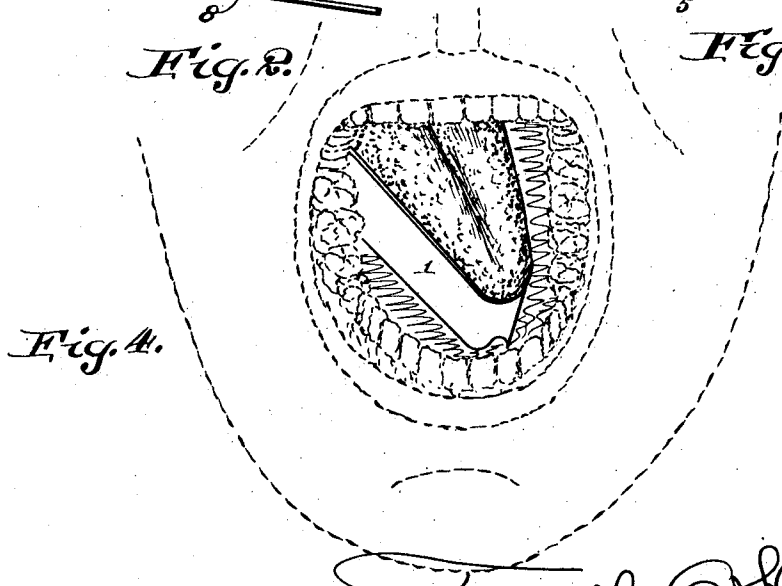
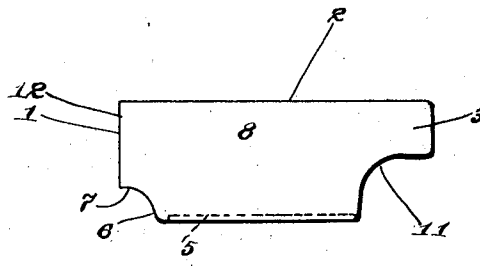
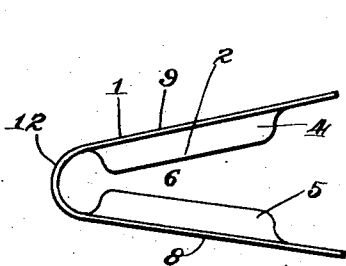
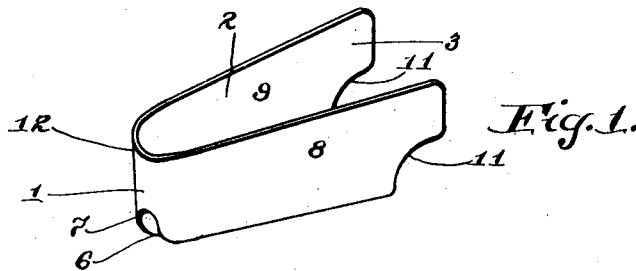


T. O. HEATWOLE.
TONGUE GUARD.
APPLICATION FILED AUG. 3, 1920.

1,405,689.

Patented Feb. 7, 1922.



WITNESSES.
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UNITED STATES PATENT OFFICE.

TIMOTHY O. HEATWOLE, OF BALTIMORE, MARYLAND.

TONGUE GUARD.

1,405,689.

Specification of Letters Patent.

Patented Feb. 7, 1922.

Application filed August 3, 1920. Serial No. 400,992.

To all whom it may concern:

Be it known that I, TIMOTHY O. HEATWOLE, a citizen of the United States of America, residing in the city of Baltimore, State of Maryland, have invented certain new and useful Improvements in Tongue Guards, of which the following is a specification.

In dental operations of every character and particularly on the teeth and surrounding parts of the lower jaw, it is necessary to protect the tongue against injury and desirable to hold it in such position that the parts to be treated are conveniently in view of the operator.

The present invention relates to a tongue guard or holder by which the tongue is enclosed and protected and also made capable of control by the operator as to its position in relation to the lower jaw.

