

T. BEATTIE & G. A. PEATE.
 DEVICE FOR PREVENTING AND CURING STAMMERING AND STUTTERING.
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1,030,964.

Patented July 2, 1912.

Fig. 1.

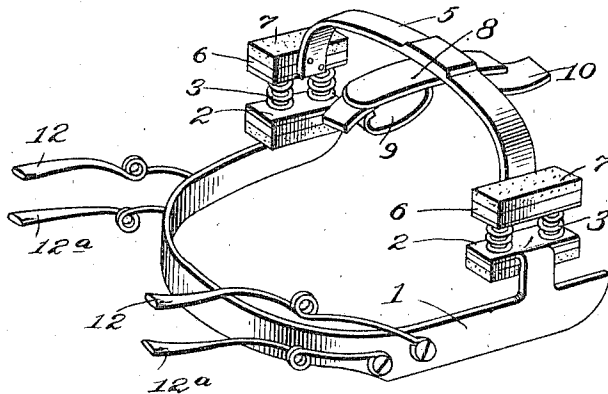


Fig. 2.

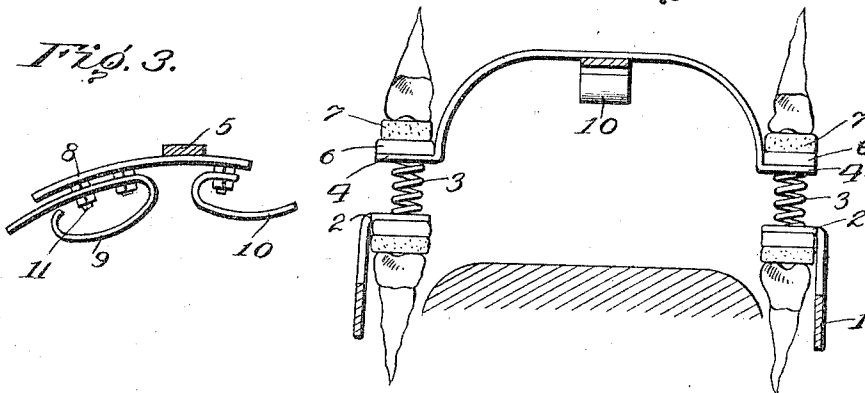


Fig. 3.

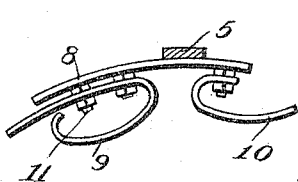
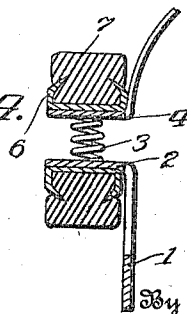


Fig. 4.



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UNITED STATES PATENT OFFICE.

GEORGE A. PEATE AND THOMAS BEATTIE, OF MONTREAL, QUEBEC, CANADA.

DEVICE FOR PREVENTING AND CURING STAMMERING AND STUTTERING.

1,030,964.

Specification of Letters Patent.

Patented July 2, 1912.

Application filed April 11, 1911. Serial No. 620,270.

To all whom it may concern:

Be it known that we, GEORGE A. PEATE and THOMAS BEATTIE, subjects of the King of Great Britain, residing at Montreal, Province of Quebec, Canada, have invented certain new and useful Improvements in Devices for Preventing and Curing Stammering and Stuttering, of which the following is a specification.

This invention comprehends certain new and useful improvements in surgical appliances and relates particularly to an apparatus designed for use on a patient in the treatment by experts for the prevention and cure of stammering and stuttering.

The invention has for its primary object a novel and useful device designed particularly for use as a supplementary device in the treatment which includes, in its initial steps, an apparatus disclosed in our companion application for Letters Patent of the United States, filed of even date herewith, Serial No. 620,271, such last named device being designed to hold the articulating organs at a widely separated position and so that they cannot act at all even to a slight degree, as a reference to such application will more fully appear, while the present device is so arranged that the jaws, tongue, and lips may move, the device relieving the mind of all responsibility of controlling these organs.

With this and other objects in view as will more fully appear as the description proceeds, the invention consists of certain constructions, arrangements and combinations of the parts that we shall hereinafter fully describe and claim.

For a full understanding of the invention, reference is to be had to the following description and accompanying drawing, in which:

Figure 1 is a perspective view of our improved device; Fig. 2 is a transverse sectional view thereof; Fig. 3 is a longitudinal detail view of the tongue depressing device; and Fig. 4 is a detail sectional view of the appliance.

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.

Our improved appliance comprises a curved base plate 1 which is shaped to fit the lower jaw around the gums and inside of the lower lip, said base plate being

formed at correspondingly opposite points with inwardly turned extensions 2 that are substantially horizontally disposed in the operative position of the device. One or more coil springs 3 are secured at their lower ends to these lateral extensions 2, and the upper ends of said springs are attached to plates 4 that in the present instance form outwardly extending integral portions of an arched cross bar 5 shaped to approximately fit the cross contour of the roof of the patient's mouth.

