

(No Model.)

T. B. FLETCHER.
DENTAL MATRIX.

No. 369,701.

Patented Sept. 13, 1887.

Fig. 1

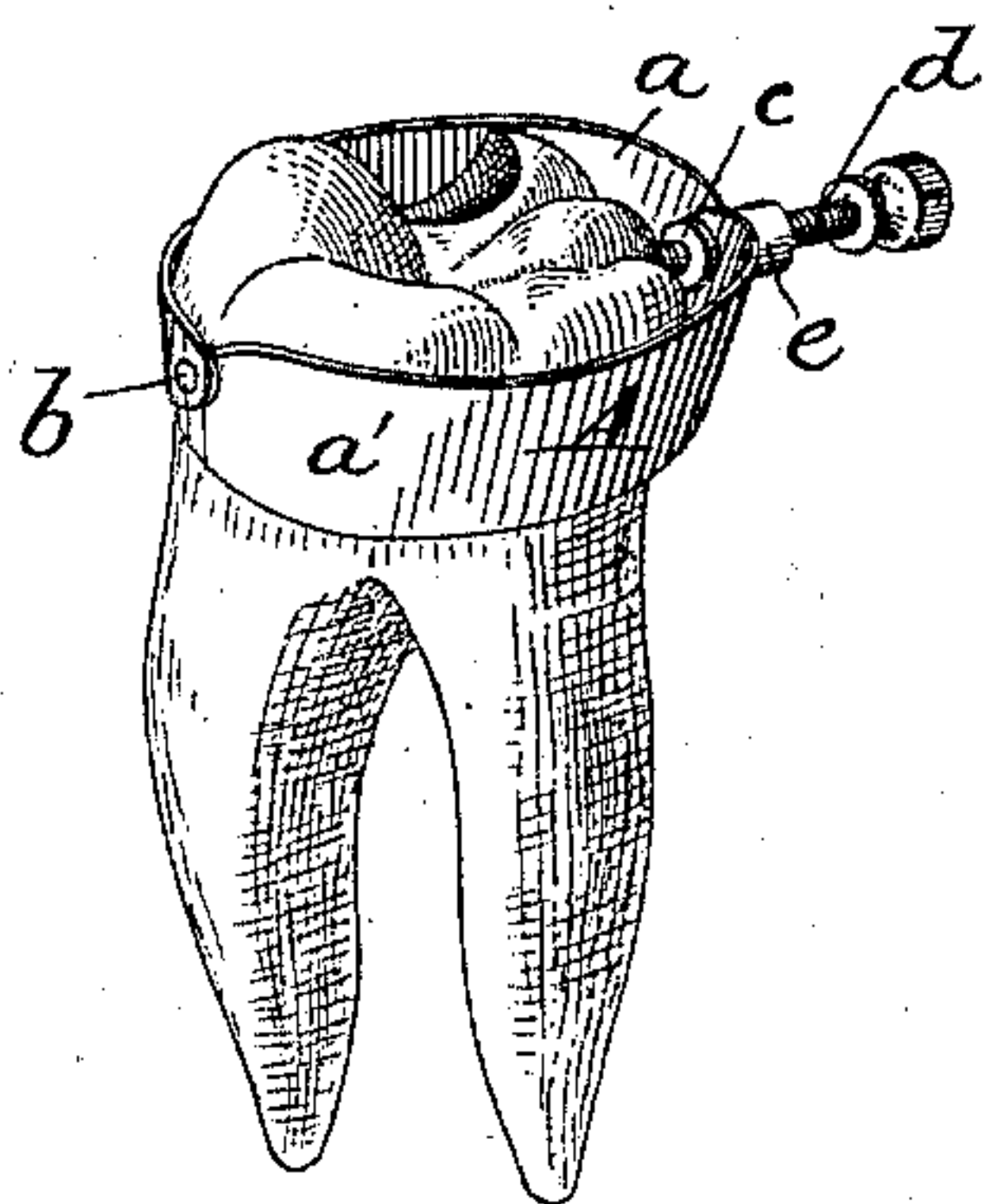


Fig. 2.

