(No Model.)

H. A. BURLINGAME.

DENTAL IMPRESSION TRAY.

No. 508,677. Patented Nov. 14, 1893.

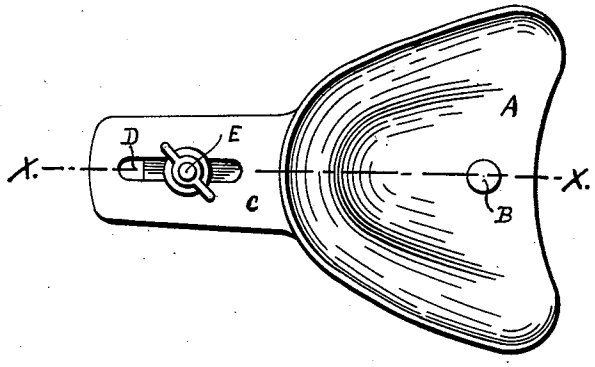


Fig. 1.

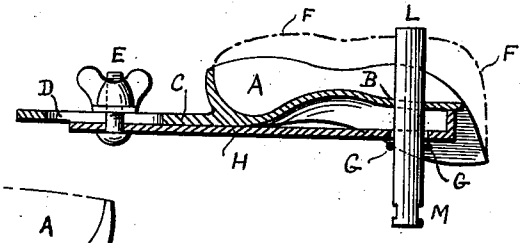
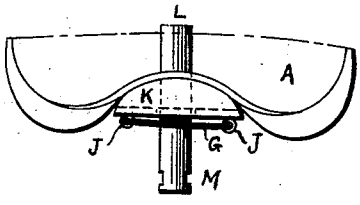


Fig. 2.

Fig. 3.



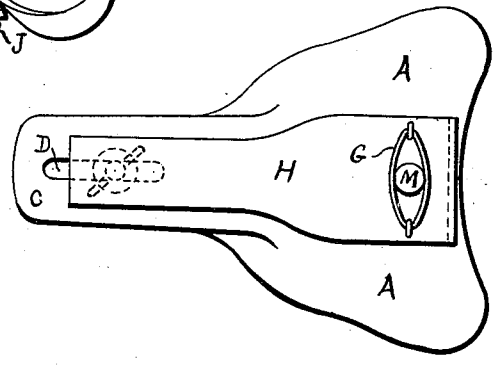


Fig. 4.

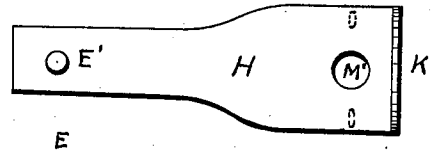


Fig. 5.

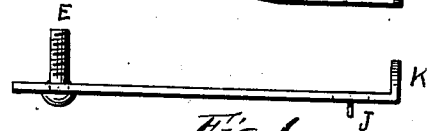


Fig. 6.

Witnesses.

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HENRY A. BURLINGAME, OF PAWTUCKET, RHODE ISLAND.

DENTAL IMPRESSION-TRAY.

SPECIFICATION forming part of Letters Patent No. 508,677, dated November 14, 1893.

Application filed August 11, 1893. Serial No. 482,895. (No model.)

To all whom it may concern:

Be it known that I, HENRY A. BURLINGAME, a citizen of the United States, residing at Pawtucket, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Dental Impression-Trays; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

In all the accompanying drawings, like letters refer to like parts.

My invention relates to a dental impression tray in which air is admitted between the plastic material and the roof of the mouth by means of a removable plug, held in place by a suitable device, and projecting through the tray and its contents; the removal of this plug causes air to enter between the plastic material and the roof of the mouth, thus destroying the suction and rendering the removal of the tray and its contents easy and painless.

The details of my invention are shown in the accompanying drawings, in which—

Figure 1 is a view of the top of the tray with my improvement; Fig. 2 a longitudinal section through the dotted line in Fig. 1; Fig. 3, an end view of the tray; Fig. 4 a plan view of the under surface; and Figs. 5 and 6 details to be explained hereinafter.

The tray A is perforated with the circular hole B, and the handle of the tray C, is slotted as shown at D; the dotted line F—F in Fig. 2, represents the plastic material with which the tray is filled.

H—K, seen in detail in Figs. 5 and 6, is a sliding plate bent at right angles at K, Fig. 6, and the bent part curved to conform to the tray as seen in Fig. 3. In the plate H, are two holes E′ and M′, through which pass respectively the bolt E and the plug L—M. The bolt E has a thumb nut as shown in Figs. 1 and 2, and by means of the slot D, the slide H is adjustable so that the holes M′ and B may be brought in opposition.

L—M is a plug sliding easily through the holes B and M′, and held in position by the elastic band G, Figs. 2, 3, and 4, and this band G, is secured to slide H by hooks J—J.

In the operation of my improvement, the plug L—M is inserted through the holes B and M′, and up through the plastic material contained in the tray so that the top of the plug projects a little above the surface of the plastic material; the impression is then taken in the usual manner, the elastic band G permitting the plug to slide downward until its upper extremity rests against the roof of the mouth just at the upper surface of the plastic material. After the material "sets," the plug is removed by a wrench fitting its lateral recesses shown at M, Fig. 2, and air is thus permitted to enter between the material in the tray and the roof of the patient's mouth.

I am aware that prior to my invention, Letters Patent have been granted for dental trays perforated for the admission of air to the roof of the mouth by suitable mechanism. I therefore do not claim broadly such an invention, but

What I do claim, and ask Letters Patent for, is—

1. A dental impression tray perforated for the admission of air, in combination with a solid plug fitting said perforation and movable therein, and an elastic band sustaining said plug, all as described.

2. A dental impression tray perforated for the admission of air; in combination with the slide H, attached thereto and adjustable thereon, and having a perforation M′; a solid plug fitting said perforations and movable therein; and an elastic band for supporting said plug, all substantially as and for the purposes described.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY A. BURLINGAME.

Witnesses:

EDWARD W. BLODGETT,

GEORGE W. COLE.