

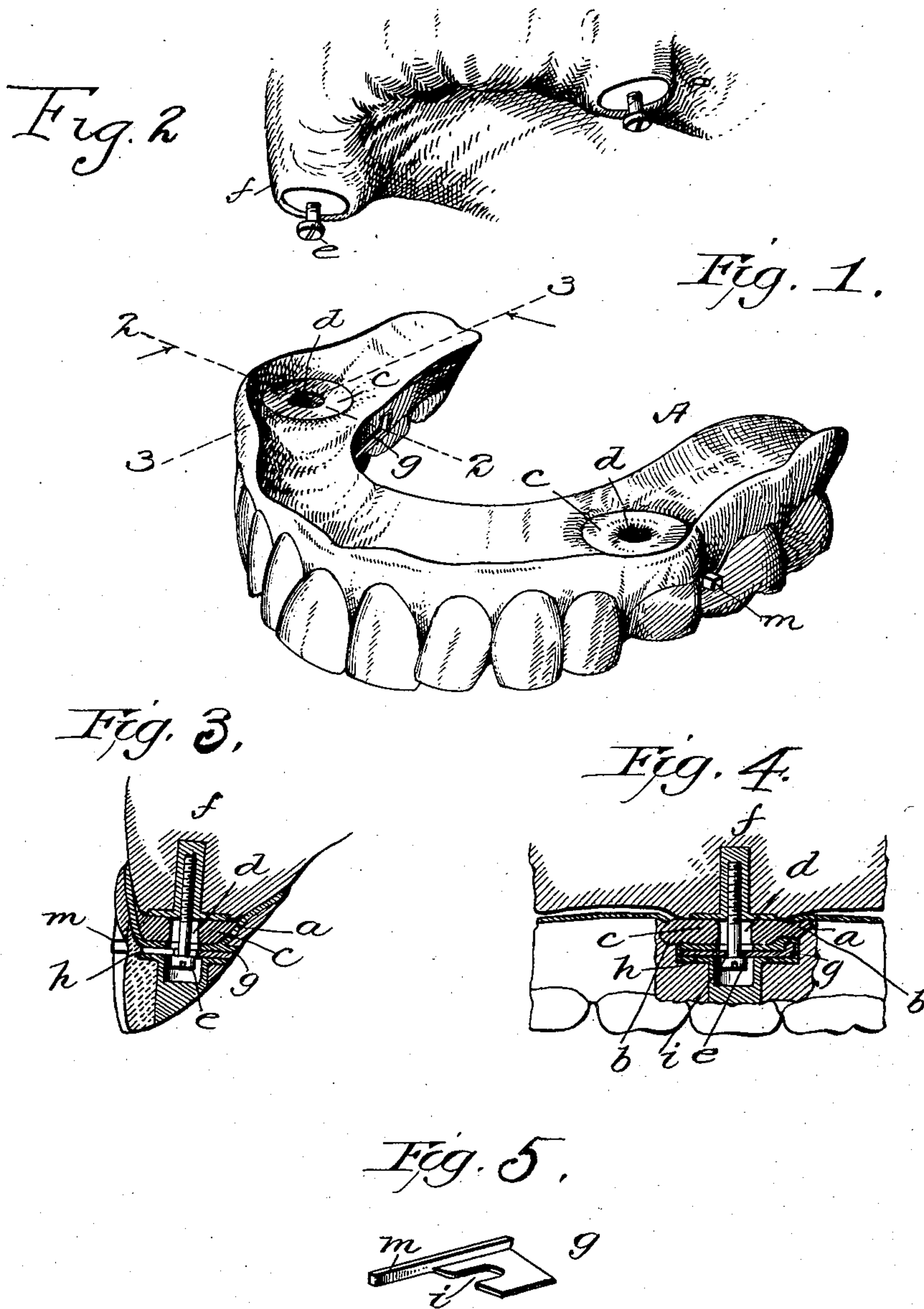
No. 744,292.

PATENTED NOV. 17, 1903.

C. M. CARR.  
ANCHORED DENTURE.

APPLICATION FILED DEC. 30, 1902.

NO MODEL.



Witnesses:  
*W. T. Estabrook*  
Watts T. Estabrook

Inventor:  
Cassius M. Carr  
By *Thos. G. DuBois & Co.*  
His Atty.



# UNITED STATES PATENT OFFICE.

CASSIUS M. CARR, OF COLORADO SPRINGS, COLORADO.

## ANCHORED DENTURE.

SPECIFICATION forming part of Letters Patent No. 744,292, dated November 17, 1903.

Application filed December 30, 1902. Serial No. 137,185. (No model.)

*To all whom it may concern:*

Be it known that I, CASSIUS M. CARR, a citizen of the United States, residing at Colorado Springs, in the county of El Paso and State of Colorado, have invented a new and useful Improvement in Anchored Dentures, of which the following is a specification.

My invention relates to an improvement in so-called "anchored" adjustable and removable dentures, and it partakes of the nature of both bridge and plate work, although it is the purpose of my invention to provide a saddle instead of the ordinary plate and construct it to fit the ridge of the gums and have embedded in it the artificial teeth, the entire denture being removably anchored by improved mechanism to the roots of teeth.

With the foregoing object in view my invention consists in means partaking of the nature of those disclosed in Letters Patent Nos. 581,335 and 583,565, granted to me; and it consists more particularly in an improved cushioning means interposed between the denture and the occluding root to which it is to be removably fastened or anchored and in the means employed for locking and unlocking the denture from its anchorage.

