Jan. 1, 1935. G. G. LOWRY 1,986,275

COMBINATION ANTERIOR MOUTH SUPPORT AND SALIVA EJECTOR

Filed Nov. 10, 1933

Fig. 1.

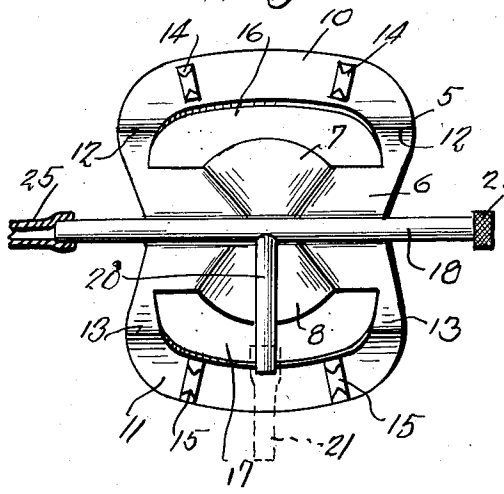


Fig. 2.

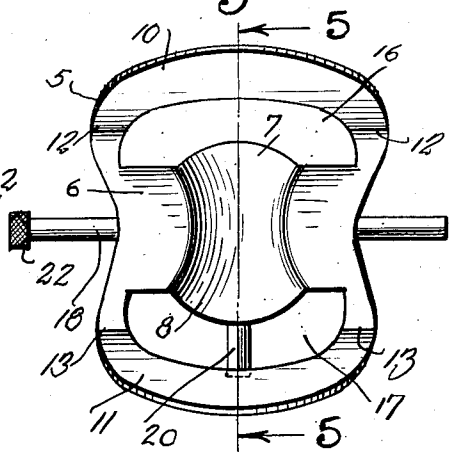


Fig. 5.

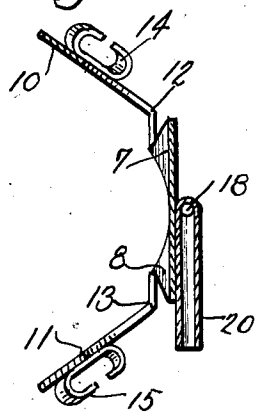


Fig. 3.

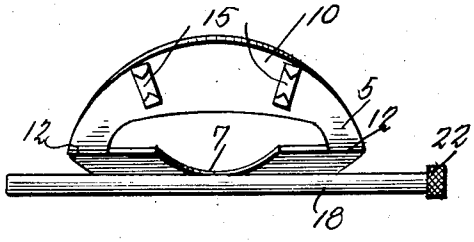


Fig. 4.

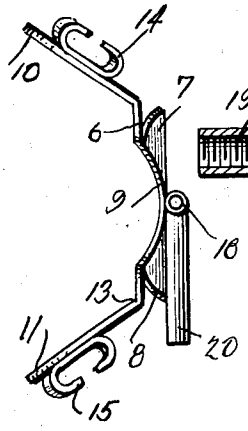
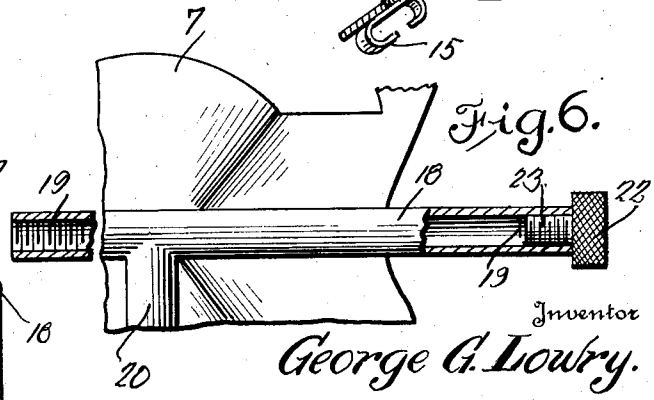


Fig. 6.



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COMBINATION ANTERIOR MOUTH SUPPORT AND SALIVA EJECTOR

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Application November 10, 1933, Serial No. 697,512

3 Claims. (Cl. 32—33)

This invention relates to improvements in combination anterior mouth support and saliva ejector.

The primary object of this invention is to provide a device of the above mentioned character with a saliva ejector having a hose connection capable of being changed from the right or left side of the mouth of the jaw brace whereby the jaw brace may be interchangeably positioned relative to the hose connection.

A further object of this invention is to provide a device of the above mentioned character having absorbent cotton holders for collecting undue moisture or saliva present in the patient's mouth.

A still further object of this invention is to provide a device of the above mentioned character adapted to protect the oral orifice of a patient while being operated upon.

A still further object of this invention is to provide a device of the above mentioned character which may be easily adjusted and placed in position in the patient's mouth without requiring numerous alterations or variations in the shape of the device.

