T. McCULLOUGH.

ARTIFICIAL TOOTH.

APPLICATION FILED NOV. 19, 1907.

917,886.

Patented Apr. 13, 1909

Fig. I.

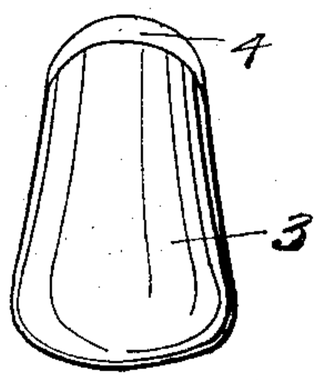


Fig. II.

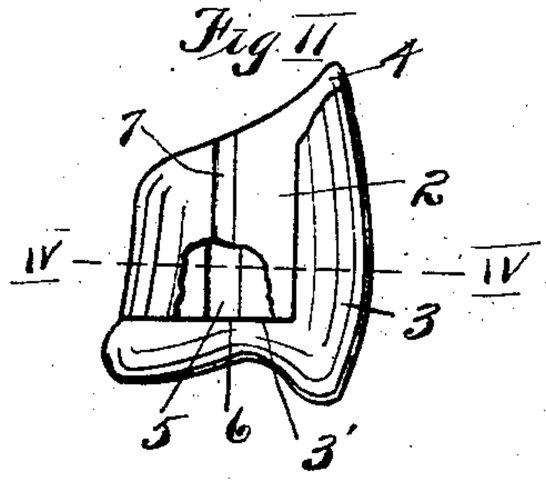


Fig. III.

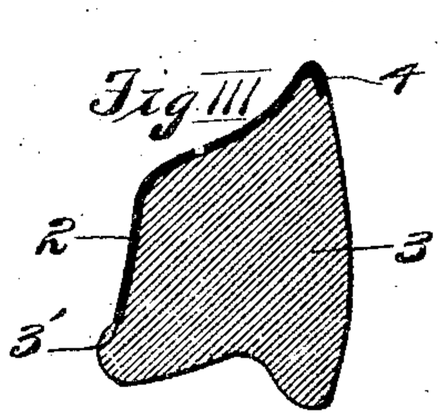


Fig. IV.

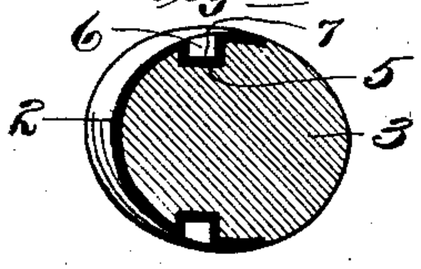


Fig. V.

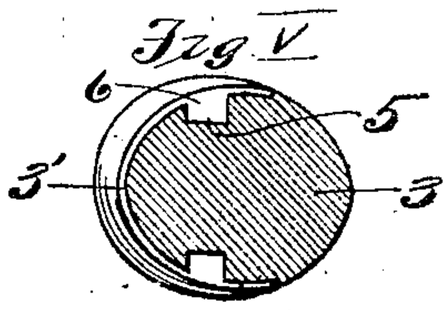
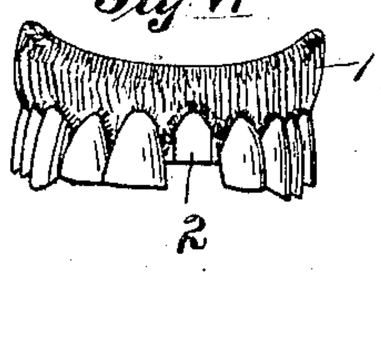


Fig. VI.



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ARTIFICIAL TOOTH.

No. 917,886. Specification of Letters Patent. Patented April 13, 1909.

Application filed November 19, 1907. Serial No. 402,797.

To all whom it may concern:

Be it known that I, THOMAS McCULLOUGH, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Artificial Teeth; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in artificial teeth and has for its principal object to provide a device of that class which may be firmly and permanently mounted in an ordinary bridge, plate, or like carrier.

A further object of my invention is to provide the improved details of structure which will presently be fully described and pointed out in the claims, reference being had to the accompanying drawings forming part of this specification, in which like reference numerals refer to like parts throughout the several views, and in which:—

Figure I is a front view of an artificial tooth constructed according to my invention. Fig. II is a view of same in side elevation. Fig. III is a central longitudinal section of same. Fig. IV is a cross section on the line IV—IV, Fig. II. Fig. V is a similar view with the cup socket removed. Fig. VI is a view showing the manner of combining the teeth with a plate, or like structure.

Referring more in detail to the parts:—1 designates a plate, of the usual construction and material, and adapted for carrying a set of artificial teeth. Within plate 1 are recesses, of various shapes and sizes, and secured in each of said recesses is a socket 2, preferably of platinum or like material, which is cut away in front to expose that portion of a porcelain or like tooth body which it may carry, but is provided with full back and base portions and a front rim 4, within which said porcelain or like body may be posited and firmly secured, preferably by cement. At each side and opening through the root end of body 3, is a groove 5, which extends almost to the free end of the tooth body and is there provided with a shoulder 6; the side of such shoulder, as well as the groove sides, being preferably squared and the tooth body portion being provided with an inner shoulder or ledge 3′ to form a base against which the socket cup 2 may abut. Projecting inwardly from the side of sockets 2 are the ribs 7, which are adapted to fit within the grooves 6 when the teeth are posited in their sockets, as will be described.

When in use, the sockets which may be made up at a factory, or a dentist's private laboratory, are applied to a mounting of any suitable description, such as a bridge or plate, that is adaptable for carrying one or more artificial teeth, as may be desired. When, for instance, it is desired to insert a single artificial tooth between natural teeth in a patient's mouth, the socket is fitted to the recess and permanently fixed in position by any of the well known devices used for that purpose; the porcelain or like tooth body member is then fitted to the space between the natural teeth and adjusted to the socket, the groove and rib arrangement permitting the porcelain or like body to be accurately guided to the position which it will ultimately occupy, although permitting its free insertion into and withdrawal from the socket while being so adjusted. When the porcelain or like body has been properly fitted, cement is placed in the socket and the tooth body finally inserted and permanently held therein, as in the use of an ordinary crown, the groove and rib parts meshing together and forming a union that will prevent the tooth body loosening in its socket when in use.

The application of my improvements to plate work is substantially similar to that of the single mounting, with the exception that in the former a number of sockets are set side by side in the plate and the artificial teeth fitted to form a "set".

In the larger use the sockets may be soldered to a suitable portion of the plate, or may be baked or formed into the plate body, the application of the porcelain or like body to the socket being as previously described.

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

1. An artificial tooth comprising a body member, and a socket cup adapted for inclosing said member at the base, rear and sides and exposing same at the front and free end, and a rim on said base adapted for projection over a portion of the exposed front of said body member, said body member being provided with side grooves and said cup with

ribs adapted for seating in said grooves when the parts are assembled, substantially as set forth.

2. An artificial tooth comprising a porcelain body member having side grooves opening through its root end and a transverse peripheral shoulder for abutment against the free end of a socket cup, substantially as set forth.

3. An artificial tooth comprising a porcelain body member adapted for insertion into a socket cup, said body member being provided with grooves adapted for coöperation with inturned ribs on a socket cup and with a ledge on its outer surface for abutment against the end of a socket cup, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS McCULLOUGH.

Witnesses:
E. E. ARMSTRONG,
HAROLD E. RICHARDS.