July 21, 1970 P. B. BERGLUND ET AL 3,521,357

CARRIER FOR PREFABRICATED TOOTH CROWNS

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Fig.1

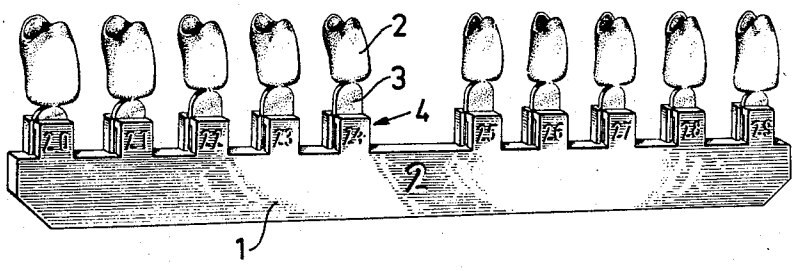


Fig.2

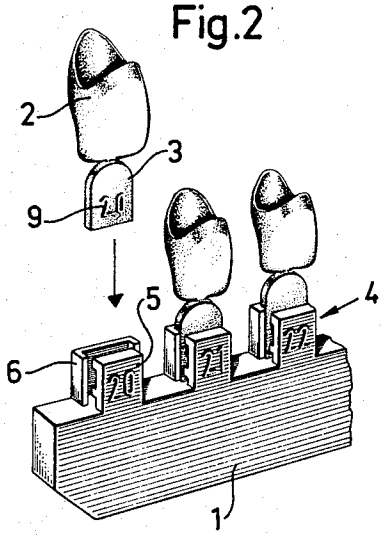
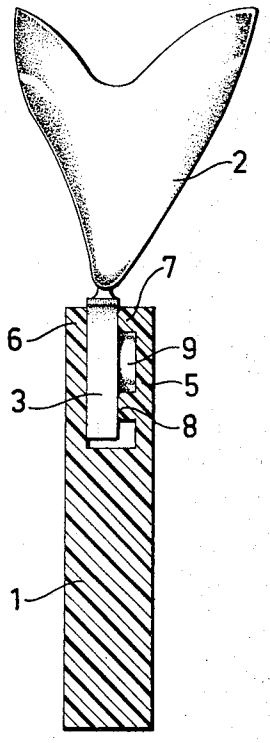


Fig.3



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CARRIER FOR PREFABRICATED TOOTH CROWNS

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Int. Cl. A61c 19/00
U.S. Cl. 32—71 2 Claims

ABSTRACT OF THE DISCLOSURE

A plurality of prefabricated tooth crowns each having an identification plate fixed thereto and including a projection extending therefrom, and a carrier for said crowns, including an integral body means separate from the tooth crowns and having a number of pockets for releasably receiving the identification plates of the tooth crowns, each of said pockets being defined by a resilient tongue at one side thereof and a substantially rigid wall portion at the opposite side thereof, each of said wall portions having along its longitudinal edges projections extending toward the associated resilient tongue, each of said resilient tongues being provided adjacent its free end with a transverse flange projecting into the associated pocket, said plates each extending into one of said pockets with the transverse flange of the pocket engaging the projection on the associated plate to retain said tooth crowns in position relative to said carrier.

When making a crown restoration a dentist initially applies a temporary crown on the prepared tooth, said temporary crown being replaced at a later stage by a permanent crown produced by the guidance of an impression of the prepared tooth. Naturally, the requirement on suitable form and size will be of less significance for the temporary crown than for the permanent one. However, although the temporary crown is used only for a short period of time, normally a few days, usually it is desired to use temporary crowns having an aesthetically pleasant appearance. This is the case especially if the tooth to be restored is an incisor or a canine. For this reason it has become common practice to use prefabricated temporary plastic crowns for teeth of the above sort and sometimes also for the first premolares. Said plastic crowns are marketed in a number of different sizes for each tooth type. In order to facilitate in each case the choice of a crown of suitable size some manufacturers of temporary crowns also delivers mould-guides each consisting of an assortment of crowns of varying size fixed to a common carrier. By means of the mould-guide the dentist makes a preliminary selection of the crown size that seems to be suitable whereupon he takes a crown of said size and type from a supply carton and applies said crown on the prepared tooth. In order to enable an identification of the different crown sizes the loose crowns are provided at their edges with identification plates marked in accordance with the marking appearing on the mould-guide.

