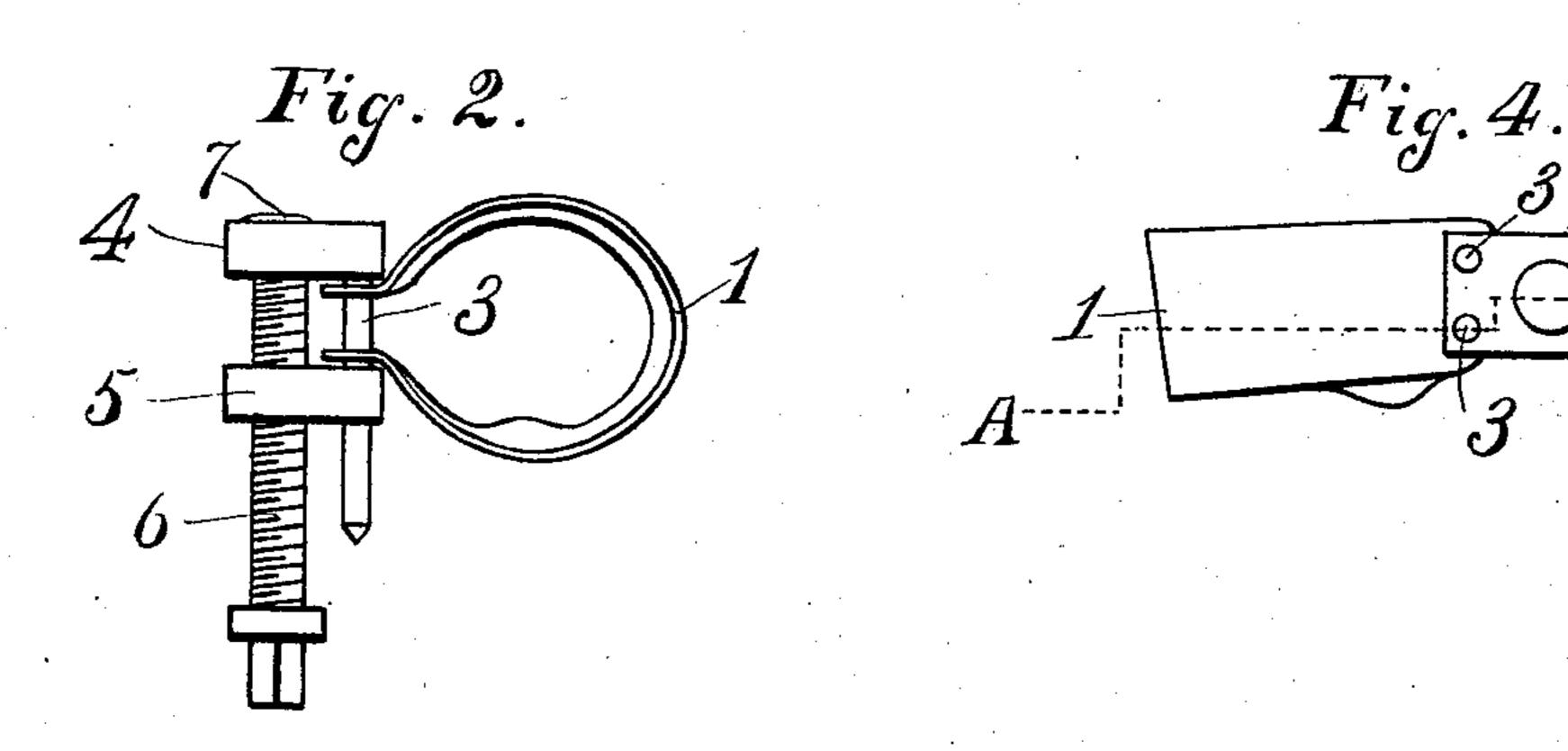
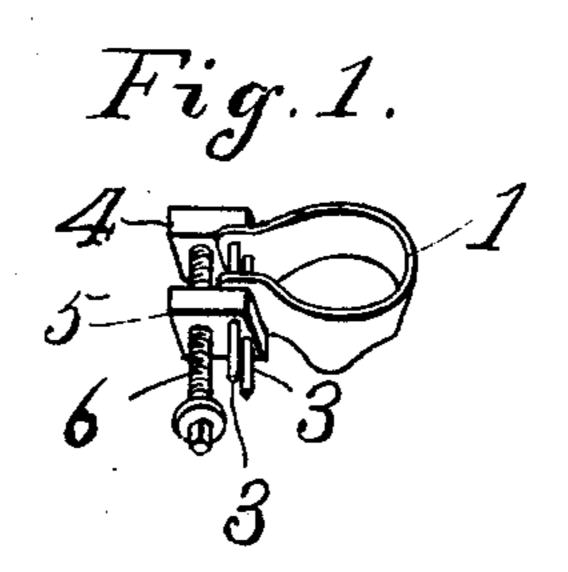
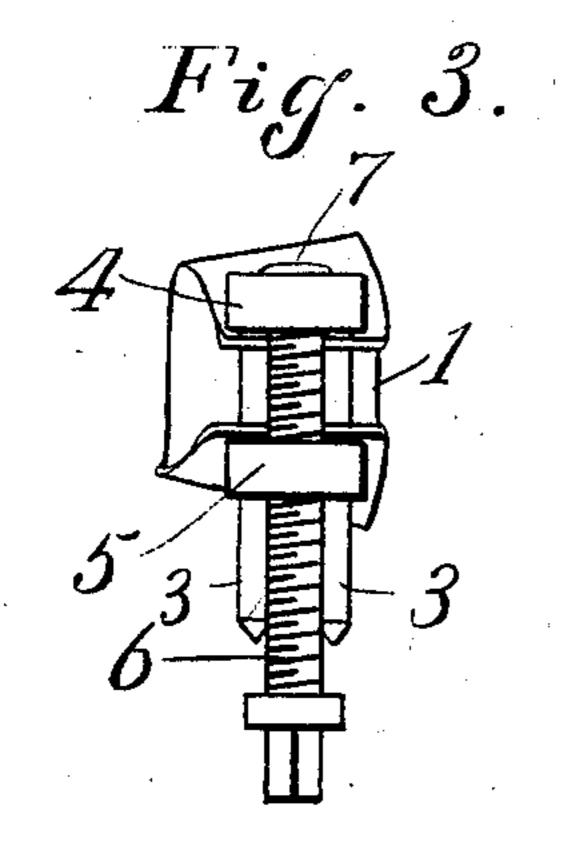
A. J. HINIKER. MATRIX BAND RETAINER.

