

(No Model.)

F. M. PALMITER.  
DENTAL IMPRESSION CUP.

No. 307,579.

Patented Nov. 4, 1884.

Fig. 1.

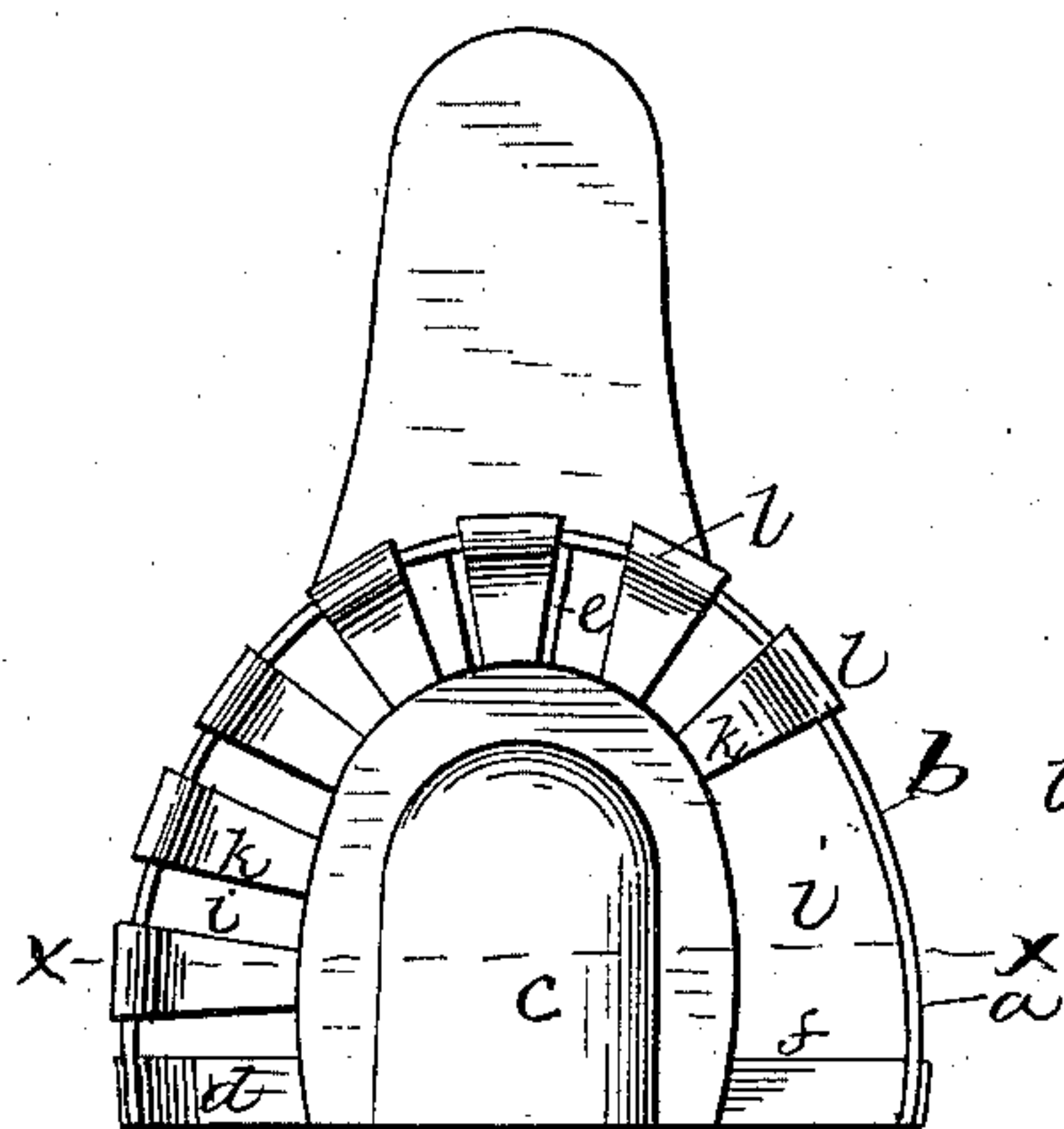


Fig. 2.

