No. 882,155. PATENTED MAR. 17, 1908.

# W. T. LYON.

## DENTAL IMPRESSION TRAY.

APPLICATION FILED AUG. 6, 1907.

Fig. 1.

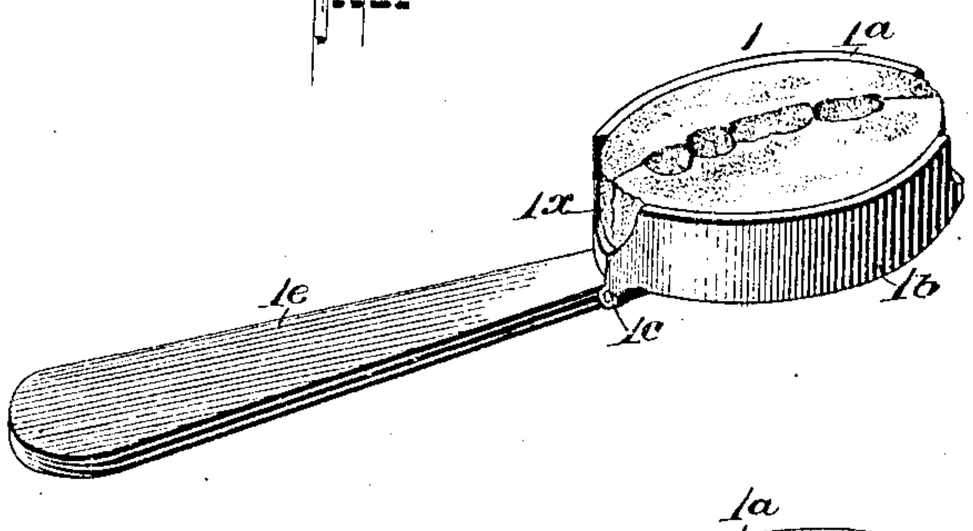



Fig. 2.

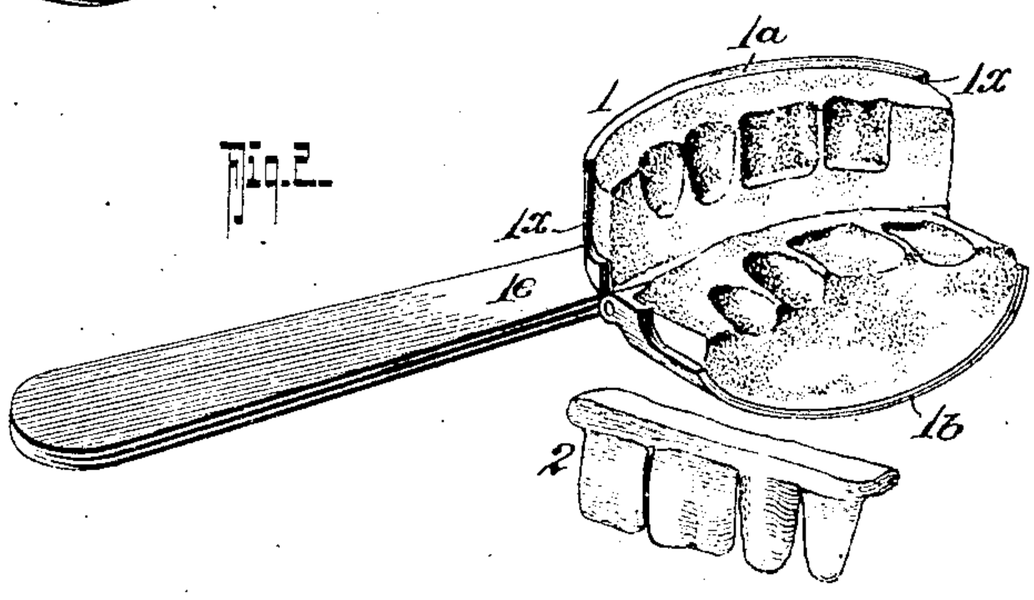



Fig. 3.

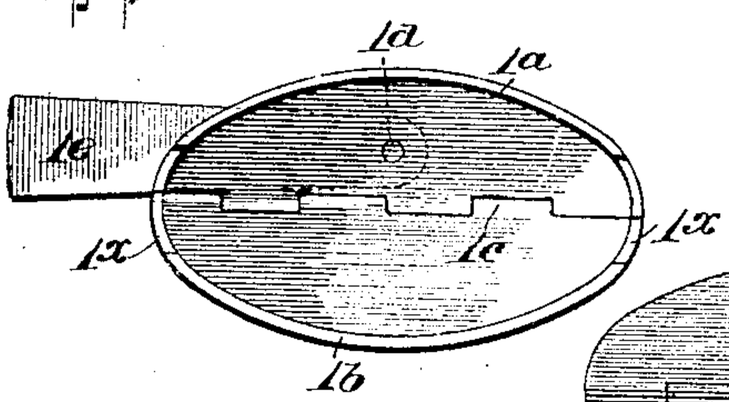



Fig. 5.

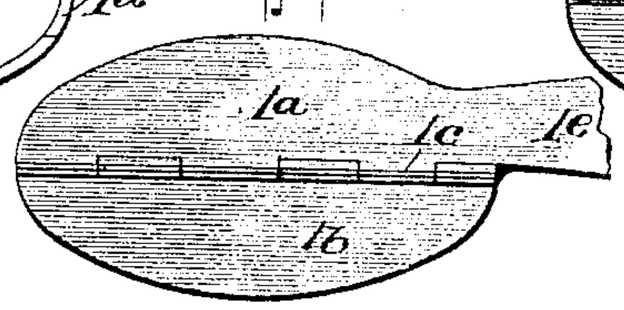



Fig. 4.

