

E. E. DU P. WOISARD.
DENTAL APPLIANCE.
APPLICATION FILED FEB. 1, 1921.

1,374,792.

Patented Apr. 12, 1921.

Fig. 1.

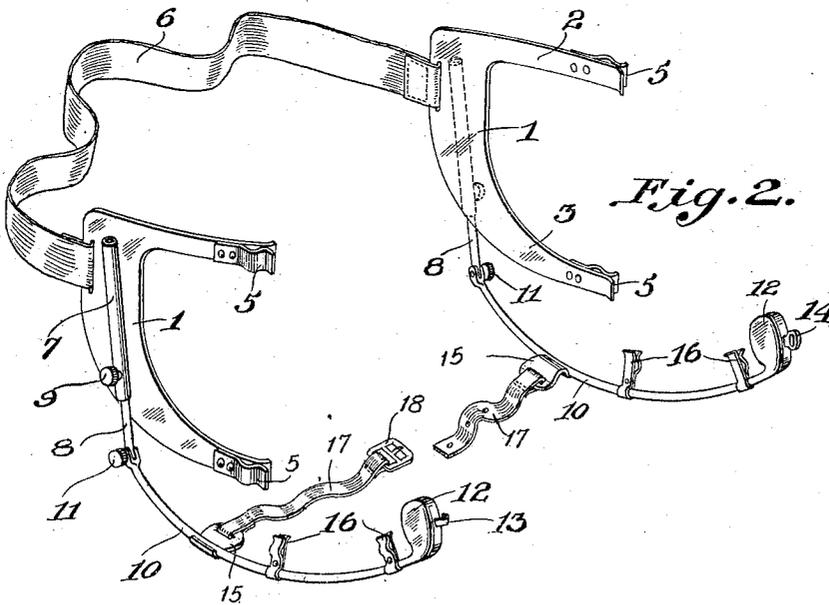
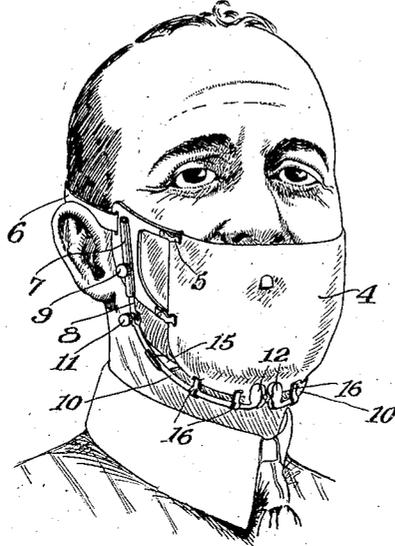


Fig. 2.

Inventor

E. E. D. Woisard

By *Wason Fenwick Lawrence,*
Attorneys

UNITED STATES PATENT OFFICE.

EDGAR ERNEST DU PORT WOISARD, OF PITTSBURGH, PENNSYLVANIA.

DENTAL APPLIANCE.

1,374,792.

Specification of Letters Patent. Patented Apr. 12, 1921.

Application filed February 1, 1921. Serial No. 441,631.

To all whom it may concern:

Be it known that I, EDGAR E. DU PONT WOISARD, a citizen of the United States, residing at Pittston, in the county of Luzerne and State of Pennsylvania, have invented certain new and useful Improvements in Dental Appliances; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to new and useful improvements in dental appliances, and more particularly to a holder for use in retaining in position upon the face the rubber dam which is generally used by dentists for preventing saliva or any other moisture from coming in contact with the teeth upon which the dentist may be working.

The main object of this invention is the provision of an appliance of the above character which will eliminate the use of the well-known rubber dam weights, and also to provide means adapted to engage the lower jaw of the patient in prosthetic work so that the operator can assure the taking of a correct bite by a patient when making an impression with wax or other material of this character.

Another object of the present invention is the provision of an appliance of this character which can be applied to the head of the patient and used without the rubber dam for supporting several instruments which the operator may be using, such as mouth mirrors, mouth lamp, lip depressors and other small articles of this character so that they may be readily accessible to the operator for use in connection with the patient upon which the operator may be working.

With the above and other objects in view, the invention consists in the novel features of construction, combination and arrangement of parts hereinafter more fully set forth, pointed out in the claims and shown in the accompanying drawings in which:

Figure 1 is a perspective view illustrating my improved dental appliance in position, and

Fig. 2 is a perspective view of the device removed.

In carrying out my invention I provide two side plates generally indicated by the numeral 1, said plates being shaped to conform to the outlines of the face at a point

preferably in front of the ear and including a body portion having an arm 2 projecting at right angles from the plate at the upper end thereof, and a second arm 3 arranged in spaced relation with the arm 2 and preferably curved outwardly from the lower end of the plate 1 as clearly illustrated in Fig. 2. It will be noted that the plate 3 is provided with a curvature adapted to conform to the outline of the jaw so that when the two plates are placed in position upon opposite sides of the plate, they will conform to the general outline of a patient's face and fit closely to the face so that the rubber dam 4 when attached to the outer ends of the arms 2 and 3 will be drawn tightly across the mouth of the patient.