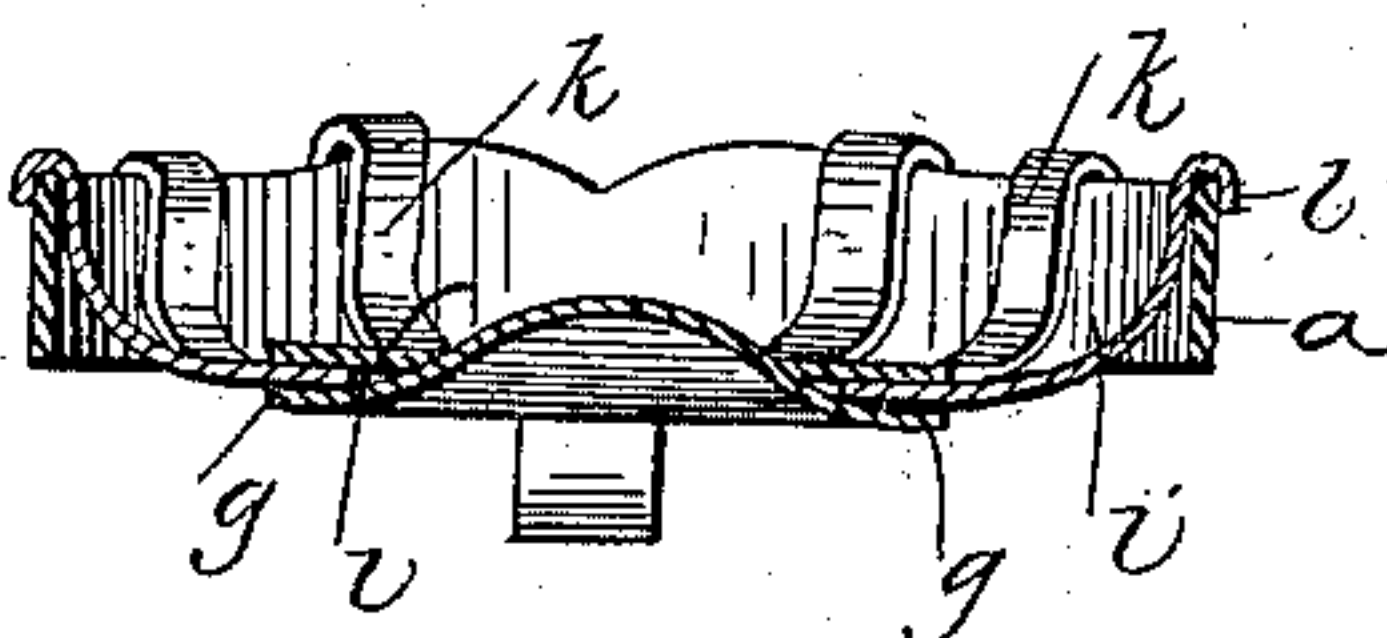


Fig. 3.

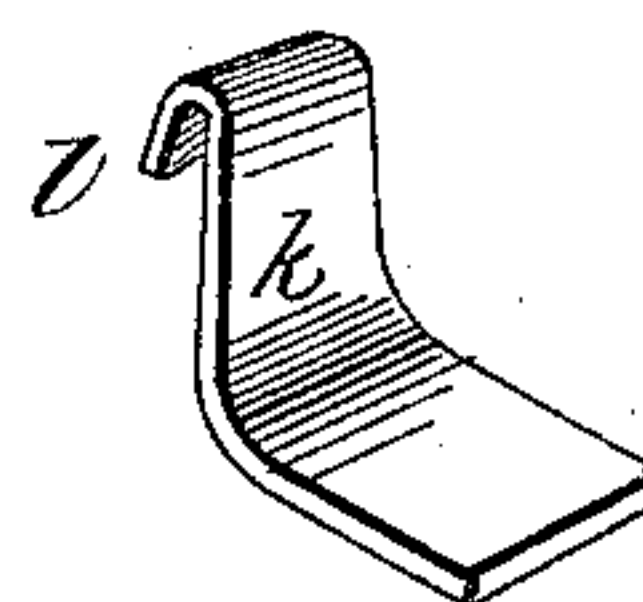


Fig. 4.

