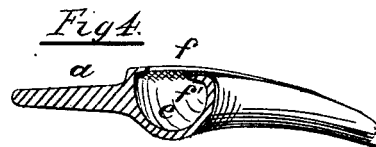
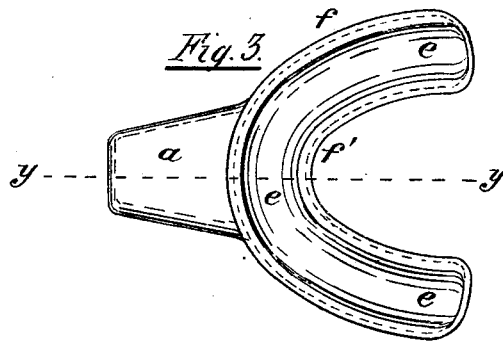
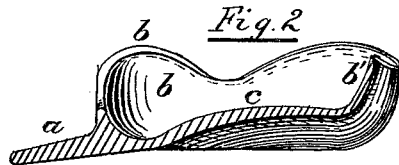
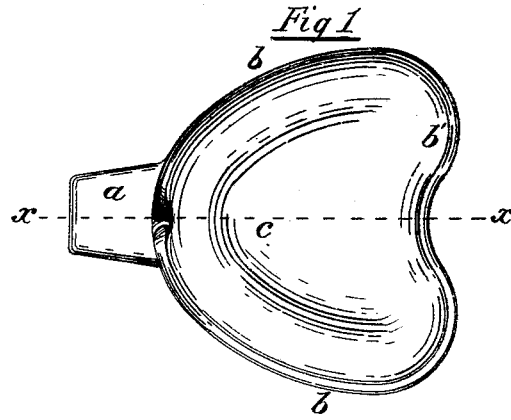


W. M. REYNOLDS.  
Dental Impression Cup.

No. 196,991.

Patented Nov. 13, 1877.



Witnesses  
M. C. Sargent  
S. C. Page.

Inventor.  
Wm M. Reynolds  
per Alfred Hedrick  
Atty.

# UNITED STATES PATENT OFFICE.

WILLIAM M. REYNOLDS, OF NEW YORK, N. Y.

## IMPROVEMENT IN DENTAL IMPRESSION-CUPS.

Specification forming part of Letters Patent No. **196,991**, dated November 13, 1877; application filed November 4, 1876.

*To all whom it may concern:*

Be it known that I, WILLIAM M. REYNOLDS, of the city of New York, State of New York, have invented a certain Improved Impression-Cup for Dental Purpose, of which the following is a specification:

This invention relates to impression-cups for holding the plaster-of-paris while taking impressions of the upper and lower jaws for dental purposes; and consists in making them with flanges all around, and of elastic soft rubber.

The advantages of these elastic cups are: they may be folded when filled with plaster, enabling them to be more readily inserted in the mouth, and the edges of the flanges, being soft and flexible, upon coming in contact with the gums, do not hurt or injure them.

Considerable force has to be sometimes used to get a good impression of the teeth and jaw.

The cup for taking impressions of the upper jaw is provided with a posterior flexible flange, which comes in contact with the roof of the mouth, and prevents the plaster falling on the tongue and gagging the patient, which is a source of much inconvenience to the patient, and trouble to the operator when operating with the cups now in use.

The cup for taking impressions of the lower jaw is provided with inside return flanges, the object of which is to hold the plaster more securely in the cup while inserting it in the mouth.

In taking plaster-of-paris impressions of the mouth it is often found that some of the teeth are undercut, and it requires considerable force to remove the set plaster with rigid cups, and sometimes the teeth are injured or broken from this cause; whereas these elastic cups, under such circumstances, may be first stripped off the plaster, and then the parts of the plaster which prevent its easy removal cut or broken away.

But, to describe my invention more particu-

larly, I will refer to the accompanying drawing, forming part of this specification, in which—

Figure 1 is a view showing the inside of a cup for taking impressions of the upper jaw. Fig. 2 is a sectional view of the same through the line *x x*. Fig. 3 is a view showing the inside of a cup for taking impressions of the lower jaw, and Fig. 4 is a sectional view of the same through the line *y y*.

The rubber is molded to the desired form, and then vulcanized to the proper degree by the ordinary process. The parts *a a*, forming the handles of the upper and lower cups, are made heavier than the other parts, as shown. Any rigid material may be vulcanized in this part of the cup, if found necessary. The sides or walls *b b* of the upper cup extend all around the base-plate *c*, the part *b'* forming the flexible posterior flange, which prevents the plaster falling on the tongue of the patient, as shown at Figs. 1 and 2.

The lower cup is made so as to form the channel *e* for holding the plaster, leaving the open space in the center for the tongue. The sides or walls *f f* of the channel *e* are made at their upper part with inside flanges *f' f'*, which extend all around the same. The object of these flanges is to prevent the plaster falling out of the cup when it is inverted, and they, being soft and flexible, do not hurt the gums upon coming in contact with them.

I claim—

As a new article of manufacture, impression-cups made of soft rubber or other elastic material, and flanged upon all sides, substantially as and for the purposes hereinbefore set forth.

WM. M. REYNOLDS.

Witnesses:

E. H. JOHNSON,  
GEO. P. BYRNE.