

V. M. ROBINSON.
DENTAL IMPRESSION TRAY.
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1,406,492.

Patented Feb. 14, 1922.

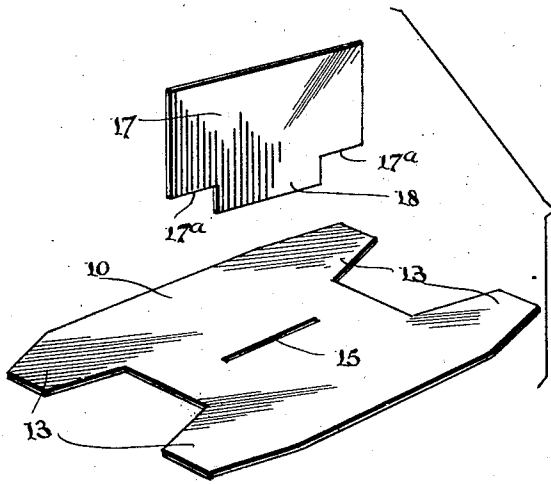


Fig. 1.

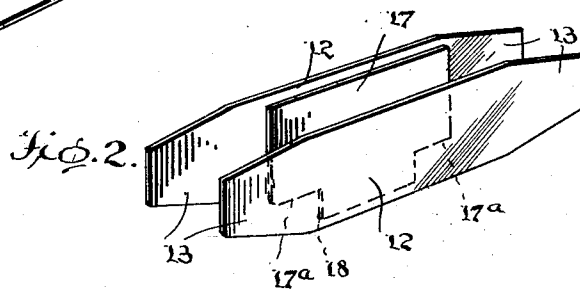


Fig. 2.

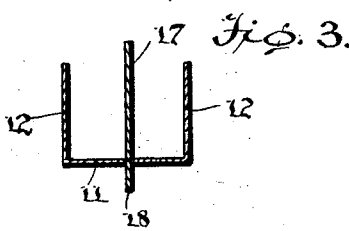


Fig. 3.

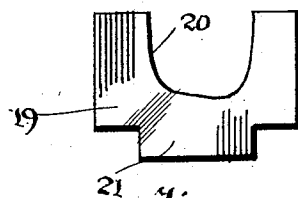


Fig. 4.

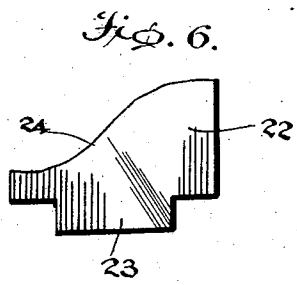


Fig. 6.

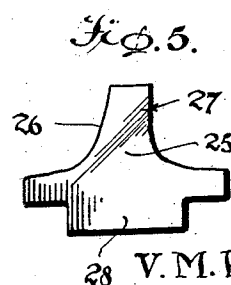


Fig. 5.

WITNESSES
[Signature]

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UNITED STATES PATENT OFFICE.

VINCENT MUNGER ROBINSON, OF ST. JOSEPH, MISSOURI.

DENTAL IMPRESSION TRAY.

1,406,492.

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To all whom it may concern:

Be it known that I, VINCENT MUNGER ROBINSON, a citizen of the United States, and a resident of St. Joseph, in the county of Buchanan and State of Missouri, have invented certain new and useful Improvements in Dental Impression Trays, of which the following is a specification.

My invention relates to an improvement in dental impression trays especially adapted for use in taking partial impressions and has for its object to provide a device of this character which is of extremely simple construction, adaptable to the varied requirements of individual cases, which may be advantageously employed in obtaining impressions in difficult cases wherein the tooth is undercut or has a bulbous crown, and which in all cases is effective to secure a distinct, clean-cut and true impression.

Other objects and advantages of the invention reside in certain novel features of construction, combination and arrangement of parts which will be hereinafter more fully described and particularly pointed out in the appended claims, reference being had to the accompanying drawings forming part of this specification, and in which:

Figure 1 is a group view in perspective of an embodiment of the invention;

Figure 2 is a perspective view, illustrating the invention in assembly and showing one form of division plate;

Figure 3 is a view in transverse vertical section of the assembly shown in Figure 1;

Figure 4 is a detail view in elevation of a modified form of division plate;

Figure 5 is a similar view of another modified form of division plate; and

Figure 6 is a similar view of still another modified form of division plate.

Referring to the drawings wherein for the sake of illustration is shown the preferred embodiment of the invention, the numeral 10 designates a blank of metal, such as aluminum or the like. The blank is bent to form a dental impression tray having a bottom 11 and side walls 12, the side walls having tongues 13 extending therefrom at each end thereof which tongues are preferably tapered slightly toward the outer ends. The bottom, side walls and tongues thus constitute a tray or container constructed of a

single piece of resilient metal with the tongues 13 extending from the tray in such manner that they may be bent in or out as the case may be to act as guides causing the tray to be centered or placed in its proper position in relation to the teeth.

The blank in the portion thereof which forms the bottom wall 11 of the tray is provided with an elongated slot 15 which preferably extends longitudinally of the bottom and parallel to the base. The slot 15 is adapted to receive the tongue or other operative connective means carried by a division plate now to be described.

In the form of the invention shown in Figures 1 to 3 the division plate comprises a rectangular piece or body portion 17 constructed of suitable material and having a tongue 18 extending from its lower side and in the plane of the body portion. The tongue 18 is of a longitudinal extent less than that of the body portion whereby the body portion presents shoulders 17^a which about the bottom wall of the tray in assembly, the tongue 18 entering the slot 15 of the bottom.

In Figure 4 the division plate includes a body portion 19 having a U-shaped opening 20 provided therein and having a tongue 21 adapted to enter the slot in the bottom of the container. In Figure 5 the body portion of the division plate is designated at 22 and the tongue at 23, the body portion being cut away on a curved line 24. In Figure 6, the body portion 25 is cut away on curved lines 26 and 27, the tongue being designated at 28. All of the division plates when assembled with the tray have their tongues received in the slot of the bottom wall. The division plates are cut away to adapt them to individual cases and are so placed as to facilitate the splitting of the impression material through its long axis thus enabling an impression to be taken of different cases having an undercut or of a tooth having a bulbous crown.

I claim:

1. A dental impression tray constructed of a single blank of resilient metal bent to form a bottom and side walls, the side walls having tapered tongues extending from the ends thereof and adapted to be bent to center the tray, the bottom wall having an elongated

slot therein and a division plate having a tongue adapted to enter said slot.

2. A dental impression tray constructed of a single blank of resilient metal bent to form a bottom and side walls, the side walls having tongues extending from the ends thereof and adapted to be bent to center the tray.

3. A dental impression tray having a slot

in one of its walls and division plates having a tongue adapted to enter said slot. 10

4. In combination, a dental impression tray, division plates having a contour corresponding to the impression to be taken, and means for releasably maintaining the division plate in position in the tray.

VINCENT MUNGER ROBINSON.