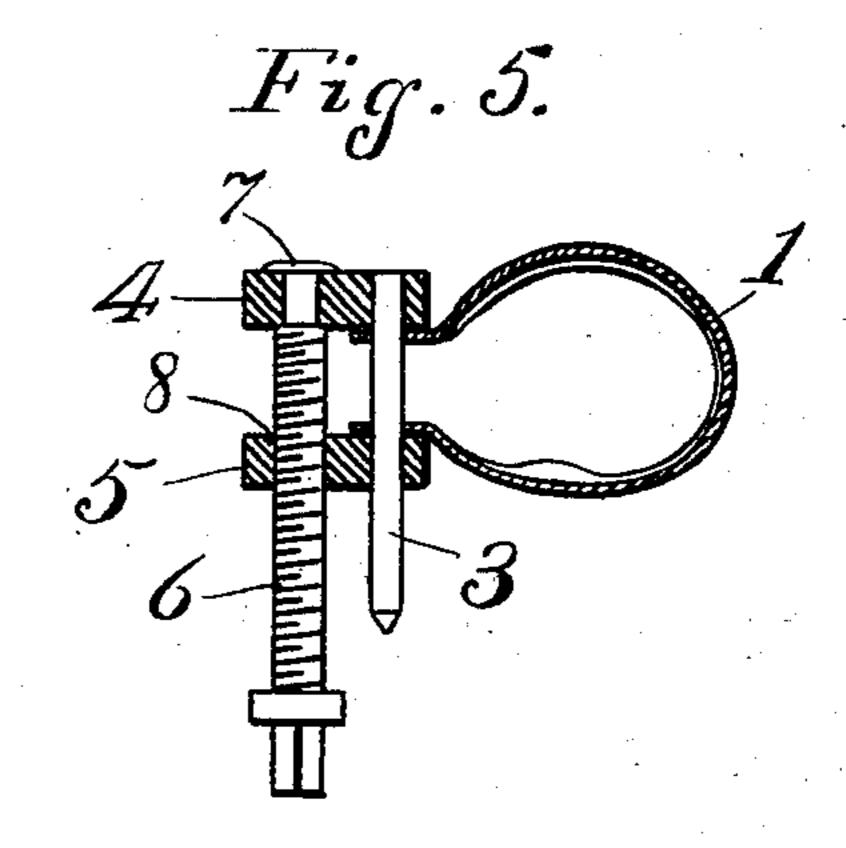
Application filed Sept. 23, 1901.)