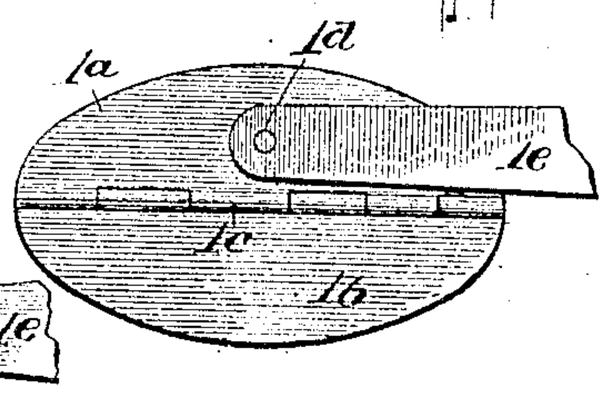
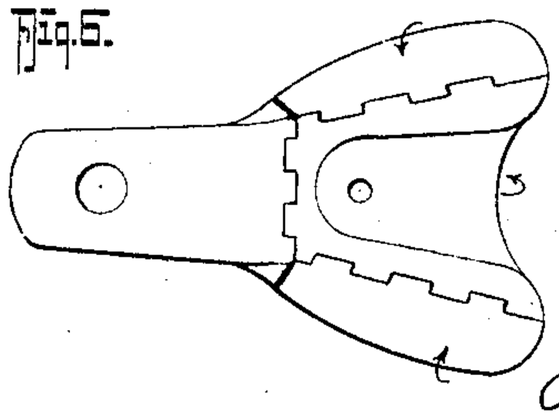



Fig. 6.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

WILLIAM T. LYON, OF PORTLAND, OREGON.

## DENTAL IMPRESSION-TRAY.

No. 882,155. Specification of Letters Patent. Patented March 17, 1908.

Application filed August 6, 1907. Serial No. 387,322.

*To all whom it may concern:*

Be it known that I, WILLIAM T. LYON, residing at Portland, in the county of Multnomah and State of Oregon, have invented certain new and useful Improvements in Impression-Trays, of which the following is a specification.

My invention relates to certain new and useful improvements in impression trays which are particularly adapted for dentists' use in obtaining impressions of teeth in a plastic material and in which the tooth form or die may be cast, if desired.

In its generic nature the invention embodies a tray composed of a plurality of sections hinged together and swivelly connected with a handle member, the purpose of the hinged sections being to enable a ready removal of the plastic cast from the mouth.

In its more subordinate nature, the invention also embodies a tray or cup of improved form, which can be easily and cheaply manufactured and which will readily serve its intended purposes.

Referring now to the accompanying drawings, Figure 1, is a perspective view of my invention. Fig. 2, is a similar view showing the sections swung apart to permit removal of the cast. Fig. 3, is a top plan view of the invention. Fig. 4, is an inverted plan view thereof. Fig. 5, is a modification of my invention. Fig. 6, is a detail view of a further modification of my invention.

Referring now to the accompanying drawings in which like letters and numbers of reference indicate like parts in all of the figures 1 designates the tray or cup which comprises the two sections $1^a$—$1^b$ of substantially elliptical shape in plan view and which are hinged together along their longitudinal axis as at $1^c$, each of the sections $1^a$, being swivelly connected at $1^d$, to the handle $1^e$, as shown, so that the cup may be readily adapted for use.

The tray or cup 1, in practice, is preferably elliptical shape in plan view, as before stated, and is provided with cut-away portions $1^\times$ at its ends for a purpose presently explained.

The sections $1^a$—$1^b$ have a tight hinged joint so as to remain in their various coöperative positions, such for instance, as that shown in Fig. 1, while the impression is being taken, and when the sections are in the position shown in Fig. 2, they will remain in such position while the cast 2 is being removed.

In practice, the tray 1 is filled with a plastic compound, such as plaster of paris, and the like, and held between the upper and lower sets of teeth of the patient, who, upon biting down upon the plastic mass, causes the impression of the teeth to be formed therein, the cut-away portions $1^\times$ of the cups prevent contact between the teeth and the metallic parts of the cup.

Instead of connecting the handle and cup with a swivel joint, as shown in Figs. 1 to 4, the same may be formed integrally with the cup section, as shown in Fig. 5.

In Fig. 6, I have shown a further modification of my invention in which the tray is adapted for obtaining a full impression of the mouth, and when trays of such size are used they are made of several sections, as shown, so that the impression can be readily broken to enable the removal of the same from the mouth.

From the foregoing description taken in connection with the accompanying drawing, it is thought the complete construction, operation, uses and advantages of my invention may be readily understood by those skilled in the art to which the invention appertains.

What I claim is:—

1. An impression tray comprising a plurality of sections hingedly secured together on an axis lying substantially in the central plane of the tray, substantially as shown and described.

2. An impression tray comprising a plurality of tray sections hingedly secured together, each of said sections including a bottom portion and a side portion, said sections being hinged together along the bottom portion, and a handle swivelly secured to one of said sections.

3. In an impression tray, a plurality of cup-shaped sections having bottom segments, means for hingedly securing said sections together along the adjacent edges of said bottom segments, the hinge axes lying

substantially parallel with the position of the teeth when the impression is being made.

4. In a device of the class described, an impression tray comprising a plurality of sections hingedly secured together with the hinge axes in the central longitudinal plane of the tray, said sections having their ends cut-away substantially as shown and described.

WILLIAM T. LYON.

Witnesses:
W. P. LaRoche,
A. T. Lewis.