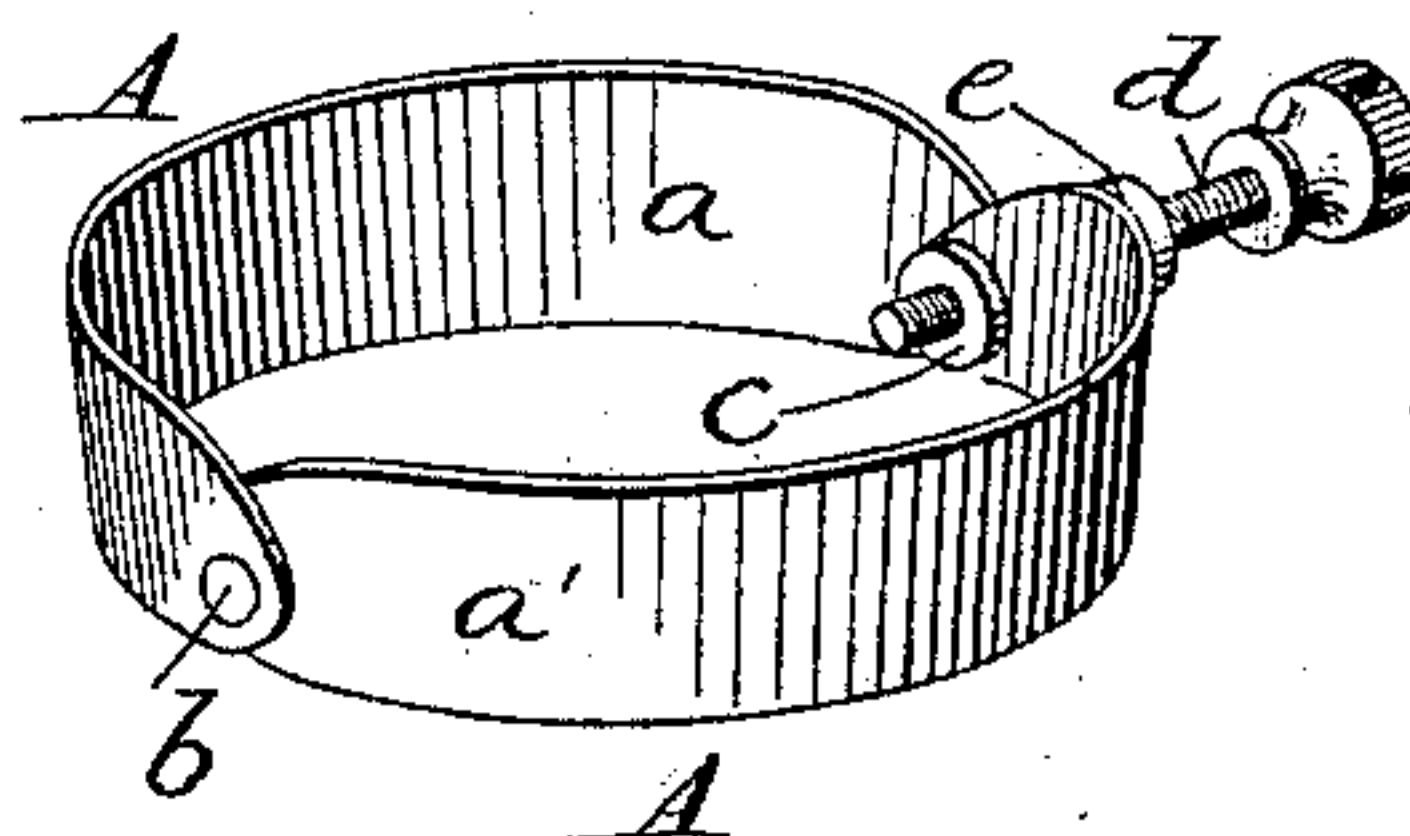


Fig. 3.

