

Oct. 14, 1952

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2,613,441

DENTAL PAD

Filed May 23, 1951

2 SHEETS—SHEET 1

FIG. 1

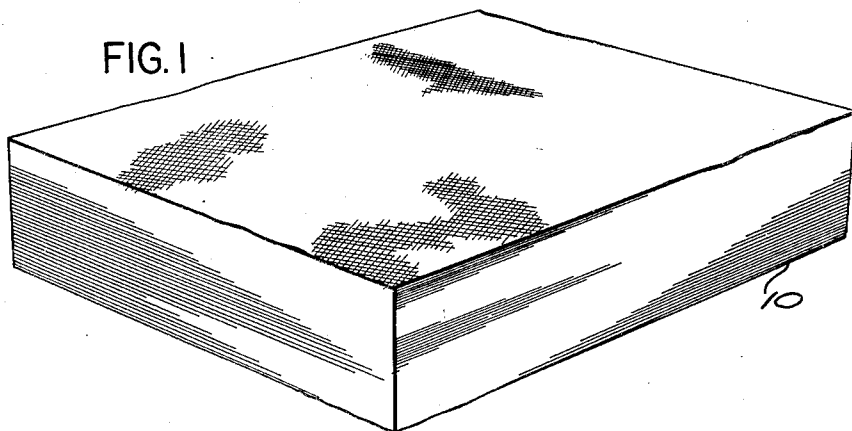


FIG. 2

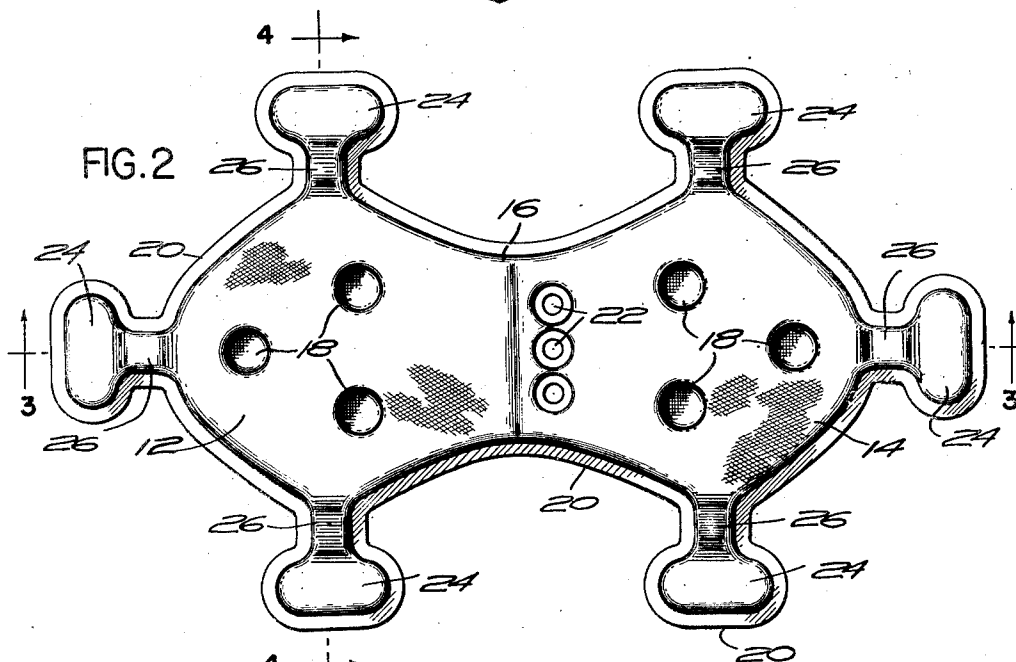
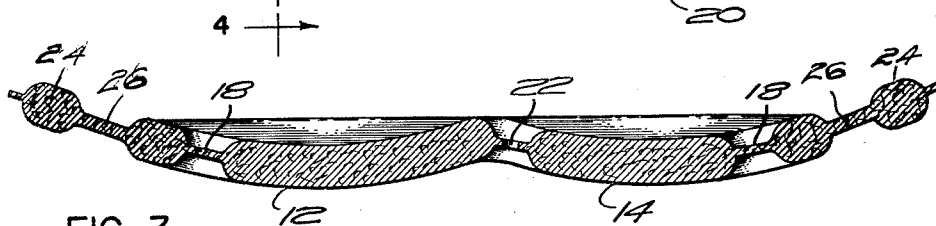


