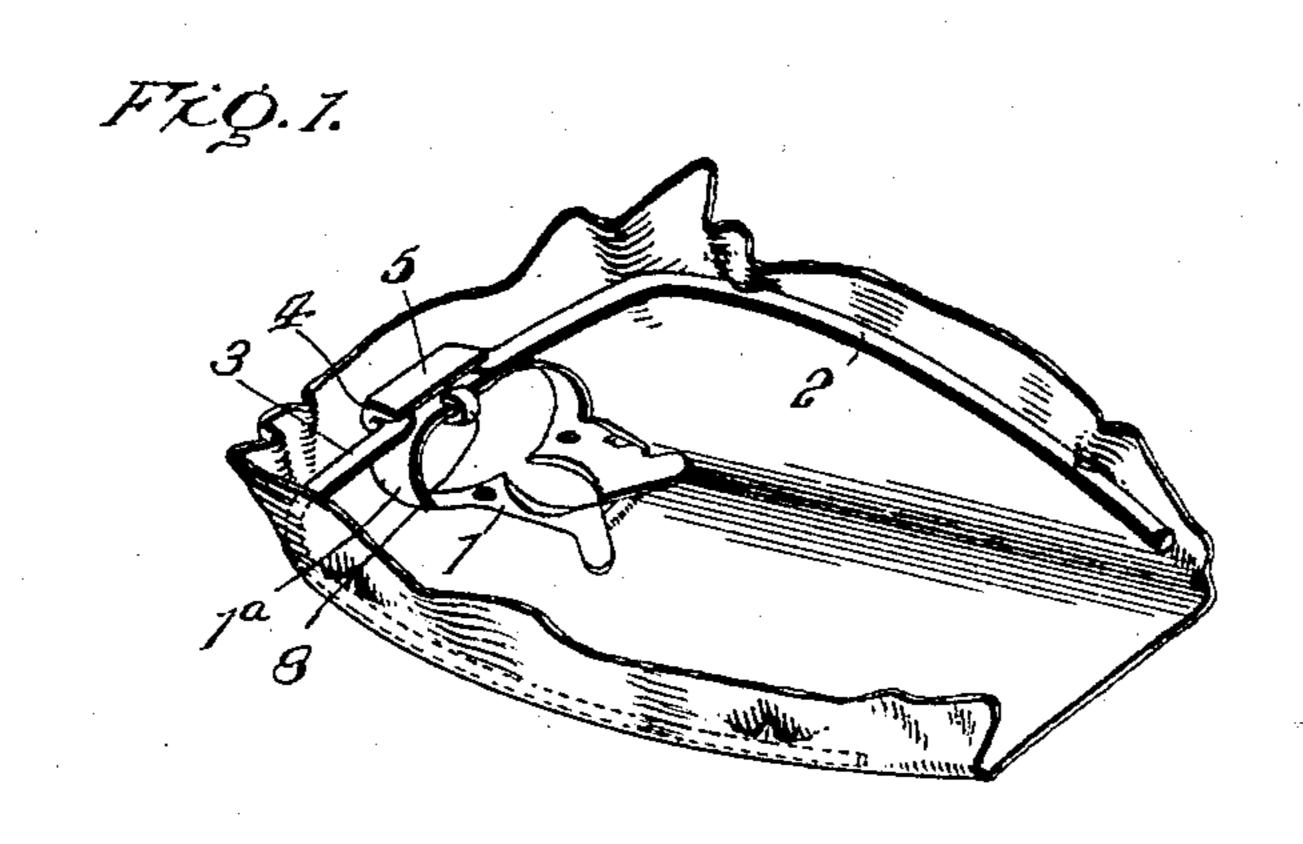
No. 835,358.

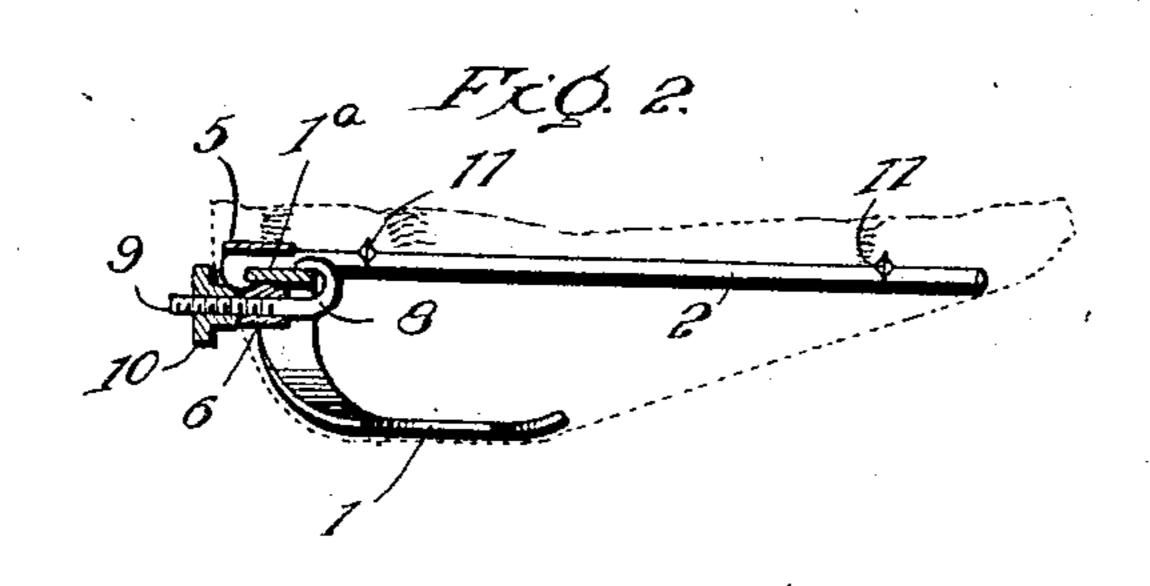
PATENTED NOV. 6, 1906.

