOUBLE-THREADED TOOTH PICK

This invention relates to a tooth pick, and more particularly to a tooth pick having an end formed with threads in the form of a double helix.

A known tooth pick used for removing food residual such as dregs, sediments, dirty and impure materials lodged among teeth comprises an elongated bar having at least a pointed end which is inserted through a gap between teeth to pierce said food residual and remove it therefrom.

Another known tooth pick is provided with a single helix wound about a pointed end of a bar thereof. It is found disadvantageous that both of the known tooth picks described above are, in general, lacking of sufficient holding abilities and thus fail to remove the food residual efficiently. To this end, the inventor has attempted to make an improved tooth pick to overcome the drawbacks of known tooth picks.

An object of the present invention is to provide a tooth pick having a double-threaded end which can be poked into food residual or the like lodged among teeth, rotated to catch it and pulled outwards to remove said food residual without injuring or damaging the teeth and/or the gums.

A further object of the present invention is to

provide a tooth pick having a slim portion which is tapered to a flat section and terminating with a hook for easily removing food residual lodged behind teeth. According to the present invention there is provided a tooth pick comprising an elongate bar having a first end which tapers to a point and is formed thereon with threads in the form of a double helix with the threads being wound in opposite directions about the bar, and a second end which tapers to a flat section, terminating with a hook. This tooth pick obviates the inconvenience encountered hitherto. The first end tapered to a point and threaded in a double helix with the threads being wound in opposite direction about the bar allows insertion through a gap between teeth and twisting, to pierce and hold food residual lodged therein. The second end which tapers to a flat section and terminates with a hook allows bringing the hook into positions behind rear side walls of teeth to hook and remove food residual lodged therein.

The present preferred exemplary embodiment will be described in detail with respect to the following drawings, wherein:

Fig. 1 is a front elevational view showing a preferred embodiment of the present invention;

Fig. 2 is a top elevational view of the double-threaded tooth pick shown in Fig. 1;

Fig. 3 is a side elevational view along arrow A of the tooth pick shown in Fig. 1;

Fig. 4 is a schematic view showing tooth picks of this invention which is in use;

Fig. 5 is an enlarged perspective and schematic view of a double-threaded end portion of the tooth pick which is in use; and

Fig. 6 is a front elevational view showing another preferred embodiment of the present invention.

Referring to Figs. 1, 2 & 3, a double-threaded tooth pick comprises an elongated bar 1, a double-threaded portion 2 formed on one end of the bar 1 and a slim portion 3 formed on another end of the bar 1.

The double-threaded portion 2 is tapered from the mid portion of the bar 1 to a point 20 and threaded in a double helix of which a first and second helical threads 21, 22 are wound in opposite directions about a conical circumference thereof so that the helical threads 21, 22 intersect repeatedly and periodically with one another to form a plurality of X-crosses evenly distributed around the conical wall of the end portion 2.

Said slim portion 3 has a flat section 31, which is terminated with a hook 32, tapered from the bar 1.

In operation, as shown in Figs 4 & 5, the double-threaded end 2 is inserted through a gap between teeth T and further twisted such as in a direction following the arcuate arrow R to pierce and hold the food residual D lodged therein and then pulled outwards in a direction following the arrow F. The food residual D will be firmly caught by the double-threaded end 2 for

removing it out of mouth.

The operation for removing food residual can be divided into two steps including a step of bar rotation and the other step of bar withdrawl. The operation of rotating the bar 1 of the present invention is quite different from the operation of reciprocating the bar of the conventional tooth pick with which the gums may be injured and the teeth enamel may be damaged

The tooth pick in accordance with the present invention is quicker and more efficient in removing lodged food residual and less harmful to the teeth structure than that of the known tooth picks.

The hook 32 of the slim portion 3 of the double-threaded tooth pick may be brought into positions behind the rear side walls of the teeth to hook food residual lodged therein and further withdrawn to efficiently remove it. The slim portion 3 can also be inserted through a gap between teeth for smooth and safe operation without injuring the teeth and gums.

It should be noted that the double helix of the tooth pick can be two helical ridges 21, 22 integrally wound about the conical circumference, as shown in Fig. 1, or screws grooved in and wound about the conical circumference of the double-threaded portion 2. The end portion 2 relative to the latter design obviously has a relatively smooth conical circumference for particularly safe operation.

While the invention has been described with what

is presently considered to be the most practical and preferred embodiment, it is to be understood that the invention is not to be limited to the disclosed embodiment, but on the contrary, is intended to cover various modifications and equivalent arrangements included within the scope of the appended claims.



CLAIMS

1. A tooth pick comprising an elongate bar having a first end which tapers to a point and is formed thereon with threads in the form of a double helix with the threads being wound in opposite directions about the bar, and a second end which tapers to a flat section, terminating with a hook.
 2. A tooth pick as claimed in claim 1 wherein the double helix comprises two opposed helically extending ridges integrally formed on the bar and wound about a conical circumference of the first end of the bar.
 3. A tooth pick as claimed in claim 1 wherein the double helix comprises two opposed helical grooves formed in a conical circumference of the first end of the bar.
 4. A tooth pick substantially as described herein with reference to the accompanying drawings.
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