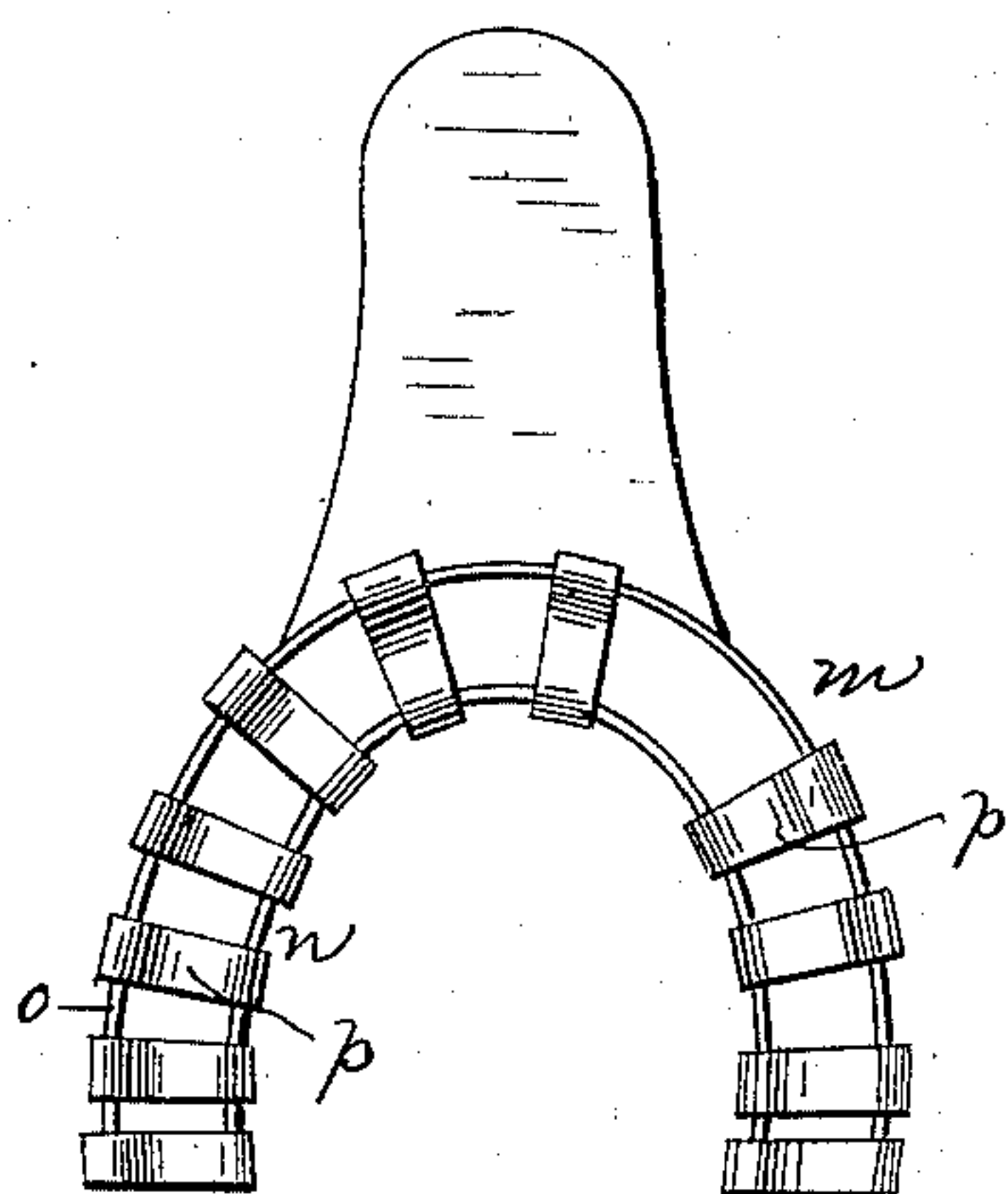


Fig. 5.