FIG. 3



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2 SHEETS—SHEET 2

FIG. 4

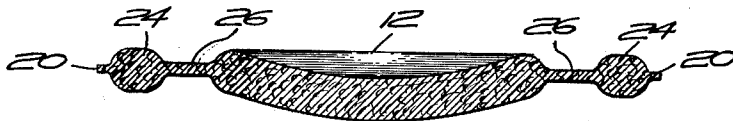
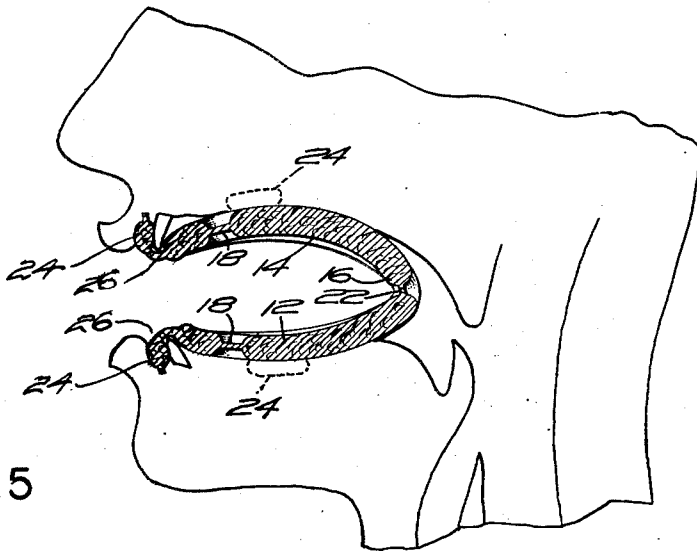


FIG. 5

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DENTAL PAD

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This invention relates to improvements in dental pads. More especially it has to do with a pad of absorbent material so shaped that it will lie on the tongue and against the roof of the mouth within the confines of the lower and upper gums respectively.

It has long been desired to have a satisfactory pad for use by dentists when working on a patient's teeth. There are always the difficulties caused by the collection of saliva in the mouth and the frequent interruption of the work while such collection is expectorated. The particles of a tooth and possibly of the filling which may lodge in the mouth during the treatment of a cavity cause annoyance to the patient and the modern use of abrasive powder under pressure in place of the usual metal drill increases the patient's discomfort in this respect. Moreover, unless the mouth is frequently rinsed of this foreign matter it may pass into the throat of the patient. Another distracting difficulty encountered with most patients is the "fogging" of the dentist's mirror due to the vapor in the oral cavity. The reduction of these various annoyances mentioned is the purpose of the present improvement.

The primary object of the invention is to provide a simple, inexpensive but highly efficient pad with two body portions integrally joined by a waist portion which permits the body portions to be folded toward one another with the waist portion acting as a sort of hinge. Each body portion is shaped to fit fairly close to the inner surfaces of the gums, one body portion lying preferably on the tongue and the other cleaving to the roof of the mouth, with the waist portion more or less overlying the passageway to the throat, and serving to prevent foreign matter entering the latter. It is a further feature to provide tabs on the outer edges of the body portions which can readily be bent over the rows of teeth and slipped between the outer surface of the gums and the cheek or lips, thus helping to hold the pad in place as well as to absorb moisture.

The best mode in which it has been contemplated applying the principles of my invention is shown in the accompanying drawings but these are to be deemed primarily illustrative because it is intended that the patent shall cover by suitable expression in the appended claims whatever features of patentable novelty exist in the invention disclosed.

In the accompanying drawings:

Fig. 1 is a perspective of the paper stock from which my improved pad is to be formed;

Fig. 2 is a plan view of the pad;

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Fig. 3 is an elevation in section on line 3—3 of Fig. 2;

Fig. 4 is another elevation in section on line 4—4 of Fig. 2; and

Fig. 5 is an elevation in section, showing the pad in position in the mouth.

Referring now particularly to the drawings, my improved pad is preferably formed from paper stock which is light in weight and highly absorbent to moisture. For example I have found that a sheet of cellulose-creped wadding of say from one-half to an inch in thickness is satisfactory for the purposes in hand. Such wadding is made up of many layers of thin creped tissue and has an absorptive capacity for water of about sixteen times its own weight. This material can be obtained in large sheets, such as is indicated at 10 in Fig. 1, which can be placed between dies and embossed or subjected to pressure and heat to produce the pad. Die plates with numerous co-related forming surfaces can be used for quantity production.

