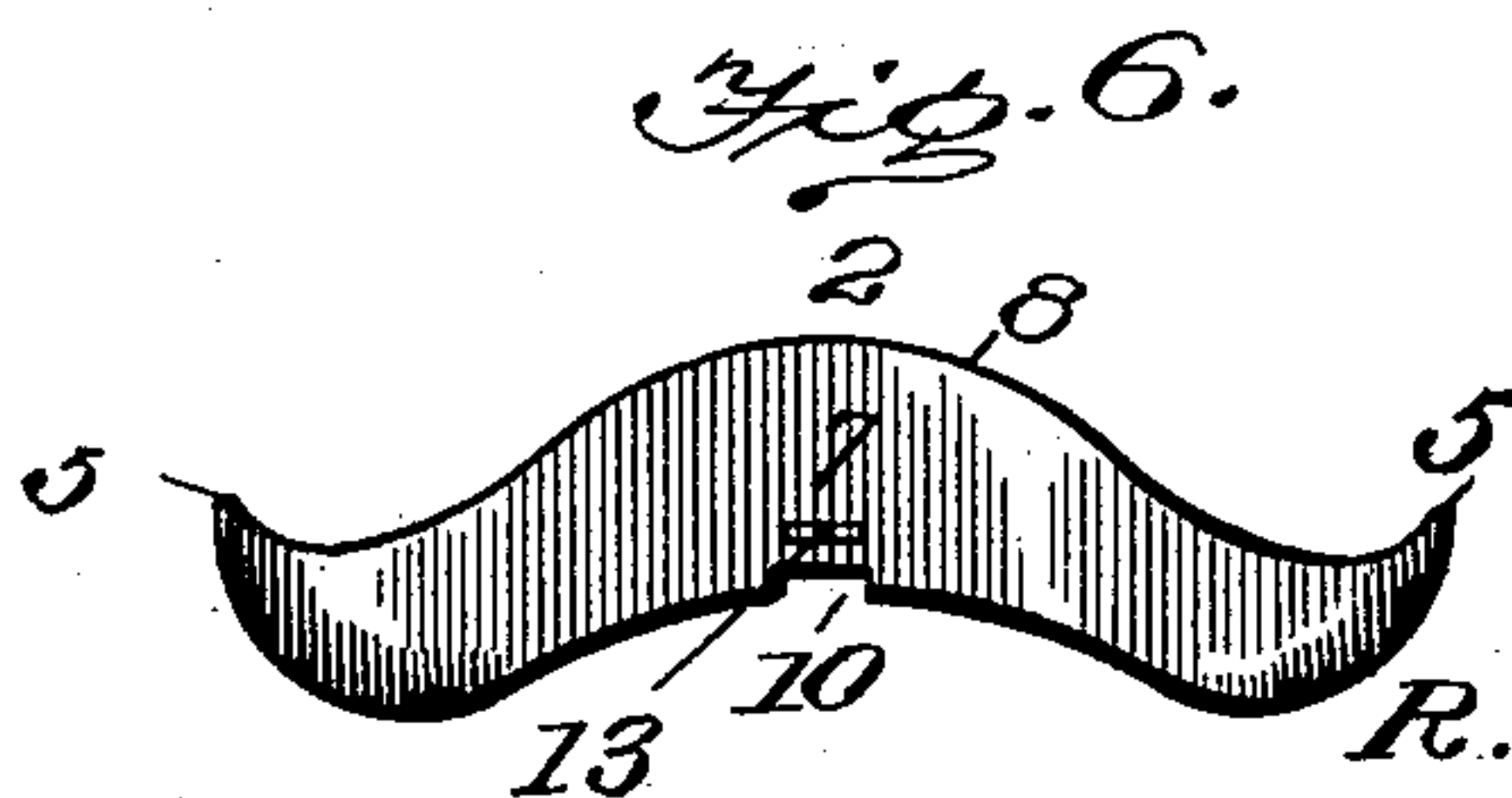
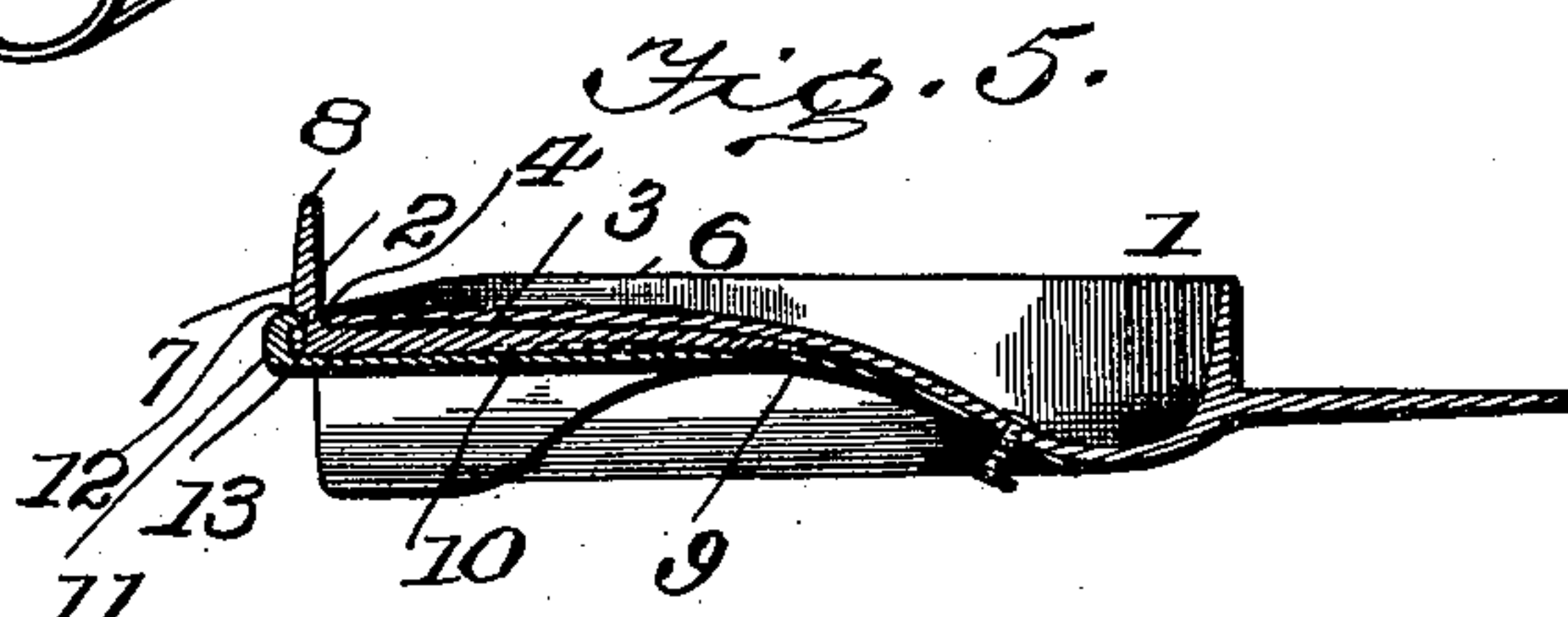
