

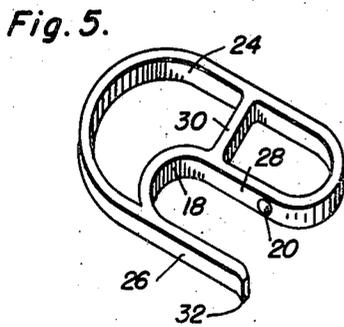
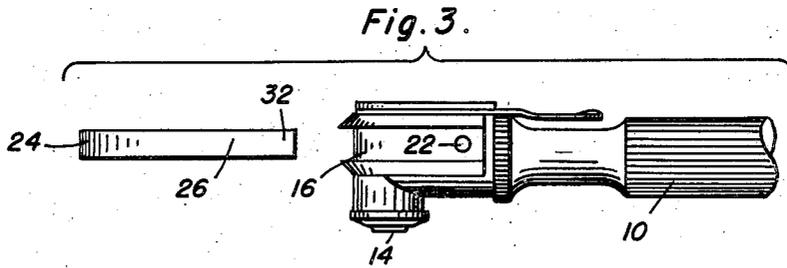
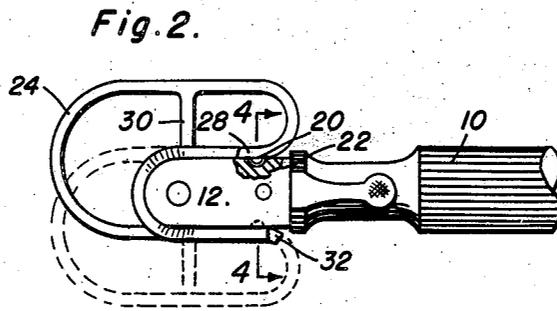
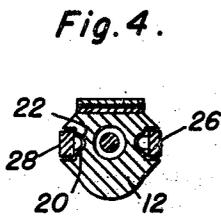
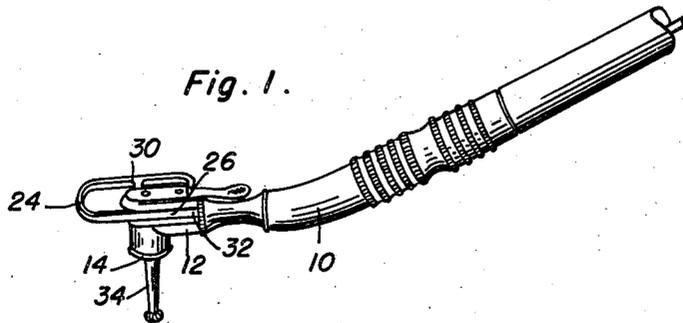
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2,485,900

GUARD ATTACHMENT FOR DENTAL TOOLS

Filed July 2, 1947



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# UNITED STATES PATENT OFFICE

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## GUARD ATTACHMENT FOR DENTAL TOOLS

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3 Claims. (Cl. 32-29)

1

This invention relates to new and useful improvements in guard attachments for dental tools and the primary object of the present invention is to provide an attachment for hand pieces so designed as to distend a patient's cheek when the hand piece is inserted into a patient's mouth so that the dentist may clearly see the tooth on which he is working.

Another important object of the present invention is to provide a guard that will hold a patient's cheek away from the tool on which the same is attached so that the dentist may work on the tooth without the tool engaging the cheek or tongue.

A further object of the present invention is to provide a device which may be quickly and readily applied to or removed from a hand piece of any size or shape to act as a guard to protect the tongue from injury by a tool carried by the hand piece.

A still further aim of the present invention is to provide a guard attachment for dental tools that is simple and practical in construction, efficient and reliable in use, relatively inexpensive to manufacture, and otherwise well adapted for the purposes for which the same is intended.

Other objects and advantages reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a fragmentary perspective view of a contra-angle hand piece showing the present invention applied thereto;

Figure 2 is a fragmentary top plan view of a hand piece showing the present invention applied thereto and with dotted lines showing the position of the guard when reversed relative to the hand piece;

Figure 3 is a group side elevational view showing the guard in position for engaging the head of a hand piece;

Figure 4 is a transverse vertical sectional view taken substantially on the plane of section line 4-4 of Figure 2; and

Figure 5 is a perspective view of the present guard attachment.

Referring now to the drawings in detail, wherein for the purpose of illustration, there is disclosed a preferred embodiment of the present invention, the numeral 10 represents a hand piece which may be a straight or contra-angle hand piece, terminating in a substantially cylindrical head 12 provided with a tool engaging device 14.

2

The head is provided with a substantially U-shaped groove 16 extending about its forward end and sides.

Frictionally engaging grooves 16 is a substantially U-shaped body 18 of resilient material having opposing lugs 20 projecting inwardly from its terminal end to engage lug seats 22 provided in the groove adjacent each end thereof.

Embracing the forward rounded portion of the body 18 and one leg of the body 18 is an arcuate guard 24 integrally formed with the body so that one end of the guard is an arcuate extension of one leg 26 of the body 18 and the other end of the guard is rounded to engage the terminal end of the other leg 28 of the body 18.

A brace 30 fixed to leg 28 and the guard 24 retains the guard in spaced relationship to the body and leg 28.

The terminal end of leg 26 is turned outwardly, as at 32, to provide finger gripping means for removal of the device from position to the head 12.

In practical use of the device best described, the tool 34 carried by device 14 may be extended into a patient's mouth whereby the guard 24 will engage the patient's cheek to distend the same so that the tool may engage a selected tooth without injury to the cheek.

The member 18 may be reversed relative to the head 12 if it is desirable to engage a tooth on the opposite side of the patient's mouth, whereby the guard will distend the opposite cheek.

Obviously, the guard may also be used to retain the tongue in a depressed position so that the tongue will not engage the tool during use of the tool.

In view of the foregoing description taken in conjunction with the accompanying drawings it is believed that a clear understanding of the construction, operation and advantages of the device will be quite apparent to those skilled in this art. A more detailed description is accordingly deemed unnecessary.

It is to be understood, however, that even though there is herein shown and described a preferred embodiment of the invention the same is susceptible to certain changes fully comprehended by the spirit of the invention as herein described and the scope of the appended claims.

Having described the invention, what is claimed as new is:

1. In a dental hand piece including a head having a groove, a guard attachment comprising a substantially U-shaped resilient body frictionally engaging the groove provided in the head of the hand piece, and means for retaining said

3

body relative to the head, said means including a pair of outwardly projecting lugs, and seats provided in the groove receiving said lugs.

2. In a dental hand piece including a head having a groove; a guard attachment comprising a substantially U-shaped resilient body frictionally engaging the groove provided in the head of the hand piece, lugs projecting outwardly from said body, seats provided in the groove receiving said lugs, and an arcuate cheek distending band carried by said body.

3. The combination of claim 2 wherein said band includes brace means between said band and said body.

ELMER L. MCKEEN. 15

4

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