

(No Model.)

C. S. HURLBUT.
ARTIFICIAL TOOTH CROWN.

No. 377,855.

Patented Feb. 14, 1888.

Fig. 1.

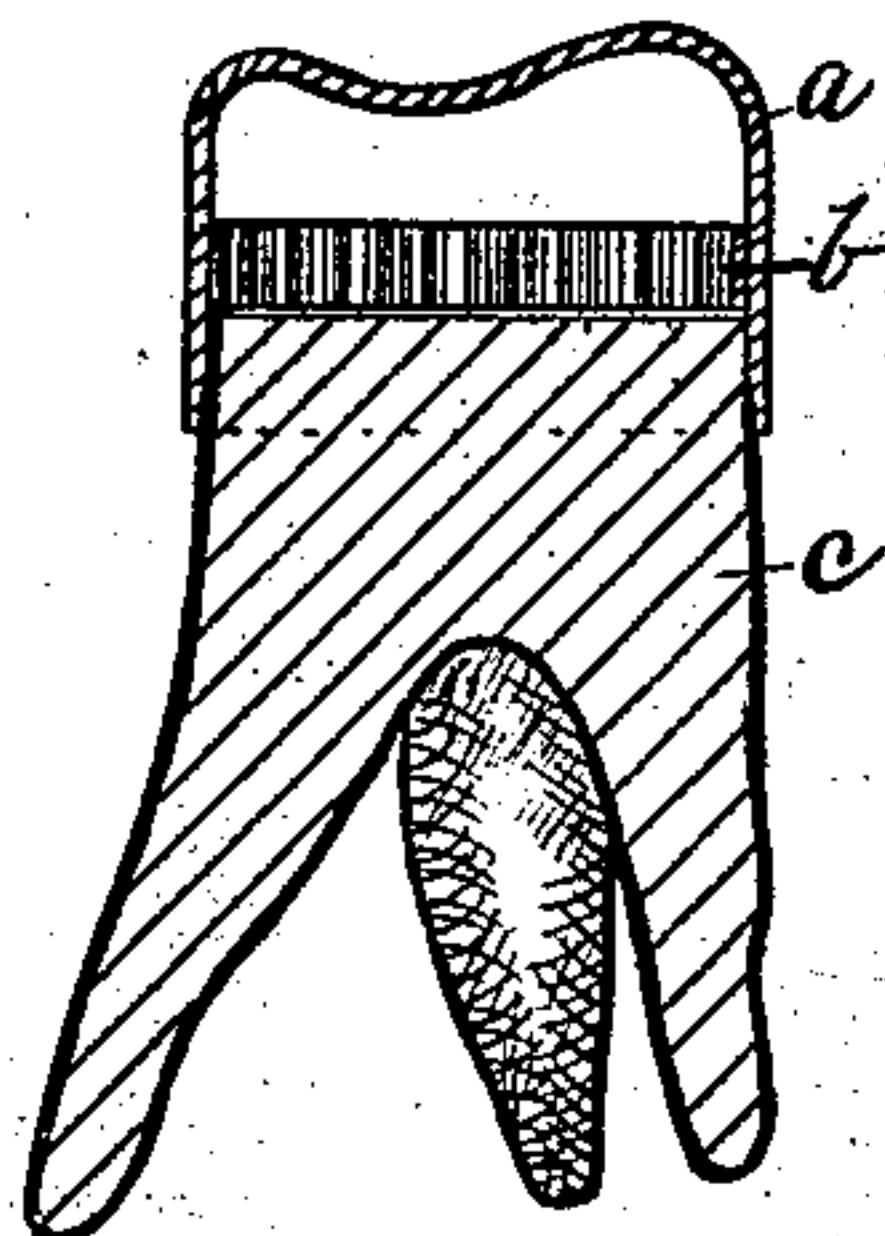


Fig. 2.