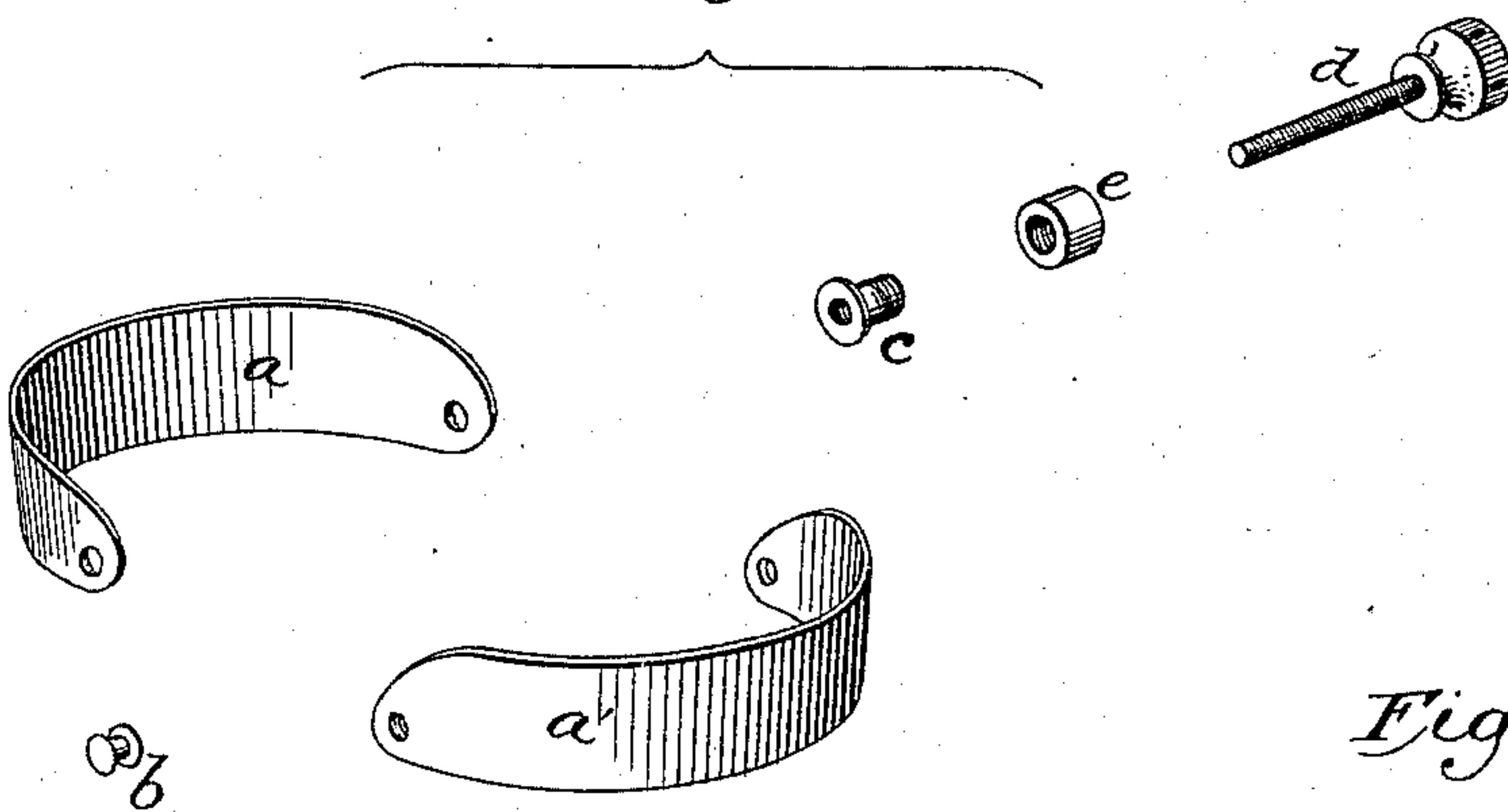