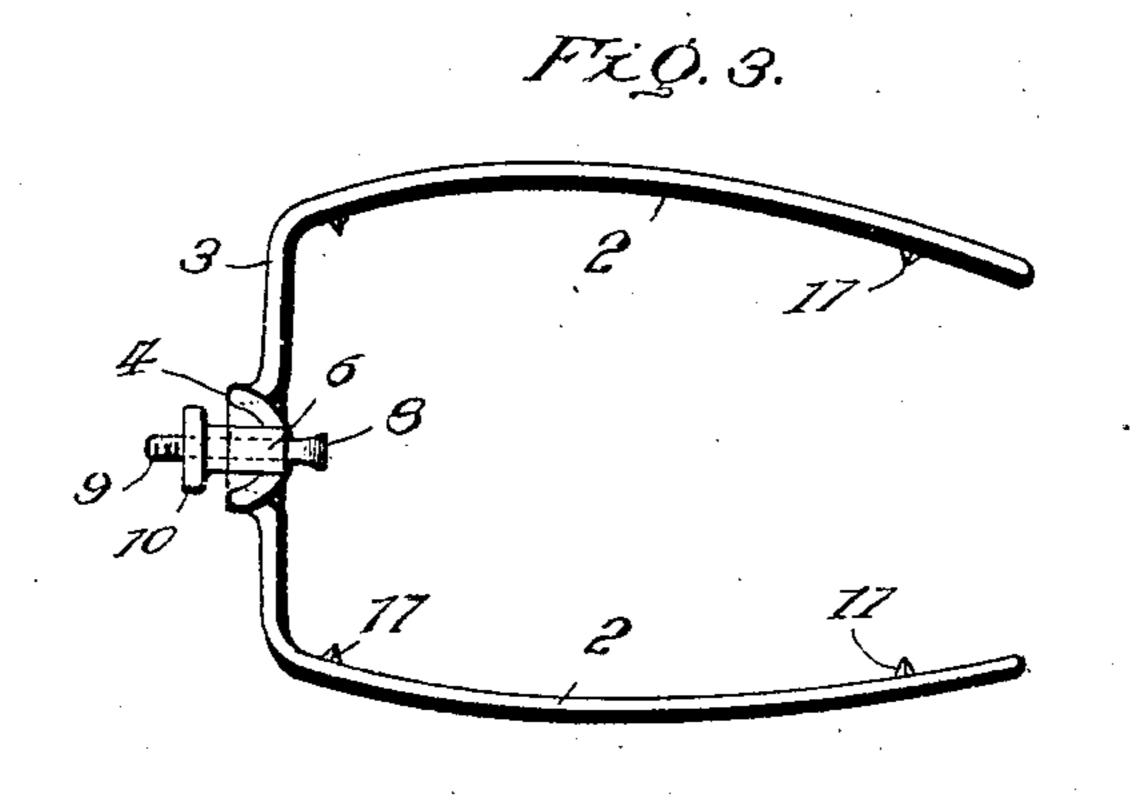
T. F. KENNEDY.

RUBBER DAM ADJUSTER.

APPLICATION FILED APR. 3, 1906.







I. F. Kennedy,

In muie

By Macey, attorneys

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## UNITED STATES PATENT OFFICE.

## THOMAS F. KENNEDY, OF JANESVILLE, WISCONSIN.

## RUBBER-DAM ADJUSTER.

No. 835,358.

Specification of Letters Patent.

Patented Nov. 6, 1906.

Application filed April 3, 1906. Serial No. 309,653.

To all whom it may concern:

Be it known that I, Thomas F. Kennedy, a citizen of the United States, residing at Janesville, in the county of Rock and State 5 of Wisconsin, have invented certain new and useful Improvements in Rubber-Dam Adjusters, of which the following is a specification.