The invention still further consists in certain novel features of construction and combinations of parts, which will be hereinafter described more fully, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a top view of the saddle. Fig. 2 is a view of the jaw, showing two roots of teeth prepared to receive the denture. Figs. 3 and 4 are sectional views, and Fig. 5 is a detail.

A represents my improved denture. It comprises a saddle, which is fitted to the ridge of the jaw to which the denture is to be applied, and it has a full or partial complement of teeth securely attached thereto, as required. At opposite points, preferably, the saddle is chambered out, as at *a a*, and in these chambers lateral branches *b b* are formed in adequate numbers. Soft-rubber cushions *c c* are formed in these chambers, the rubber being run into the laterals, where it is vulcanized fast to the material of which the denture is composed, thus holding the soft-rubber cushion in place in the chamber

against the possibility of displacement. A hole *d* is formed centrally through each of these soft-rubber cushions to receive the stud *e*, projecting from the roots of the teeth opposite said openings. These studs may consist of screws or equivalent devices having threads on their inner ends, which are screwed firmly into metal tubes embedded in the roots *f f*, and the heads on the outer ends are round heads, as contradistinguished from the T-shaped heads disclosed in my former patent. When the denture is in place, these soft-rubber cushions rest upon the roots *f f*, and the shafts of the studs *e e* are received in the holes *d d* of the cushions.

The locking of the denture may be accomplished in any approved manner; but I have shown a simple and effectual means for doing this which consists of a slide-plate *g*, fitted in an aperture *h* in the body of the denture and provided with a slot *i*, adapted to straddle the neck of the stud, the width of the slot of course being about the same as the diameter of the neck of the stud and less than the diameter of the head of the stud, so that when the slide is slid into the aperture the edges of the slide embrace the neck of the stud and lock the denture to its anchorage and when pushed in the opposite direction allows the latter to be withdrawn therefrom. The locking-slide is of such a length that its inner edge is perfectly flush with the surface of the denture when forced in and entirely closes the aperture in which it slides, so that it will not permit the entrance of anything from the wearer's mouth, and at the same time it presents a perfectly smooth surface to the tongue. The slide is provided with a projection *m*, which protrudes slightly through the outer surface of the denture when the latter is locked, so that the wearer may unfasten the denture by merely pushing inwardly upon the projecting end. The location of this locking-slide, with its projection, is usually such that the latter comes in a recess formed between two teeth, so that it does not irritate the mouth or lips in any wise.

The provision of the soft-rubber cushioning means *c* results in a yielding and cushioning effect, so that during mastication the pressure is taken up by the denture on ac-



count of the yielding support of the latter, and a light and yielding pressure is transmitted by the denture to the roots of the teeth, approximating the action of one natural tooth in occlusion with another and stimulating a healthful circulation without producing any inflammation of the surrounding tissues.

The locking means is effectual in retaining the denture against accidental displacement, at the same time permitting the removal thereof upon occasion and in a much easier, simpler, and more rapid manner than in my former construction.

It is evident that slight changes might be resorted to in the form and arrangement of the several parts described without departing from the spirit and scope of my invention, and hence I do not wish to limit myself to the exact construction herein set forth; but,

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

1. An improved denture comprising a saddle portion having chambers or pockets formed therein and provided in said chambers or pockets with soft-rubber cushions vulcanized therein.

2. An improved denture comprising a saddle portion having chambers or pockets formed therein and laterals extending from the chambers or pockets into the body of the denture, and soft-rubber cushions in said chambers or pockets and laterals vulcanized to the material composing the saddle.

3. The combination with a stud affixed upon a tooth-root and protruding therefrom, of a denture and a locking-slide having sliding connection therewith, adapted to be locked to the stud.

4. The combination with a stud affixed in a tooth-root or other support, of a denture having a slide provided with a slot which straddles the stud and locks the denture removably thereto.

5. The combination with a stud affixed to a tooth-root or other support, of a denture provided with cushioned chambers or pock-

ets, and sliding lock-plate permanently connected therewith for locking to the stud.

6. The combination with a stud affixed to a tooth-root or other support, of a denture provided with cushioned chambers or pockets, and sliding lock-plate connected therewith for locking to the stud, said lock-plate having a projection protruding through the denture to be manipulated to unlock the denture.

7. The combination with a suitably-supported stud, of a denture, a cushioning means carried thereby and having a way formed therebeneath and movable means independent of the stud and located in the way whereby to removably secure the denture to the stud.

8. The combination with a suitably-supported stud, of a denture having a way formed therein, movable means independent of the stud, the means located in and completely filling the way to prevent the ingress of foreign matter thereinto, the means adapted to removably secure the denture to the stud.

9. The combination with a suitably-supported stud, of a denture, the locking means independent of the stud and a locking means carried by the denture adapted to removably secure the denture and stud together and a projection on the locking means to permit the latter to be manipulated whereby to release the denture and stud.

10. The combination with a stud, of a denture, a locking device carried thereby, the locking device independent of the stud and normally flush with the outer surface of the denture and means carried by the locking device to permit its manipulation to release the denture from the stud.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

CASSIUS M. CARR.

Witnesses:

FRANK C. CHAMBERLAIN,  
J. W. SHEAFOR.