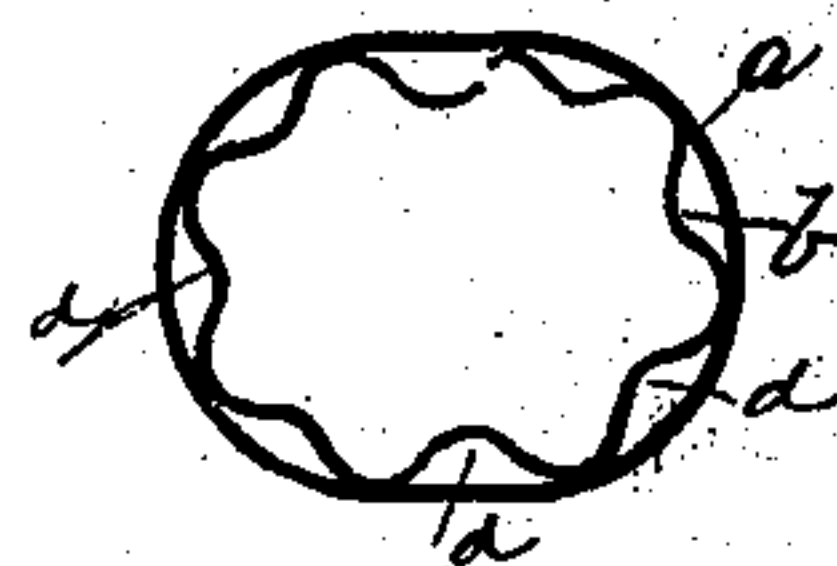
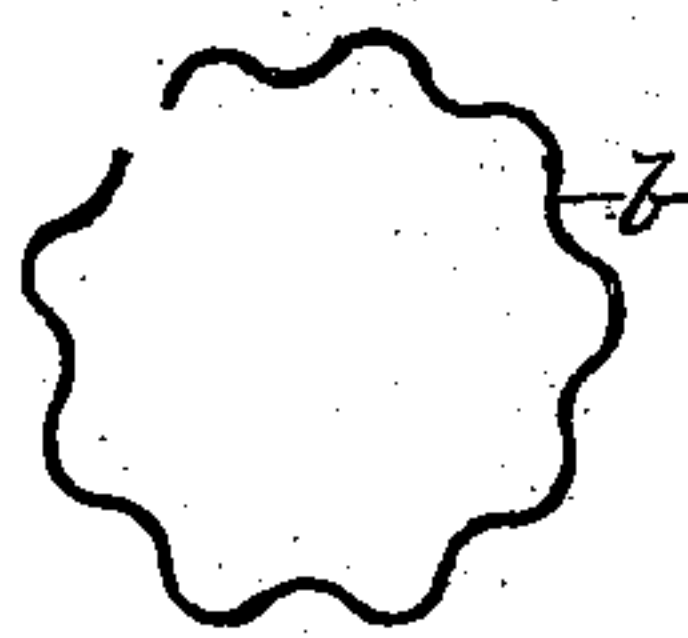


Fig. 3.



Witnesses
Geo. O. Kingsbury
J. B. Freeman

Inventor
Cornelius S. Hurlbut.
By his Attorney, Allen Webster.

UNITED STATES PATENT OFFICE.

CORNELIUS S. HURLBUT, OF SPRINGFIELD, MASSACHUSETTS.

ARTIFICIAL TOOTH-CROWN.

SPECIFICATION forming part of Letters Patent No. 377,855, dated February 14, 1888.

Application filed February 3, 1887. Serial No. 226,492. (No model.)

To all whom it may concern:

Be it known that I, CORNELIUS S. HURLBUT, a citizen of the United States of America, residing in Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Artificial Tooth-Crowns, of which the following is a specification, reference being had to the accompanying drawings and letters of reference marked thereon.

My invention relates more especially to the construction of the shoulder or interior ledge.