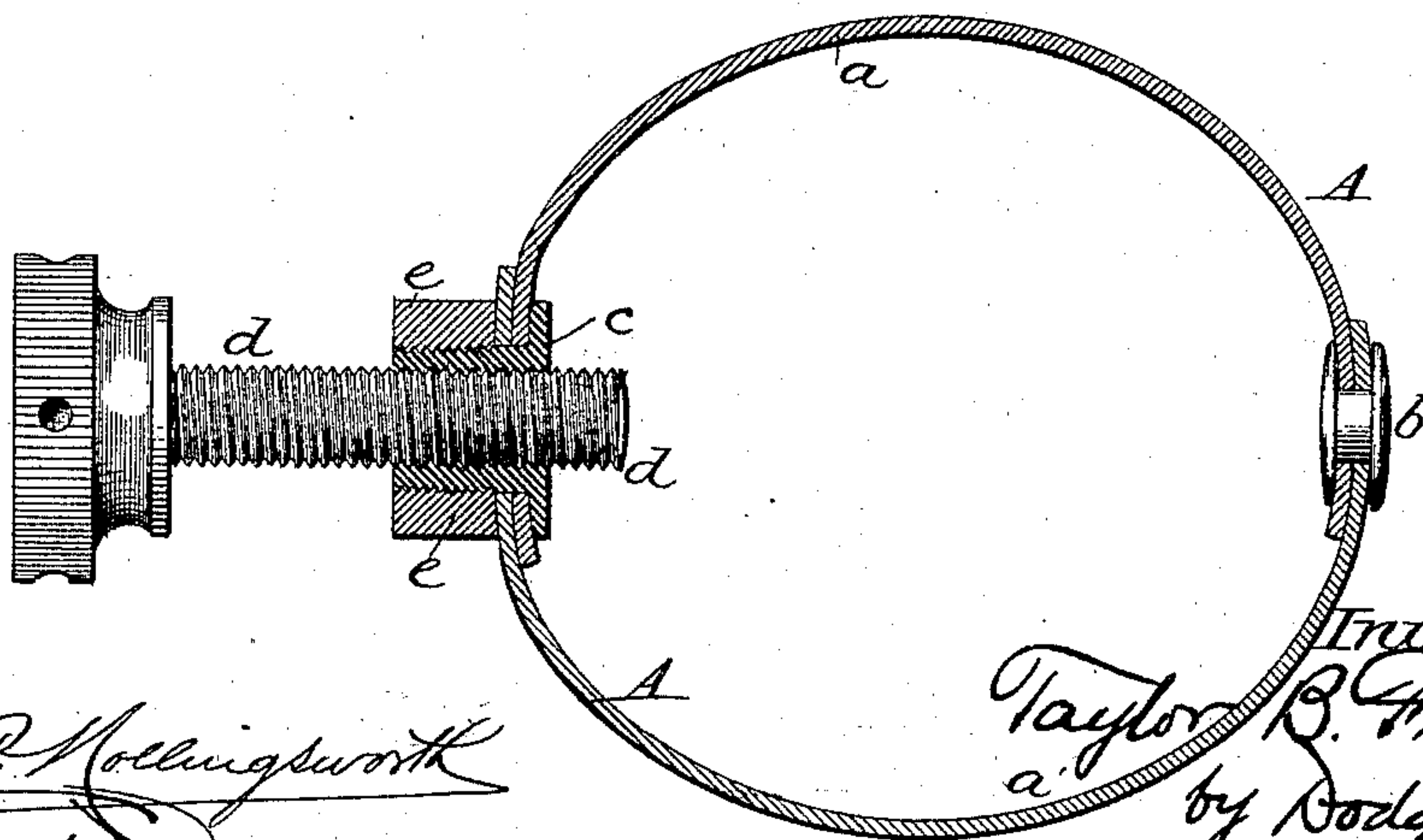