In order to retain the rubber dam 4 in position upon the face of the patient, suitable clips 5 are secured to the outer ends of the arms 2 and 3 and are adapted to engage the edges of the dam in order to retain the same in its respective position. While I have shown and described the clips 5 as formed on a spring plate having one end attached to the arm and the other end yieldingly engaging the arms, any suitable form of fastening clip may be used to detachably connect the rubber dam to the outer ends of the arms.

In order to retain the plates 1 in position upon the face of the wearer and retain the rubber dam 4 in its respective position, the plates are connected by means of a tape 6, the ends of which are secured to the body portion of the plates 1 while the intermediate portion embraces the head of the patient as shown in Fig. 1 and I wish it to be understood that this tape may be made of an elastic or non-elastic material.

Attached to the outer face of each of the plates 1 is a tubular member 7 in which is slidably mounted a rod 8, said rod being adjustable within the tube 7 and retained in various adjusted positions by means of the set screw 9. It will be noted in the accompanying drawings that the tube 7 is illustrated as cylindrical in form but any other shape of tube can be used equally as well.

Pivotally connected to the lower end of the rod 8 is a curved bar 10, the inner end of which is bifurcated to form spaced ears adapted to be disposed upon opposite sides of the lower end of the rod 8 and pivotally connected thereto by means of the adjusting screw 11. This bar 10 is preferably curved

to conform to the shape of the lower jaw and provided at its outer end with the chin engaging members 12. It will be noted in Fig. 1 that the two bars 10 arranged on opposite sides of the face of the patient are placed in position adjacent the lower jaw and the chin members or pads 12 are arranged so as to engage the chin of the patient either underneath or in front and are securely fastened together by means of the hook 13 and the eye 14 so as to retain the bars 10 in their respective positions after being adjusted by the operator.

The bars 10 are also provided with jaw supporting plates 15 which may be attached to the intermediate portions of the bars 10 in any suitable manner and project inwardly as shown in Fig. 2 to engage beneath the lower jaw. The bars 10 are also provided with suitable spring clips 16 adapted to engage the lower edge of the rubber dam 4 to assist the side members in retaining the dam in position.

While I have shown and described this appliance as particularly used for retaining a rubber dam in position upon the face of the patient, I wish it to be understood that the same can be used equally as well for supporting various tools or articles which the operator may be using upon the patient by engaging the tools or articles with the curved bars 10, suitable means can be provided whereby these tools or articles mentioned above can be detachably connected to this bar so that they may be readily accessible to the operator and can be quickly and readily removed when it is desired to use them or replaced after having finished with them. It will also be noted that the rubber dam holder which includes the side plates provided with the arms 2 and 3 can be used without the bars 10 as the bars can be readily detached from the plates by releasing the rods 8 through the medium of the screws 9.

If found convenient, the plates 15 can be readily joined together by having the two strap members 17 attached to the plates and the inner ends of said straps suitably connected beneath the lower jaw by means of the buckle 18.

I claim:

1. A dental appliance including plate members, means for retaining said plates in position on opposite sides of the face of a person, spaced arms extending outwardly from said plates, clips attached to the outer ends of said arms, curved bars adjustably

connected to said plates and spring clips carried by said bars. 60

2. A dental appliance including plate members, means for retaining said plates in position upon opposite sides of the face of the person, curved bars adjustably connected to said plates, means for detachably connecting the outer ends of said bars at a position adjacent the chin of the person. 65

3. A device of the class described including plate members; means for securing said plates in position upon opposite sides of the face of a person, tubular members secured to the outer faces of said plates, curved bars arranged in juxtaposition with the lower jaw of the person and having their inner ends adjustably connected to said tubular members and means for connecting the outer ends of said bars at a point adjacent the chin of the person. 70 75

4. A device of the class described including plate members, means for connecting said plate members, tubular members attached to the outer faces of said plates, connecting rods adjustably within said tubular members and curved bars having their inner ends pivotally connected to said rods and their outer ends connected at a point adjacent the chin of the person. 80 85

5. A device of the class described including plates adapted to be arranged upon opposite sides of the face of a person, means for securing said plates in their respective positions, tubular members attached to the outer faces of said plates, curved bars, means for pivotally and adjustably connecting the inner ends of said bars to the tubular members, chin pads formed at the outer ends of said bars and means for detachably connecting the chin pads together at a position adjacent the chin of the person. 90 95

6. The combination with side plates, means for retaining said plates in position upon opposite sides of the face of a person, spaced arms extending outwardly from said plates, clips attached to the outer ends of said arms, of curved bars adjustably connected to said plates and spring clips carried by said bars as and for the purpose set forth. 100 105

7. A dental appliance including side plates positioned upon opposite sides of the face of the person, tubular members attached to the outer face of said plates and curved bars pivotally and adjustably connected with said tubular members. 110 115

In testimony whereof I affix my signature. EDGAR ERNEST DU PONT WOISARD.