(No Model.)









WITNESSES: KLockwood Hening, 2 Oecelia Powning.

Fig. 6.

INVENTOR.
A. J. Hiniker

FM. Wight. ATTORNEY.

United States Patent Office.

ANDREW J. HINIKER, OF SAN FRANCISCO, CALIFORNIA.

MATRIX-BAND RETAINER.

SPECIFICATION forming part of Letters Patent No. 698,280, dated April 22, 1902.

Application filed September 23, 1901. Serial No. 76,318. (No model.)

To all whom it may concern:

Be it known that I, Andrew J. Hiniker, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in Matrix-Band Retainers, of which the following is a specification.

Myinvention relates to an improved matrixband retainer, the object of my invention being to provide a device of this character which
can be adjusted easily upon the tooth without
danger of the retainer pressing on the gums
and which will also admit of a wedge being
placed between said matrix-band and the adjoining tooth in order to hold the band up to
the tooth which it is desired to fill; one, moreover, in which the band can be constricted
very firmly around the tooth without danger
of slipping out of the retainer and one in
which the construction shall be simpler than
those heretofore in use.

My invention therefore resides in the novel construction, combination, and arrangement of parts for the above ends, hereinafter fully specified, and particularly pointed out in the claim.

In the accompanying drawings, Figure 1 is a perspective view of my improved device. 30 Fig. 2 is an enlarged plan view of the same. Fig. 3 is an enlarged end view. Fig. 4 is an enlarged side view. Fig. 5 is a section on the line A A of Fig. 4, and Fig. 6 is a plan view of the matrix-band blank.

Referring to the drawings, 1 represents a matrix-band adapted to fit around a tooth preparatory to filling thereon. Each end of said band has two perforations 2, through which pass guides 3, fixedly secured at one 40 end in a head 4, and passing through a sliding head 5. The perforated ends of the band are held on said guides between said heads, and thus when said heads are brought together by the sliding of the head 5 upon the 45 guides 3 the matrix band is constricted around the tooth. In order to slide said head 5 upon the guides 3, there is pivoted a screw 6, having one end 7 rotatable in the head 4, and the head 5 having a threaded aperture 8,

in which the screw 6 works. Said screw 6 is 50 squared at the end to fit in the end of the tightening-key. (Not shown.) It will now readily be seen that by screwing the screw 6 in one direction the band will be constricted around the tooth, and by screwing it in the 55 opposite direction the band will be loosened.

The valuable features of this invention are as follows: By securing the ends of the matrix-band by means of two perforations in each end through which the guides 3 pass the 60 heads 45 may be made quite small, so that the whole retainer for said band is small. This renders the device much more convenient in operation, since the tooth to be filled is much more accessible. Thus with this con- 65 struction it is easy to insert a wedge between the band and the adjoining tooth to hold the band up to the tooth to be filled. Again, in prior devices the band has been secured by its end being bent out and passed through slits 70 in the heads 45. Not only does this construction necessitate much larger heads, thereby rendering the retainer of comparatively large size and awkward in operation, but the construction is insecure, since the hold of the 75 band by its bent ends in said slits is not positive; but said bent ends may possibly slip out of said slits under great strain.

By using the guides 3 not only as guides for the sliding of the head 5, but as retainers 80 for the ends of the band, the construction is greatly simplified.

The matrix-band retainer comprising two heads, the parallel guides passing through 85 perforations in one of said heads and guiding the movement of the heads toward each other, means for so moving said heads to and from each other, and the matrix-band having at

each end two perforations through which the 90

guides pass, substantially as described.
In witness whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ANDREW J. HINIKER.

Witnesses:

FRANCIS M. WRIGHT, CECELIA POWNING.