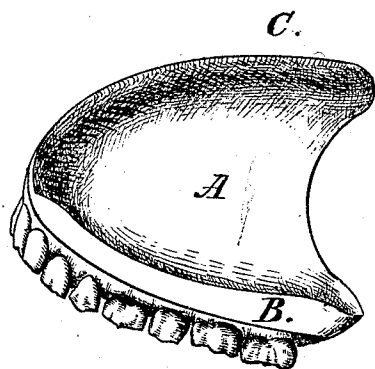


*E. J. Merick,*  
*Plate for Artificial Teeth.*  
*N<sup>o</sup> 67,129. Patented July 23, 1867.*



*Witnesses.*  
*Valentine Beach*  
*Luther Hordt*

*Inventor.*  
*Eldridge J. Merick*

# United States Patent Office.

ELDRIDGE J. MERICK, OF ROCHESTER, NEW YORK.

*Letters Patent No. 67,129, dated July 23, 1867.*

## IMPROVED DENTAL PLATE.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, ELDRIDGE J. MERICK, of the city of Rochester, county of Monroe, and State of New York, have invented a new and useful Improvement in Bases for Artificial Teeth; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing, and to letters of reference marked thereon.

The nature of my invention consists in providing artificial teeth with an elastic base, for the purpose hereinafter described and set forth.

The practical utility of this invention to the patient consists in the ease and comfort with which the piece can be worn, it having a soft, yielding, and elastic substance in immediate contact with the gums and jaws. And further, it is well known in practice that it takes several years time for the alveolar ridge to be absorbed, during which time the plate is constantly losing its proper bearing or foundation, so that with all hard bases the plate bears heavily across the back portion of the palatine arch, which causes the tipping and rocking motion of all hard or stiff plates. The reason is made still more obvious when we realize that in the palatine arch there is a hard bone that does not yield, while the bearing, as described above, is fleshy and constantly changing, so that when pressure is made, as in biting, the foundation gives way, just when we want it to be solid and firm, which has always been a great annoyance to patients. The improvement overcomes this difficulty, so that mastication can be performed with ease and comfort.

To refer to the drawing, A C represents an elastic base. B represents a skeleton-plate or frame, with teeth attached.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction.

Provide a skeleton-plate or frame B, of any substance that can be used for such purpose, set this frame B, with teeth attached, into an elastic base, A C, so that it will adhere to all parts that come in contact. If any of the vulcanite substances are used for the frame the parts will adhere without any preparation. The elastic base A C may be made of any substance or compound that will do for the purpose. I now make use of India rubber, prepared so as to be very elastic and yielding. This elastic base A C is of the same degree of elasticity over the entire surface of the bearing of the upper jaw and palatine arch.

This elastic base can be readily adapted to all the changes of the mouth, without removing the teeth from the frame B, by removing the elastic base A C and inserting a new one, so that when persons have once obtained a set of teeth that suit, they can retain them and keep up with all the changes, as described above, which is a decided advantage.

The manner of making the elastic base A C smooth is by its being vulcanized in contact with polished metal, or, to state more clearly, when the case is waxed, oil the waxed surface and place on it a thin piece of metal. I use block-tin rolled thin. Now take a smooth instrument and burnish it down to the surface of the wax form by rubbing it gently. Bend down some points to hold it in the plaster, flask the case, open it, remove the wax form, and the tin will be found adhering on the opposite side from where it was placed. Now polish the tinned surface with a burnisher and soft cotton.

In brief, this invention removes all obstruction from the palatine arch of the plate, so that the teeth will have their natural bearing on an elastic base on the jaw.

I do not claim a flexible air-chamber, knowing that it has been heretofore in use.

First and mainly, what I claim as new, and desire to secure by Letters Patent, is—

1. The use of an elastic base over the entire surface of the upper jaw and the back portion and sides of the palatine arch.

2. I claim the manner of making the elastic base smooth on the lingual side by means of its being vulcanized in contact with polished metal, for the purpose and uses expressed, and in the manner substantially as set forth.

The foregoing specification is a full and true description of the nature and operation of my invention.

ELDRIDGE J. MERICK.

Witnesses:

VALENTINE BEACH,  
LUTHER NORTHROP.