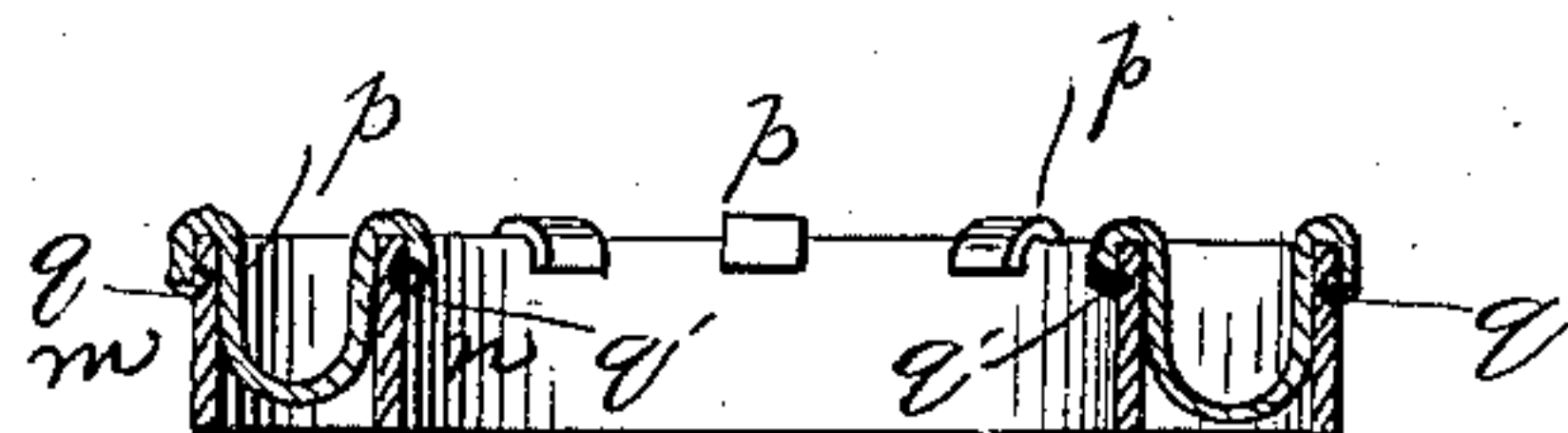


Fig. 6.



WITNESSES

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# UNITED STATES PATENT OFFICE.

FRANK. M. PALMITER, OF FAIRBURY, NEBRASKA.

## DENTAL IMPRESSION-CUP.

SPECIFICATION forming part of Letters Patent No. 307,579, dated November 4, 1884.

Application filed April 16, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK. M. PALMITER, a citizen of the United States, residing at Fairbury, in the county of Jefferson and State of Nebraska, have invented a new and useful Dentist's Impression-Cup, of which the following is a specification, reference being had to the accompanying drawings.

This invention has relation to dentists' impression-cups for taking impressions of the gums for partial plates for artificial teeth; and it consists in the construction and novel arrangement of parts, as will be hereinafter fully described, and particularly pointed out in the claims.

Figure 1 is a plan view of the upper cup with my improvements. Fig. 2 is a transverse vertical section on line *x x* in Fig. 1. Fig. 3 is a detail view of the slides for the upper cup. Fig. 4 is a plan view of the lower cup, or the cup for the lower jaw. Fig. 5 is a transverse vertical sectional view, and Fig. 6 is a detail view, of one of the removable slides for the lower-jaw cup.

Referring by letter to the accompanying drawings, *a* designates the frame of the impression-cup for the upper jaw, the flaring rim *b* of which is bent to conform to the outline of the gums, and is connected to the palate-plate *c* of the cup by downwardly-bent strips *d e f*, which form supports for the cup to rest upon. The palate-plate *c* is provided in its edge with a lateral or horizontal groove, *g*, extending entirely around it, except at the rear line, *h*, of the plate *c*, which is left plain. The space *i*, between the rim *b* and the palate-plate *c*, is filled in with a number of sliding or removable cup-sections, *k*, the inner ends of which fit in the groove *g*, the other ends being provided with hooks *l*, which engage the upper edge of the rim *b*. These sections *k* are curved, as shown, to form the cup for the plaster when in place. This cup, as well as the one for the lower jaw, has a suitable handle, as shown, by which to manipulate it. The lower cup, *m*, is slightly different in construction. It has no palate-plate, but has an inner rim, *n*, and an outer rim, *o*, connected by three supports on which to rest it. The cup-sections *p* are slightly varied in shape, and are made, preferably, as shown in Fig. 6, and are sprung into grooves *q q'* in the inner and outer rims, so that they may slide therein and be removed therefrom; but the man-

ner of removably attaching them may be varied without departing from the invention.

The object of having the cup-sections removable from the impression-cups is this, viz: In taking an impression where there are isolated teeth the cup-sections at these points are removed to make an opening through which the tooth or teeth may pass to permit the cup to be pressed against the gums and make a perfect impression.

To prevent the plaster from running through the opening or openings made by the removal of a cup section or sections, a piece of thin paper is placed over the opening or openings, and it is pushed out through the opening as the impression-cup is pressed up or down to place.

This device is cheap and simple in its construction, and by its use the very best impressions for partial plates can be taken.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a dentist's impression-cup, the combination, with the palate-plate and connected outer rim, of removable cup-sections fitting over the rim at one end and having their other ends fitted in a groove of the palate-plate, as set forth.

2. In a dental impression-plate, the combination, with the cup-frame composed of an inner and an outer rim, of removable cup-sections engaging the inner and outer rims, and having their central portions depressed and fitting between the rims to accommodate the teeth, as set forth.

3. In a dental impression-cup, the combination, with the cup-frame composed of an inner and an outer rim, and having a suitable handle and supports, of removable cup-sections, U-shaped in form and engaging the said rims at each end, as set forth.

4. A dental impression-cup provided with a tooth-space and removable cup-sections, formed of spring metal, bent to conform to the shape of the teeth, and having their respective ends sprung into place, and held without the use of screws or nails, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

Witnesses: FRANK. M. PALMITER.  
M. WARREN,  
ED. B. COWLES.