This device is so constructed that it not only encloses the tongue, so far as is necessary or desirable to prevent injury under these circumstances, but at the same time leaves it free, so that the patient may remove his tongue from the guard and replace it when desirable. Also, it is formed with an opening for the frenum beneath the tongue which avoids any chance of discomfort by interference with the same, and, while it extends well to the rear for the purpose of protection, it is so formed as not to come in contact with the sensitive membranes in the back part of the mouth, contact with which would cause gagging.

The apparatus is particularly useful during the removal of tartar accumulations from the inner side of the teeth of the lower jaw to enable the dentist to get a better view of the field of operation. It also makes it possible for him to work more rapidly and efficiently with the least possible injury to the delicate tissue by which the teeth are surrounded and is particularly effective in the operation of scaling and polishing the teeth in the treatment of Riggs' disease. It is also of use in the process of taking an impression of the lower jaw for the purpose of constructing an artificial substitute, the tongue guard making it easy for the operator to obtain a full view of the lower jaw so that he can make an accurate impression in a satisfactory manner.

The device is also of great use as a protection for the tongue in filing or dressing down fillings in interdental spaces, by the

use of a sandpaper disk or otherwise, as the revolving disk sometimes breaks or clogs in the space and lurches toward the tongue side of the jaw, doing material injury to that organ before the control can be shut off. It is also available in connection with the grinding down of teeth for bridge abutments and crown adaptations, which is accomplished by the use of rapidly revolving carborundum stones, sandpaper, disks and various cutting instruments. Another function of the device is the protection of the tongue from caustics or other tissue destroying drugs, which are thus prevented from coming in contact with the tongue.

In the accompanying drawings, I have illustrated a tongue guard constructed in accordance with my invention. In the drawings:

Figure 1 is a perspective of the device.

Figure 2 is a plan.

Figure 3 is a side elevation.

Figure 4 shows the device applied to the tongue.

Referring to the drawings: The device consists of a wedged shaped angular enclosure or receptacle, 1, of sheet metal, paper or fibre, or other suitable material. It is shown in upright position, being open at the top at 2, and at the rear end at 3, the bottom being formed with two inwardly projecting shelves, 4, 5, one, at the bottom edge of each side, the shelves being slightly spaced apart to form a central longitudinal slot, 6, extending the entire length of the bottom wall of the enclosure. In the form shown, the front end of the slot terminates in a slightly enlarged opening, 7, and the rear ends of the two sides, 8, 9, project beyond the bottom and are indented or cut away as to their lower portions at 11, as shown. The forward end of the enclosure is preferably rounded at 12, as indicated.

In operation, the tongue of the patient is placed inside the guard, in which it fits rather snugly, tending to hold the desired relation of the guard to the tongue. In the operative position of the device, the bridle or cord at the bottom of the tongue occupies the slot, 6, and may extend into the opening, 7. The sensitive portion at the back of the mouth is relieved of contact with the guard by the cut away or concave formation at 11; at the same time, the rear ends of the two sides, extend backward sufficiently far along the tongue, to afford complete protection.

A feature of the device is, that while the tongue is thus completely enclosed and protected and rendered controllable by the operator, a patient may, conveniently remove
5 his tongue from the guard, if necessary, to prevent choking or otherwise for his convenience.

Having thus described the tongue guard and various features of my invention in the
10 preferred form, I would have it understood that the specific terms herein are used descriptively rather than in a limiting sense, the scope of the invention being defined in the claims.

15 What I claim and desire to secure by Letters Patent is:

1. A tongue guard same being free to move with the tongue having side walls, and a bottom portion with a central slot

open at the rear, the tongue guard being also
open at the top to provide for free removal
of the tongue from the guard by the patient.

2. A tongue guard having side walls meeting at the front and open at the rear and the
bottom portion with a central slot also open
25 at the rear, the rear ends of the side walls being inwardly curved as to their lower portions to avoid contact with the sensitive portion of the mouth near the rear of the lower
jaw, the tongue guard being also open, at the
30 top to provide for free removal of the tongue from the guard by the patient.

Signed by me at Baltimore, Maryland,
this 30th day of July, 1920.

TIMOTHY O. HEATWOLE.

Witnesses:

PORTER H. FLAUTT,
ANNA BERNSTEIN.