No. 111,168. PATENTED JAN. 24, 1871.

J. B. BEERS.

ATMOSPHERIC PRESSURE ATTACHMENT FOR DENTAL PLATES.

Fig. 1.

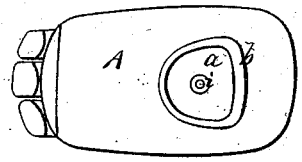


Fig. 2.

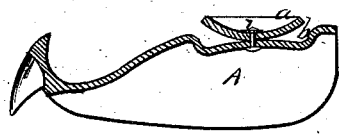
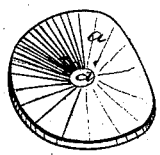


Fig. 3.



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JOHN B. BEERS, OF SAN FRANCISCO, CALIFORNIA.

Letters Patent No. 111,168, dated January 24, 1871.

IMPROVEMENT IN ATMOSPHERIC-PRESSURE ATTACHMENTS FOR DENTAL-PLATES.

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, JOHN B. BEERS, of the city and county of San Francisco, State of California, have invented an improved Atmospheric-Pressure Attachment for Dental-Plates; and I do hereby declare the following description and accompanying drawing are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvement without further invention or experiment.

My invention relates to an improved device to be attached to dental-plates in order to provide a more perfect means of retaining them in position in the mouth and prevent them from being detached and falling down during the process of mastication; and

It consists in the attachment of a piece of any flexible or elastic material, which has been previously given the proper shape to the upper or palatine side of the plate, in such a manner that it will serve to hold the plate in position by atmospheric pressure.

In order to more fully illustrate and explain my invention, reference is had to the accompanying drawing forming a part of this specification, in which—

A represents the dental-plate.

When these plates are sustained against the roof or palate of the mouth by the pressure produced by exhausting the air from the usual cavity in the plate, they are liable to become detached and fall down into the mouth while the wearer is speaking or eating. This is caused by pressure applied to some particular spot, which causes the plate to rock, and thus admits the air between the plate and palate. To prevent this I take any flexible or elastic material, such as India rubber, and cut out a disk, *a*, of the desired size and shape.

A chamber formed of thin metal, and pressed to a concave shape, can also be used.

The plate A is first formed with a depression or cavity, *b*, in the same manner as the ordinary suction-cavity, and of a sufficient size to permit the disk *a* to lie in it.

The disk *a* is then secured in this depression by a rivet, *i*, which passes through it at or near its center into or through the plate A, to which it is secured, thus allowing the edges or rim of the disk to be free.

When a metal chamber is used it should be secured to the plate in the same manner by some suitable universal joint, which will allow it to rock freely in the mouth.

When this attachment is used it is possible for the plate to be free at all points except where it is held by the disk, and yet be retained in its position in the mouth, as it will be impossible to detach the disk by the service which it performs in mastication or while the wearer is speaking.

The point of attachment being at the center, the free rim of the disk will be held by atmospheric pressure, even should its center be drawn downward.

Dental-plates provided with this attachment will also be worn more comfortably, as no local or unusual pressure is caused in the mouth unless it is attempted to remove the plate.

The plate itself will be retained against the palate in the usual manner by the pressure of the air, the disk lying in the depression formed to secure it.

Having thus described my invention,

What I claim, and desire to secure by Letters Patent, is—

1. In combination with the dental-plate A, provided with a recess, *b*, the disk *a*, or its equivalent, secured in said depression at or near its center, substantially as and for the purpose above described.

2. As a new article of manufacture, the disk *a*, prepared to be attached to dental-plates in the manner substantially described.

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