Fig. 4.



Attest:

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UNITED STATES PATENT OFFICE.

TAYLOR B. FLETCHER, OF PORTAGE, WISCONSIN.

DENTAL MATRIX.

SPECIFICATION forming part of Letters Patent No. 369,701, dated September 13, 1887.

Application filed April 6, 1887. Serial No. 233,909. (No model.)

To all whom it may concern:

Be it known that I, TAYLOR B. FLETCHER, of Portage, in the county of Columbia and State of Wisconsin, have invented certain new and useful Improvements in Dental Matrices, of which the following is a specification.

My invention relates to matrices to be used in filling teeth; and it consists in a novel construction of the same, as hereinafter set forth and claimed, whereby the matrix is permitted to adapt itself to the form of the tooth to which it is applied.

Referring to the accompanying drawings, Figure 1 is a perspective view showing my matrix applied to a tooth. Fig. 2 is a perspective view of the matrix removed from the tooth; Fig. 3, a perspective view of the parts separated, and Fig. 4 is an enlarged horizontal sectional view.

Heretofore dental matrices have been made of a single band of thin metal and tightened by a screw, and while said matrices work fairly well when the crown and neck of the tooth are of the same size, they are practically useless where the crown is larger than the neck of the tooth, as it is in a majority of cases, because the matrix will fit only the largest part of the tooth.

The object of my invention is to provide a self-adjusting matrix which will fit the crown and the neck of the tooth at the same time, more particularly the neck of the tooth or the cervical margin, as it is at this point that the matrix is most needed.

Referring to the drawings, A represents the band of the matrix which encircles the tooth, said band comprising two or more thin and preferably flat metallic strips, *a a'*, united at one end by a rivet, *b*, and at the other end by a hollow sleeve, *c*, as shown in Figs. 1, 2, and 4, thus forming a continuous band. The rivet *b*, while firmly uniting the strips *a a'*, allows said strips to turn upon said rivet as a pivot, and thereby bring the sides of the band A parallel or at an angle to each other. The hollow sleeve *c* is provided at its inner end with a head or enlargement, and is threaded internally throughout its entire length to receive a screw, *d*, and said sleeve is also threaded on its exterior for a portion of its length at its outer end, as shown in Fig. 4. A nut, *e*, screws upon the outer end of the sleeve *c*, as shown, and thereby connects the ends of the strips *a a'*.

As the matrix is applied to the tooth, the two sides or strips *a a'* may readily adapt themselves to the form or shape of the tooth, and by turning the screw *d* up against the tooth the matrix will be firmly and securely held in place. The strips *a a'*, forming the band A, are free to turn upon the rivet *b* and the hollow sleeve *c*, although the said strips are secured to each other by the said rivet and sleeve.

Instead of forming a screw-thread upon the exterior of the sleeve *c*, and providing said sleeve with a nut, as *e*, a collar might be mounted upon and brazed to the said sleeve. It is likewise apparent that the strips *a a'* may each be formed of more than one piece of metal if it should be found desirable so to do.

The head of the screw *b* will preferably be provided with sockets or holes to receive an instrument by which it may be turned; or said screw may be provided with a milled head.

Having thus described my invention, what I claim is—

1. A matrix to be used in filling teeth, composed of a thin band of steel or similar material formed of two or more parts pivotally connected to each other and a device for securing the matrix in place upon the tooth.

2. In a dental matrix, a band comprising the strips *a a'*, (two or more,) pivotally connected at opposite sides of the band, and a set-screw or equivalent device for securing the band in position.

3. In combination with the band A, composed of the metallic strips *a a'*, a rivet, *b*, uniting said strips at one end, a hollow sleeve, *c*, threaded internally and uniting the strips at their opposite ends, and a screw, *d*, passing through said sleeve, all substantially as shown and described.

4. In combination with strips *a a'*, rivet *b*, loosely connecting the strips at one end, sleeve *c*, threaded externally and internally and pivotally connecting the strips *a a'* at their other end, a nut, *e*, upon the outer end of sleeve *c*, and a screw, *d*, passing through the sleeve, all substantially as shown.

In witness whereof I hereunto set my hand in the presence of two witnesses.

TAYLOR B. FLETCHER.

Witnesses:

S. L. PLUMB,
E. L. CLARK.