HOLLOW METAL CROWN FOR ARTIFICIAL TEETH.

1.393.166.

Application filed August 24, 1920. Serial No. 405,600.

To all whom it may concern:

Be it known that I, JEAN LOUIS PHILIPPE ROUMEGUÈRE, citizen of the Republic of France, and resident of Auch, France, have invented new and useful Hollow Metal Crowns for Artificial Teeth, which improvements are fully set forth in the following specification.

Up to now the hollow metal crowns supplied to the trade for being fitted either to natural teeth or to artificial teeth are of two kinds: (1) crowns of distinctly tubular shape for natural teeth, with fairly large lateral faces so that they can cover entirely a crown of a natural tooth; (2) crowns having so to say only a grinding face for artificial teeth.

These crowns have inside a circular groove constituted by the folding of the edges of the metal plate. They are of small height and are used only for the large molars and for artificial teeth requiring crowns of a very small height, in which porcelain teeth would not be suitable.

Crowns of the former kind are manufactured in various types intended to cover either the incisors or the canines or the molars, and they are not provided with inward turned edges. Besides a triturating or grinding face corresponding in shape to that of the natural tooth, they have lateral faces of a height practically equal to that of a natural tooth crown of the corresponding type.

Crowns of the second kind can only replace molars. They have edges turned inward and capable of producing in the rubber a groove in which they are engaged; on the other hand, they have only one grinding face, the edges of the metal plate descending laterally only to the extent of about one millimeter, whereupon they are at once turned toward the interior of the crown so as to form a circular groove.

These two kinds of crowns have one point in common, viz:—the same height for a given crown on all its faces.

This invention relates to hollow metal crowns for artificial teeth, characterized in that—

1. The edges are turned inward and capable of producing in the rubber or other suitable material, depressions with which these edges will engage.

2. The lateral faces which are not to be seen when the crowns are mounted on the artificial teeth are reduced to a minimum. They are of sufficient dimensions to allow the edges of the crown to be turned behind the visible faces only at a distance which allows the rubber to be securely held by the said edges.

3. The lateral faces which can be noticed when the crowns are mounted on the artificial teeth, are of a shape conforming approximately to those of the natural teeth and of sufficient dimensions to produce the impression of their covering the crowns of natural teeth of the corresponding types when placed on the said artificial teeth.

The crowns forming the subject of the present invention, can be manufactured by stamping out in several types, each of correct shape as regards the grinding face and the lateral faces which are to be visible as soon as these crowns are mounted on the artificial teeth, each of the said types corresponding to a type of natural tooth.

In the accompanying drawing:

Figure 1 is a front elevation of a metal crown for an incisor;

Fig. 2 is a rear view thereof;

Fig. 3 is a horizontal section on line 3—3 of Figs. 1 and 2;

Fig. 4 is a transverse vertical section showing the crown applied to an artificial tooth;

Fig. 5 is a transverse vertical section showing a crown for a canine applied to an artificial tooth;

Fig. 6 is a transverse vertical section showing a crown for a molar applied to an artificial tooth.

As will be readily apparent from the drawings, the metal crowns forming the object of the invention do not have the tubular shape of the crowns designed to entirely cover a natural tooth crown; and they are not limited to a grinding face, as is the case of half-metal artificial teeth. In fact, if the incisor crown (Figs. 1–3) is considered, where the grinding face is very small, it will be seen that the visible face a is formed completely of metal; the metal being
bent over at the top at \( b \) and laterally at \( c, c' \) in order to take hold of and anchor itself in the plastic material of the artificial tooth \( d \) (Fig. 4). The lower part \( e, e' \), likewise bent back, enables the rubber or other plastic material of the tooth \( d \) to be firmly compressed into it, as indicated in Fig. 4.

The canine-shaped metal crown (Fig. 5) has the same characteristics as the preceding one, being provided with a visible face \( a \) which is shaped to conform to that of a natural canine tooth and of such dimensions that it gives the appearance of entirely covering the crown of said tooth. The rear face—invisible when the artificial tooth \( d \) is in place in the mouth—is always limited by a simple bend of metal at the grinding face, permitting the rubber or other plastic material of the tooth \( d \) to be readily squeezed into it. The lateral faces, which are not visible, are likewise limited, and the metal which is formed by the stamping operation into the grinding face and the front face is bent over into the interior of the crown along the oblique line \( e, f \) so as to form in the material of the artificial tooth a depression or groove \( g \) in which the bent-in edges of the metal crown are anchored.

The same description applies to the molar-shaped crown represented in Fig. 6.

I claim as my invention:

A hollow crown for artificial teeth, having its grinding face and its lateral faces which are visible when the crown is mounted on the artificial tooth, formed completely of metal and shaped to conform approximately to those of a natural tooth of the corresponding type; said crown having its edges bent backward and toward its interior in order to permit the plastic material of the tooth, when the crown is being fitted on a tooth of rubber or other suitable material, to be tightly compressed by said edges.

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

JEAN LOUIS PHILIPPE ROUMÉGUÈRE.

Witnesses:
S. BERTRAND JACOBSON,
JAMES D. CHILD.