A still further object of this invention is to provide a device of the above mentioned character which increases the confidence of the patient during operation and which is of indispensable assistance to the operator in that it eliminates the overflow of saliva and also eliminates the need or use of a rubber dam.

A still further object of this invention is to provide a device of the above mentioned character which may be formed of any material suitable for sterilization possessing sufficient rigidity to maintain the device in place within the patient's oral orifice.

Other objects and advantages of the invention will become apparent during the course of the following description forming a part of the specification and taken with the accompanying drawing in which,

Figure 1 is a rear elevational view of the device embodying this invention;

Figure 2 is a front elevational view illustrating the jaw brace and the manner in which the saliva ejector tubes and connections are associated therewith;

Figure 3 is a top elevational view of the jaw brace illustrating the manner in which the saliva ejector is attached thereto;

Figure 4 is a side elevational view illustrating the saliva ejector tube and showing the absorbent cotton holders on the top and bottom of the jaw brace;

Figure 5 is a vertical cross-sectional view taken on line 5—5 of Figure 2, looking in the direction of the arrows illustrating the saliva ejector tube as associated with the jaw brace; and

Figure 6 is an enlarged fragmentary view partly in section illustrating the opposite screw threaded ends of the saliva ejector tube and showing the manner in which the reversible plug may be held in place.

In the drawing, wherein for the purpose of illustrating the invention and wherein like reference characters will be employed to designate the same, the reference character 5 will generally be employed to designate a mouth brace comprising a frame portion 6 having central curved portions 7 and 8. The curved portions 7 and 8 are offset from the frame portion 6 and said frame portion is arcuately curved as at 9 transversely thereof. Connected to the frame portion 6 at opposite ends thereof are curved bands 10 and 11 offset from the frame portion 6 by portions 12 and 13 respectively. On the curved portions 10 and 11 there are formed loops 14 and 15 for receiving a piece of rolled absorbent cotton adapted to engage between the teeth and lips or gums and lips of the patient. The bands 10 and 11 form openings 16 and 17 through which the teeth of the patient may project so that the dentist may operate without the danger of causing damage to the patient through slippage of the tool or through the tool engaging portions of the patient's mouth which has heretofore caused considerable inconvenience and injury.

Secured to the frame portion 6 on the rear of the frame 5 is a longitudinally extending pipe 18 having the free ends thereof extending outwardly of the frame portion and internally screw threaded as at 19 as clearly shown in Figure 6. Intermediate the ends of the tube 18 there is provided a downwardly extending and communicating tube 20 adapted to be presented to the floor of the patient's mouth so that a flexible tube 21 may have its end connected to the free end of the tube 20 whereby the opposite end of the flexible tube 21 may rest within the patient's mouth on the floor directly under the tongue where saliva collects.

A plug 22 having a screw stud 23 may be selectively received within either end of the tube 18 in the screw threads 19 so that a suc-

tion hose or tube 25 may be connected by a slip-fit to the open end of the tube 18.

It will be readily observed that the tube 25 may be removed from the end of the tube 18 as shown in Figure 1 and the screw plug 22 removed from the opposite end of the tube whereby the plug 22 and flexible tube 25 may be reversed when it is desired to use the device in different positions in the mouth such as when the dentist is working in either side of the mouth so that clearance will be provided and no hindrance offered the dentist in his manipulation of instruments and in his work.

The brace constitutes a restful support for the mouth and maintains the mouth in an open position without discomfort to a patient. The work of the dentist is greatly facilitated by the presence of the saliva ejector that is attached to the brace as it is unnecessary for the dentist to manipulate the ordinary ejector that usually is supported by the lower lip of the patient and his hands are entirely free for dental practice. The tube 25 and screw plug are readily detachable from the tube section 18 so that the complete brace may be subjected to a sterilization process.

It will be apparent that the form of the invention herewith shown and described is to be taken as the preferred embodiment of the same and that minor changes may be made therein without departing from the spirit and scope of the invention as claimed.

I claim:—

1. In a device of the character described, a dental mouth brace, a saliva ejector rigidly attached thereto, including a tube extending longitudinally of the brace and a branch tube depending from the aforesaid tube intermediate its ends, a closure plug selectively attached to either end of the longitudinal tube and a flexible conduit removably attached to the open end of the longitudinal tube.

2. In a device of the character described, a dental mouth brace, a saliva ejector rigidly attached thereto, including a tube extending longitudinally of the brace and a branch tube depending from the aforesaid tube intermediate its ends, a closure plug selectively attached to either end of the longitudinal tube, a flexible conduit removably attached to the open end of the longitudinal tube, and pin clips carried by upper and lower portions of the brace for support of saliva absorbent pads.

3. In a device of the character described, a dental mouth brace, a saliva ejector rigidly attached thereto, including a tube extending longitudinally of the brace and a branch tube depending from the aforesaid tube intermediate its ends, a closure plug selectively attached to either end of the longitudinal tube, a flexible conduit removably attached to the open end of the longitudinal tube, and a rubber tube attached to the lower end of the branch pipe.

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