(No Model.)

J. J. R. PATRICK.

ARTIFICIAL TOOTH.

No. 346,312. Patented July 27, 1886.

Fig. 1

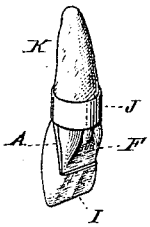


Fig. 3.

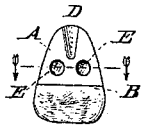


Fig. 4.

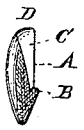


Fig. 7.

Fig. 6.

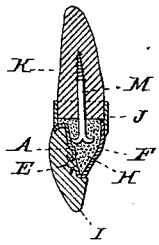


Fig. 5.

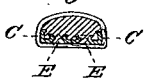


Fig. 2.

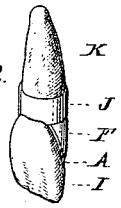


Fig. 8.

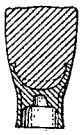
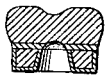


Fig. 9.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOHN J. R. PATRICK, OF BELLEVILLE, ILLINOIS.

ARTIFICIAL TOOTH.

SPECIFICATION forming part of Letters Patent No. 346,312, dated July 27, 1886.

Application filed March 5, 1886. Serial No. 194,155. (No model.)

To all whom it may concern:

Be it known that I JOHN J. R. PATRICK, a citizen of the United States, residing at Belleville, in the county of St. Clair and State of Illinois, 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 letters or figures of reference marked thereon, which form a part of this specification.

Figures 1 and 2 of the drawings are representations of this invention, and are perspective views. Figs. 3, 4, and 5 are details, and show back view, side view, and horizontal section of the body of the tooth. Fig. 6 is a vertical section. Fig. 7 is a detail. Figs. 8 and 9 are modifications.

My invention relates to artificial teeth; and it consists in the construction and novel combination of parts, as will be hereinafter described, and pointed out in the claims.

Porcelain teeth as now commonly made have platinum in the form of pins or tubes inserted in the teeth when in a soft condition or state, and the teeth are afterward fastened by soldering the pins, with the teeth, to plates of metal. The insertion of pins in porcelain teeth tends to weaken the strength of the porcelain. To obviate this difficulty I have made a platinum back, A, so constructed as to cover the lingual surface B, and surround the lateral and cervical margins C and D of the tooth, and in the place of inserting platinum pins into the porcelain I cause the porcelain to pass through one or more holes, E, which are made in the platinum back A, after the manner of the holes in a nutmeg-grater or the like, so as to present small sharp divergent points, to be embraced by the clay, as well as a hole or holes for the clay to pass through, by which means greater strength is given to the body of the tooth.

One of the most useful applications for which this invention is designed is the construction of artificial crowns to be fastened to the roots of natural teeth, and when used for this purpose a platinum or gold back or lingual surface, F, is struck up, in a die prepared for that purpose, in such a manner as to represent the natural form of the lingual surface F, and is soldered to the platinum back A on the back of the tooth. This leaves a space, H, between the two plates of platinum.

The attachment of the artificial crown I to the natural root K is made by first fitting a band, J, around the natural root immediately below the margin of the gum. This band J is then removed and soldered to the artificial tooth-crown I, and when perfectly soldered the space H is impervious to fluids, giving room for the cement and the split end of the conical screw-post M, which forms a fixed point by means of its tapering thread in the natural root. This mode of attaching platinum backs to porcelain or artificial teeth applies as well to that class of teeth known as "plate-teeth"—*i. e.*, teeth that are to be soldered to gold, platinum, or silver plates. The lingual surfaces or platinum backs for the teeth are struck up in dies, which dies embrace all the different forms of plates that are made of gold or platinum. The attachment of the plates is made to all of the teeth in the same manner, and the forms of the plates will vary only as the forms of the teeth vary. The platinum base of the teeth, upper and lower, extends upward on the lateral margins, and is bent into the porcelain clay at the extreme lateral points. This, with the concavity of the platinum at the base, gives great strength to the tooth.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination, with a porcelain tooth, of a platinum base having points extending into the porcelain crown, the said platinum also extending upward on the lateral margins of the tooth, and bent into the porcelain clay at the extreme lateral points, substantially as specified.

2. The combination, with a porcelain tooth, of a platinum base extending around the cervical border into the body of the tooth, forming a concavity at its base and extending upward on the lateral margins of the tooth, and bent into the clay at the extreme lateral points, substantially as specified.

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

JOHN J. R. PATRICK.

Witnesses:
FRED SUNKEL,
FRANK ANDERSON.