

No. 646,629.

Patented Apr. 3, 1900.

W. P. SUGATT.
DEVICE FOR REGULATING TEETH.

(Application filed Mar. 23, 1899.)

(No Model.)

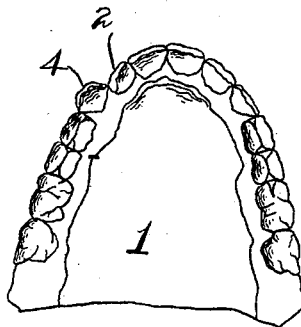


Fig. 1.

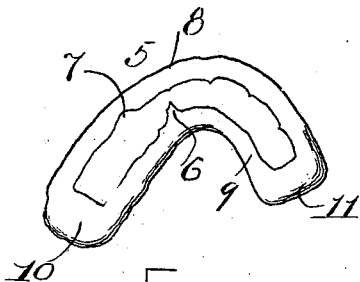


Fig. 2.

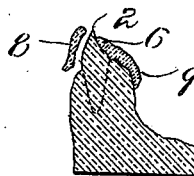


Fig. 3.

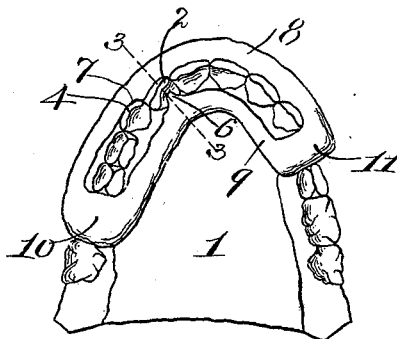


Fig. 4.

WITNESSES

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DEVICE FOR REGULATING TEETH.

SPECIFICATION forming part of Letters Patent No. 646,629, dated April 3, 1900.

Application filed March 23, 1899. Serial No. 710,249. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM P. SUGATT, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in Devices for Straightening Teeth, of which the following is a specification.

The object of this invention is to produce a device for regulating or straightening teeth.

The invention consists in an elastic plate of vulcanized rubber so formed and constructed as to press against the particular tooth or teeth which it is desired to straighten and to stay in position in the mouth without the aid of ligatures or bands.

In the drawings like numerals refer to like parts throughout the several views thereof.

Referring to the drawings, Figure 1 is a plan view of a plaster cast of the teeth of an upper jaw. Fig. 2 is a plan view of my improved tooth-regulating device. Fig. 3 is a section taken on line 3 3, Fig. 4. Fig. 4 is a plan view similar to Fig. 1 with the tooth-regulating plate in position thereon.

In the drawings, 1 is a plaster cast of the upper jaw and the teeth therein. Said cast is made from a wax mold taken from the patient's mouth in the usual well-known manner. It will be noted that the teeth in this case are regular with the exception of 2 and 4, which need to be pressed outwardly and inwardly, respectively. Having obtained the plaster cast 1, which is an exact duplicate of the patient's upper set of teeth, the operator scrapes a slight portion of the plaster away from the inner side of 2 and from the outer side of 4. A wax impression is next taken of the plaster cast of the same shape as the regulating-plate 5, Fig. 2, and the regulating-plate 5 of vulcanized rubber is made from this wax impression in a manner well known to those skilled in the art. The regulating-plate 5 is smoothed and polished carefully to keep it from hurting the patient's mouth. The plate 5 fits the teeth closely, but presses against 2 and 4 harder than the others on account of the plate having been taken from the cast 1 after the latter had been changed, as described, by scraping a slight portion of the plaster off at the points 2 and 4, and hence adding onto the plate 5 at

the points 6 and 7 corresponding thereto. The plate 5 consists of an outer rim 8 and an inner rim 9, said outer and inner rims fitting the teeth and being joined together at the ends by the cross-pieces 10 11, which fit over the crowns of two teeth, thus serving to keep the plate in position in the mouth. It is not necessary to include all the teeth in the jaw in the plate 5; but two or three on each side of the tooth to be regulated should be included. It will be seen and understood that after the irregular teeth have been forced back by the plate 5 for several days a new plate can be made by scraping a little more plaster from 2 and 4 and constructing another plate 5 from the cast 1, as before. It will thus be seen that a tooth may be gradually forced into position and that the operator will in each change of the plate 5, having the cast 1 as a model, be enabled to positively construct a new plate 5, differing from the preceding one by the exact amount which he removes from the plaster cast 1. Thus by these gradual changes the tooth is brought into the proper position with little if any pain or inconvenience to the patient.

The plate 5 is easily placed in position in the mouth and as easily removed by the patient without the aid of the operator. It is very simple and effective. There is no mechanism to get out of order and can be worn as much or as little as may be desired. During meal hours the plate can be removed. The advantages secured by the ease with which the plate can be removed from the mouth and cleansed cannot be overestimated when compared with the fixed ligatures and bands used for accomplishing the same purpose and which require the aid of an experienced operator to secure their removal.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A plate for straightening teeth so constructed as to fit the teeth, consisting of an inner rim and an outer rim, connected at their ends by cross-pieces, and all of elastic material, and a projection carried by a rim, substantially as described for the purpose specified.

2. A plate 5 for straightening teeth, consisting of an inner rim 9, an outer rim 8 con-

structed to bear against the inner and outer
sides respectively of the teeth, said inner and
outer rims being connected at their ends by
the cross-pieces 10, 11, all of elastic material,
5 substantially as described for the purpose
specified.

In testimony whereof I have hereunto set

my hand in presence of two subscribing witnesses.

WILLIAM P. SUGATT.

Witnesses:

JAMES M. PERKINS,

ROBERT C. BROOKER, Jr.