The invention is based on the discovery that the dentist's work would be facilitated if the mould-guides could be used not only for a preliminary selection of the suitable crown size but also as a supply of usable crowns.

The invention relates to a carrier for a selection of prefabricated tooth crowns having identification plates attached thereto, said carrier being characterized in that it is formed as an individual member separated from the tooth crowns and having a number of pockets for releasably receiving the identification plates of the tooth crowns, said pockets being adapted to retain said plates between opposite walls thereof through spring action. The disengageable connection between each tooth crown and the carrier makes it possible to use the crowns without making the mould-guide incomplete, as a tooth crown removed from the carrier can at a later stage be replaced by another crown taken from the supply box.

According to a preferred embodiment of the invention each pocket of the carrier has at its one side a resilient tongue. The opposite wall of the pocket can be substantially rigid and provided at its longitudinal edges with projections extending towards said tongue and serving to guide the identification plate laterally.

The carrier can preferably be made in such a way that the identification plates of the tooth crowns are retained in the pockets through snap action. For this purpose the resilient tongue may have adjacent its free end a transverse flange projecting into the pocket, said flange serving to co-operate with a corresponding projection on the identification plate. This projection can for instance be formed by identification characters extending from the surface of the plate.

The invention will now be described in greater detail, reference being had to the accompanying drawings, in which:

FIG. 1 shows a perspective view of a carrier according to one embodiment of the invention having a number of tooth crowns removably mounted therein;

FIG. 2 is a partial view of the carrier according to FIG. 1, in perspective and on an enlarged scale; and

FIG. 3 shows a section, on a yet more enlarged scale, of the carrier according to FIG. 1.

Reference numeral **1** designates a comblike carrier for a number of prefabricated tooth crowns **2** which are removably mounted in the carrier **1** by means of substantially flat identification plates **3** fixed to the edges of the crowns. These plates are received in pockets formed in teeth **4** extending from the main portion of the comblike carrier **1**. Each tooth **4** consists of a resilient tongue **5** and an opposite U-shaped wall portion **6** the legs of which confine the pocket formed between tongue **5** and wall portion **6**, in lateral direction and serve as guiding means for the identification plate **3**. As appears from FIG. 3, the tongue **5** is at its free end provided with a transverse flange **7** extending towards the inner of the pocket. The tongue **5** has an additional flange **8** slightly above the root end of tongue **5**. The two flanges **7** and **8** serve to retain a plate **3** in position in the pocket through cooperation with a projection **9** extending from said plate **3** and constituting an identification character.

The identification plate **3** with the tooth crown **2** carried thereby is thus adapted to be retained through snap action in the pocket formed between tongue **5** and wall portion **6**. As appears from FIG. 3, the plate **3** has such a length that it will not reach the bottom of the pocket. However, such an embodiment is possible if flange **8** is omitted. In order to facilitate the identification of a tooth crown **2** mounted in carrier **1** the resilient tongues **5** of the carrier teeth **4** are marked in accodance with the identification plates **3**.

Natually, the invention is not restricted to the embodiment above described, but includes a number of different modifications. For instance, the carrier can have any other suitable shape than the comblike one shown on the drawings.

What is claimed is:

1. In combination, a plurality of prefabricated tooth crowns each having an identification plate fixed thereto and including a projection extending therefrom, and a carrier for said crowns including an integral body means

separate from the tooth crowns and having a number of pockets for releasably receiving the identification plates of the tooth crowns, each of said pockets being defined by a resilient tongue at one side thereof and a substantially rigid wall portion at the opposite side thereof, each of said wall portions having along its longitudinal edges projections extending toward the associated resilient tongue, each of said resilient tongues being provided adjacent its free end with a transverse flange projecting into the associated pocket, said plates each extending into one of said pockets with the transverse flange of the pocket engaging the projection on the associated plate to retain said tooth crowns in position relative to said carrier.

2. Apparatus as defined in claim 1 wherein each of said resilient tongues is provided with a second transverse flange extending into the associated pocket and located slightly above the root end of the associated tongue.

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