6 designates cup-like holders that are secured to the upper sides of the lateral extensions 4 and to the lower sides of the lateral extensions 2, said holders being formed of silver or any other desired metal and having their flanged edges clenched in preferably rubber pads 7, said pairs of pads being designed to be inserted between the upper and lower sets of teeth so as to have a tendency to open the jaws, while at the same time permitting the jaws to be closed in articulating, but under some degree of restraint or tension.

Secured to the middle of the cross bar 5 is a slightly curved longitudinal bar 8 which projects both forwardly and rearwardly from the cross bar 5. The longitudinal bar 8 has springs 9 and 10 connected to it in an adjustable manner, preferably by threaded bolts 11 that are secured to the bar 8, and nuts working on said bolts. These springs 9 and 10 are so shaped and located that they will exert a yielding pressure downwardly upon the tongue so as to be a check against a too high or strong movement toward the roof of the mouth. In the preferred arrangement of the parts there are two of these tongue depressing springs, as shown, as two independent springs are advisable, owing to the fact that one portion of the tongue is used in sounding some of the consonants, while another part of the tongue is used in sounding other consonants.

Secured to the curved base plate 1 preferably somewhat near the front thereof are two pairs of spring rods, each pair embodying an upper spring member 12 and a lower spring member 12^a. These are secured at their lower ends to the base plate 1 and extend upwardly and forwardly one above the other, being designed to project in between the lips of the patient when the device is held in the mouth, so as to exert an opening pressure upon the lips.

From the foregoing description in connection with the accompanying drawing, we believe that the operation of our improved appliance will be apparent. In the preferable use of the device, after the patient has progressed sufficiently to warrant its use, the apparatus is fitted within the lower jaw around the gum and between the same and the lower lips, the pads 7 fitting in between the teeth of the upper and lower set, and exerting an opening pressure upon the jaws. The cross bar 5 fits snugly within the roof of the mouth and the tongue depressing devices 9 and 10 exert a yielding pressure in a downward direction upon the tongue, while the springs 12 and 12^a, fitted between the lips, will exert a sufficient check upon the lips to relieve the will from attending to their action during the latter part of the treatment.

It will thus be seen that we have provided a very simple and efficient device, by the use of which the patient's speech-energy is controlled as it divides itself and is distributed to the various organs. The exact distribution necessary to a coordinate action of the organs is maintained first mechanically and the parts so thoroughly improved by specific and prescribed work that such perfect distribution continues thereafter on the principle of habit.

What we claim is:

1. A device of the character described, comprising a base plate formed at opposite points with inwardly turned extensions, an arched cross bar above said plate and formed at opposite points with outwardly turned extensions, springs interposed between corresponding upper and lower extensions and pads secured to said extensions and adapted to fit between the upper and lower sets of a person's teeth.

2. In a device of the character described, an arched supporting bar adapted to fit within the roof of a person's mouth, means for supporting the bar within the mouth, a longitudinally extending bar connected to said arched bar, and a spring carried by said longitudinal bar.

3. In a device of the character described, an arched supporting bar adapted to fit within the roof of a person's mouth, means for supporting said bar within the mouth, a longitudinally extending bar connected to said arched bar, and springs carried by said longitudinal bar, said springs being ar-

ranged in longitudinal alinement with each other.

4. In a device of the character described, an arched supporting bar adapted to fit within the roof of a person's mouth, means for supporting the bar within the mouth, a longitudinal bar connected to said supporting bar and extending forwardly and rearwardly therefrom, and springs adjustably connected to said longitudinal bar.

5. In a device of the character described, an arched supporting bar arranged to extend transversely in the roof of a person's mouth, means for supporting the bar within the mouth, a longitudinal bar extending forwardly and rearwardly from said supporting bar, a spring connected to the forwardly extending end of the longitudinal bar, and another spring connected to the rearwardly extending end of the longitudinal bar.

6. In a device of the character described, a base plate adapted to fit within and behind a lower lip, lower pads supported by said base plate, a cross bar, and pads connected to the cross bar and disposed above the lower pads, the upper and lower pads being yieldably connected together.

7. In a device of the character described, a base plate adapted to fit within and behind a lower lip, upper and lower pads adapted to wedge between the upper and lower sets of a person's teeth, the pads being yieldably connected together, a cross bar to which the upper pads are operatively connected, and lip opening members connected to said base plate and extending forwardly therefrom.

8. In a device of the character described, a curved base plate adapted to fit around a person's lower jaw back of the lower lip, and two pairs of lip-opening yieldable members, each pair comprising an upper and a lower member that are secured at their rear lower ends to the base plate and that extend upwardly and forwardly therefrom.

In testimony whereof, we affix our signatures in presence of two witnesses.

GEORGE A. PEATE. [L. S.]

THOMAS BEATTIE. [L. S.]

Witnesses as to the signature of George A. Peate:

JOHN B. LAYEUX,

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Witnesses as to the signature of Thomas Beattie:

R. J. BURKETT,

F. C. WALLACE.