In the practice of dentistry for certain op-10 erations well known to the profession it is necessary to employ a rubber dam, so as to isolate the tooth or teeth being operated upon from the other teeth and all portions of the mouth of the patient, so as to exclude 15 the saliva and prevent it from interfering with the work: It is customary for many dentists to employ a rubber dam for this purpose which is inserted over the tooth or teeth being operated upon and bound tightly 20 therearound, either by a cord or by a rubberdam clamp, the sides of the rubber dam being carried partially around the patient's cheeks and held securely in place by a strap passing around the back of the head. With 25 such practice there is a considerable surplus of rubber to obstruct the view, the rubber dam covering the lower part of the patient's face is annoying to all patients and irritable to many, the head or neck strap is also an-30 noying and requires some time to adjust, and a considerable amount of rubber must be used each time the rubber dam is applied, to say nothing of the time necessary to adjust the dam with the dam-holder.

The object of my invention is to avoid the difficulties above mentioned and to provide a rubber-dam adjuster which will involve little trouble and time in adjusting the dam, in which there will be no surplus rubber to ob-40 struct the dentist's view, which will do away with the annoyance incident to the headstrap, which will save a considerable amount of rubber, and which will be easy to apply.

With this primary object in view the in-45 vention consists in an improved frame designed to be secured to a rubber-dam clamp to hold the rubber in its dam formation, so as to effectually prevent saliva from flowing into or around the tooth or teeth being oper-50 ated upon.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of proved rubber-dam adjuster or holder which

the means for effecting the result reference is to be had to the following description and 55 accompanying drawings, in which—

Figure 1 is a perspective view of my improved rubber dam adjusted. Fig. 2 is a longitudinal sectional view thereof, the dam being indicated in dotted lines. Fig. 3 is a 6c plan view.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Referring to the drawings, the numeral 1 designates a rubber-dam clamp of that type provided with a curved cross-bar 1<sup>a</sup>.

2 designates my improved dam-adjuster, which is in the form of a three-sided open 70 frame, of which the cross-bar3 is buckled intermediate its length, as indicated at 4, and has secured thereto, preferably by solder or the like, on its upper side at the buckled portion a plate 5. A bearing 6 is secured to the frame 2 75 and is also preferably attached by solder to the buckled portion 4 of the cross-bar 3, and in said bearing 6 is mounted a swiveled hook 8, the shank 9 of which is threaded to receive a nut 10. The cross-bar 3, as well as the two 80 side bars of the frame 2, are provided with obliquely-extending prongs 11, and the ends of the side bars are preferably turned slightly inward toward each other, as shown.

In the practical application of my im-85 proved rubber-dam adjuster, the rubber dam 12 having been perforated and inserted over the tooth to be operated upon and the clamp 1 having been applied thereto, my improved frame 2 is secured to the curved cross-bar 1<sup>a</sup> 90 of the clamp 1 by means of the hook 8, which is screwed up sufficiently tight to hold the frame substantially in a rigid manner with respect to the clamp. The rubber 12 is then stretched around the frame on the prongs 11, 95 thereby maintaining the rubber in its stretched condition and holding it in its dam formation. If desired, the rubber 12 may be perforated at one point, so as to take over the nut 10 of the hook 8 to hold the rubber at 100 said point in a manner to coact with the prongs 11.

From the foregoing description, in connection with the accompanying drawings, it will be seen that I have provided an im- 105

will effectually act to hold the rubber in proper position to form the dam around the teeth without the necessity of using a large or surplus amount of rubber and without the 5 necessity also of using the head and neck strap before referred to.

Having thus described the invention, what

is claimed as new is—

1. A device of the character described 10 comprising an open frame provided with means for attaching it to a rubber-dam clamp, and also provided with means for holding a rubber dam in stretched condition around the clamp.

2. A device of the character described, comprising an open three-sided frame, and means for attaching said frame to a rubberdam clamp, the cross-bar and the side bars of said frame being provided with prongs de-20 signed to hold the rubber dam in stretched

condition around the clamp.

3. A device of the character described comprising an open frame provided with a cross-bar and with prongs on said cross-bar 25 and side bars, and a swiveled hook mounted in the cross-bar and designed to be detach-

ably secured to the cross-bar of a rubber-dam

clamp.

4. A device of the character described, comprising an open three-sided frame, the 30 cross-bar of which is buckled intermediate its ends, a bearing designed to support a hook and secured to the buckled portion of the cross-bar, a hook swiveled in said bearing and provided with an adjusting-nut, the hook 35 being designed for detachable connection to the cross-bar of a rubber-dam clamp, and the cross-bar and side bars being provided with prongs, as and for the purpose set forth.

5. A device of the character described 40 comprising an open frame provided with prongs designed to hold a rubber dam in stretched condition, and a hook mounted on said frame and arranged for attachment to a

rubber-dam clamp.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS F. KENNEDY. [L. s.]

Witnesses:

T. H. McCarthy, W. M. PFENNIG.