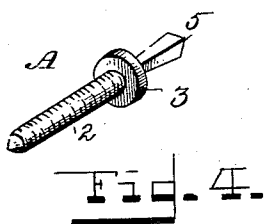
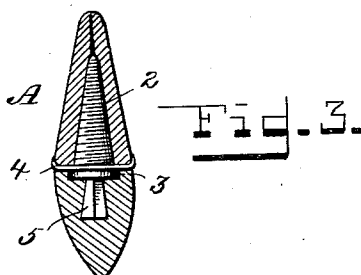
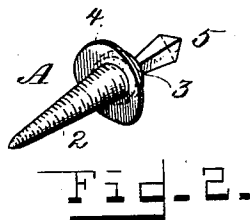
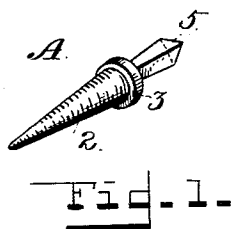


(No Model.)

F. E. HANSEN.
ARTIFICIAL TOOTH PLUG.

No. 403,428.

Patented May 14, 1889.



Witnesses

J. Thomson Cross
A. G. Kuyper

Inventor,

Florian E. Hansen,
By his Attorney *J. M. Yzraga.*

UNITED STATES PATENT OFFICE.

FLORIAN EMILIUS HANSÈN, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR TO
MARY COWAN HANSÈN, OF SAME PLACE, AND OLIVIA PETRINA HANSÈN,
OF ST. LOUIS, MISSOURI.

ARTIFICIAL TOOTH-PLUG.

SPECIFICATION forming part of Letters Patent No. 403,428, dated May 14, 1889.

Application filed March 16, 1889. Serial No. 303,542. (No model.)

To all whom it may concern:

Be it known that I, FLORIAN EMILIUS HANSÈN, a citizen of the United States of America, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Connecting-Plugs for Artificial Tooth-Crowns; 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 letters and figures of reference marked thereon, which form a part of this specification.

My invention has relation to improvements in artificial teeth; and the object is to provide a connecting means for an artificial tooth-crown and the natural root of the tooth, which may be conveniently applied, and is substantial, certain, reliable, and permanent in its results.

With this object in view my invention consists in a metallic connecting-plug of the particular construction hereinafter described, and specially as the same is set forth in the claims.

I have fully illustrated my invention in the accompanying drawings, wherein Figure 1 is a view of the connecting-plug. Fig. 2 is a view showing a disk arranged thereon. Fig. 3 is a sectional view of a tooth-crown and natural tooth-root with the connecting-plug inserted. Fig. 4 is a view showing the modified form of the screw part.

A designates my improved connecting-plug, formed of a single piece of non-corrosive metal. In constructing the connecting-plug a piece of suitable metal is cut of a determined length, and on the part 1, designed to enter and be attached to the natural root, are cut fine screw-threads 2. This threaded part is preferably of a conical form, its base starting from a collar, 3, formed on the body of the plug. This collar, when the plug is in position in the root and crown, sets between the dressed face of the natural root and the top of the crown-tooth; and it may be so extended as to have its edges turned up about the edges of the natural root to give additional security and finish to the connections; but

generally the collar is simply embedded between the root and the crown, and a non-corrosive metal disk, 4, arranged on the screw to rest on the collar and form a substantial plate between the parts, the edges of the disks being turned up to protect the root and constitute means for additionally strengthening the connections.

From the lower part of the collar 3 is projected the crown-plug 5, which enters the artificial crown and serves to hold it to the natural root. This part 5 is conical or wedge-shaped, the base of the cone or head of the wedge being at the lower end of the part, so that when embedded in the crown it will be firmly set against removal or extraction and also permit the base of the crown to be made heavier and stronger than if the part were made thicker at the collar. The part 5 may be made of any shape in cross-section having angular exterior, the essentiality being that it shall be in the nature of a plug having its larger part farthest in the crown and tapering to its junction with the collar.

The application of my improved connecting-plug will be readily perceived by the profession, and consists simply in preparing the natural root, and after adjusting the disk to the dressed face of the natural root then firmly introducing the screw into the natural root, thereafter embedding the part 5 in the artificial tooth-crown with some suitable material, forming thereby a firm and strong connection, which may be done with or without the disk formation, as may be required, and then giving the connections the finish demanded.

The connecting-plugs will be made for the profession in different sizes, so as to be readily selected to meet the different sizes of tooth-connections in practical application.

Having thus fully described my invention, so as to distinguish it from other inventions and devices, I proceed to particularly point out and distinctly claim the improvements which I claim as my invention, as follows:

1. As an improved article of manufacture, the connecting-plug for fastening a crown-tooth to the natural tooth-root, consisting of a single piece of metal formed with a screw-threaded part to enter the natural tooth-root,

a collar at the base of the threaded part, and a wedge-shaped part to enter the crown-tooth, substantially as described.

5 2. The crown-tooth connecting-plug, comprised of a threaded part to enter the natural tooth-root, a collar at the base of the threaded part, and a flaring plug to enter the artificial tooth-crown, combined with a disk-plate arranged at the base of the threaded part and

seated on the collar, substantially as described.

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

FLORIAN EMILIUS HANSEN.

Witnesses:

JOSEPH L. DOBBIN,
E. MOORE.