Heretofore the ledge or shoulder usually used in a shell for a tooth-crown has consisted of a ring or plate secured to the inner surface of the shell, and no provision has been made for anchorage-openings through the ledge or between the ledge and shell, and no provision has been made to permit the surplus cement to escape from between the surfaces of the tooth-stump and the ledge, which should be in contact when the crown is in its proper position. It is found in practice that if the shell be fitted snugly to the tooth-stump and the ledge be fitted so its lower or inner surface or face will bear upon the top face of the stump, when the crown is forced down upon the stump, the surplus cement, which should be forced out from between the stump-face and the ledge-face, will gather in the corner and prevent the crown going home to the position to which they have been fitted, and that if the cement do not gather in the corner the crown cannot in many instances be forced into position and the cement forced out from between the surfaces which are to be in contact when the crown is in its proper position without the application of more force than a patient cares to bear.

The object of my invention is to provide a device which shall be free from the above-mentioned objectionable features, and to provide a crown having a ledge or shoulder which shall be light and strong, easily adjusted, give a large bearing-surface and good anchorage or holding for the cement, and so constructed that the surplus cement may easily escape from between the ledge and stump; and to that end my invention consists in providing the ledge with openings for anchorage and for the escape of surplus cement.

It also consists in making the ledge of corrugated material.

It further consists in the general construction and arrangement, as herein set out, whereby the advantages of my invention are attained and the above-enumerated objections are overcome.

In the accompanying drawings, in which like letters of reference indicate like parts, Figure 1 is a sectional view of a tooth-stump having a crown thereon. Fig. 2 is an end view of the crown, and Fig. 3 is a view of the ledge or interior bearing-ring detached.

In detail, *a* indicates the shell portion of the crown. *b* indicates the ring or ledge. *d* indicates openings, and *c* indicates the tooth-stump.

The construction will be readily understood on reference to the drawings. The shell portion *a* of the crown may be of any construction, and after the stump *c* is prepared in the usual manner and the shell *a* fitted thereon the ledge or ring *b* is inserted, and, being somewhat more elastic than a plain ring, it will spring against the inner surface of the shell and remain in the position in which it is placed until moved by pressure. If, now, the shell be placed on the stump and pressed gently down upon it, the tooth-stump will force the ledge into the shell until the shell comes to the position upon the stump it was fitted to occupy. The ledge will then bear upon the top or prepared surface of the tooth-stump around its outer edge. The shell is then removed and the ledge secured permanently in position in the shell. It will be seen that when this crown is in position on the stump this ledge gives a greater bearing-surface upon the stump, while being of less weight than if the ledge were a plain ring of the same thickness of material extending around and close to the inner surface of the shell, and that this form of ring for a ledge serves to strengthen the shell, and that it is easier to apply than the old form of construction, and that the openings through the ledge or openings formed by the corrugations serve to give a very much better anchorage for the cement when applied in the usual manner for holding the crown permanently to the stump, while they also serve to permit the surplus cement to escape from between the faces of the stump and ledge, thus enabling me to use a ledge of lighter construction than heretofore, and enabling me to

place the crown in position without the application of so much force as has heretofore been required.

I prefer to make the ledge of flattened or
5 plated wire, as shown, and to secure it to the interior of the shell with one of its broader sides next the shell, so that the edge or narrower side will bear upon the prepared surface of the stump, and while the portion bent
10 away from the inner surface of the shell will serve to give a more extended bearing on the stump the openings formed between the ledge and shell by the bends or corrugations will serve to permit the surplus cement to escape
15 from between the surfaces which are to be in contact, and serve, also, as anchorage-openings.

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

1. A tooth-crown composed of a cap or shell 20 and an interior ledge to rest on the root, with vertical openings for anchorage, substantially as stated.

2. In a tooth-crown, the combination of the cap or shell with an interior ledge with ver- 25 tical openings, said ledge being formed of a corrugated or bent plate or piece, substantially as stated.

CORNELIUS S. HURLBUT.

Witnesses:

ALLEN WEBSTER,
CHAS. R. CULVER.