For the most part the wadding is compressed to a thickness of about one-eighth of an inch to form two body portions 12 and 14 integrally connected by a waist portion 16. Each body portion is dished from its edge toward the center as shown clearly in the sectional views. Within each body portion are several so-called pressure spots 18 where the wadding is more highly compressed to a thickness of about one-hundredth of an inch, and around the entire edge 20 of the pad the wadding is similarly pressed to about the same thickness. On one side of the waist portion there is provided one or more small holes 22 through the pad and the wadding around each hole is likewise tightly pressed. The pressure spots and the thin rims around the entire outer edge and around the holes serve to hold the pad in shape even after it becomes moist by the absorption of saliva, blood or vapor from the oral cavity.

The surface of the padding is preferably glazed to prevent the pad from sticking to the flesh in the mouth and to give it a high degree of reflectivity for light.

Each body portion is shaped to fit within the space generally defined by the gum containing a row of teeth. One body portion 12 rests on the tongue with its edge close by the inner surface of the gum from which protrude the teeth of the lower jaw. The other body portion 14 lies in similar manner against the roof of the mouth, with its edge close by the inner surface of the gum of the upper jaw. The waist portion 16 which connects the body portions together acts as a sort of

hinge to permit the body portions to be opposite one another in the mouth, and also provides a barrier against the inadvertent passage of any foreign material into the throat.

Before placing the pad in the mouth it should be gently folded on itself to bring the concave surfaces opposite one another, and with the holes 22 on the upper portion of the now curved waist portion 16. This location of the holes permits the passage of air to and from the throat and yet insures no foreign matter will pass into the throat. If desired a piece of fairly open gauze may be placed over the hole or holes by sticking its edges to the surface of the pad but this is not deemed essential.

At the sides and ends of the body portions are tabs 24 connected by neck portions 26 with the body. When the pad is placed in the mouth the tabs are tucked between the gum and cheek and between the gum and the lips, the neck portions 26 readily bending around the teeth, and serve to hold the pad in place. These are particularly helpful as respects the upper portion of the pad because they allow the patient to open and close the lower jaw without disturbing the body portion next to the roof of the mouth. If a tab or neck portion would interfere with the operation on any tooth, that particular tab and its neck can easily be snipped off. It is preferable to retain as many tabs as possible because they not only help hold the pad in place but they also absorb moisture.

The improved pad not only absorbs saliva and blood but also the vapor in the mouth which frequently settles as a film on the dentist's looking-glass. The wadding is desirably made of white stock and a pad of this material readily reflects light and gives improved visibility to the dentist in his work. The pads are very light in weight roughly about one-third of an ounce and cause no discomfort to the user. On the contrary the fact that they easily absorb the moisture in the mouth gives great comfort to the patient. The dished shape of the body portions insures that all foreign matter collected on the pad will remain there until the pad is removed and this assurance relieves the patient from fear of any foreign matter passing into the throat. The pad can be used by the dentist for temporary deposit of particles chipped from the tooth and also for wiping off his drill or other instru-

ment. The highly absorbent capacity of the pad aids in keeping dry the tooth upon which the dentist is working and greatly lessens the discomfort of the patient.

I claim:

1. A dental pad of highly absorbent material having a pair of body portions integrally connected by a waist portion; each body portion being shaped to fit within the space defined by the teeth; one body portion being adapted to rest on the tongue and the other body portion to rest against the roof of the mouth; the said waist portion being bent over at the rear of the mouth to prevent passage of foreign material into the throat.

2. A dental pad made of cellulose-creped wadding having a pair of body portions integrally connected by a waist portion; the pad having spots where the wadding is tightly compressed and the entire pad having a tightly compressed edge; the pad otherwise having the wadding only lightly compressed so that it may readily absorb moisture.

3. A dental pad of highly absorbent material having body portions shaped to fit in the mouth within the confines of the gums; a waist portion connecting the body portions and shaped to overlie the entrance to the throat; and tabs outstanding from the body portions for insertion between the teeth and cheeks or lips.

4. A dental pad of absorbent material having a pair of body portions integrally joined by a waist portion; one body portion fitting within the space defined by the gum of the lower jaw and the other body portion fitting within the space defined by the gum of the upper jaw; and the waist portion being curved between the body portions and overlying the entrance to the throat; one body portion having a hole adjacent the waist portion for passage of air.

JOHN W. BIGGS.

REFERENCES CITED

The following references are of record in the file of this patent:

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