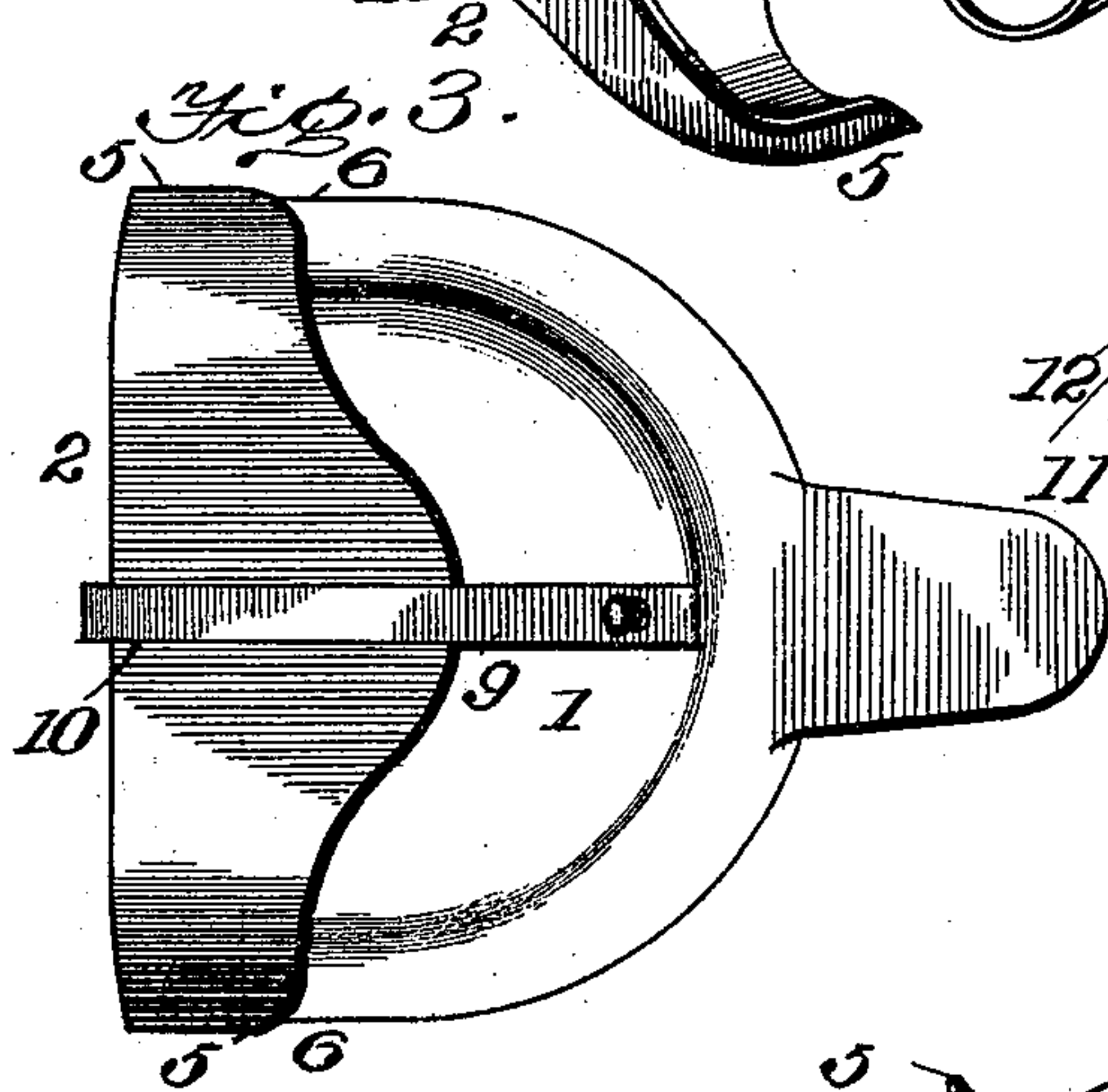
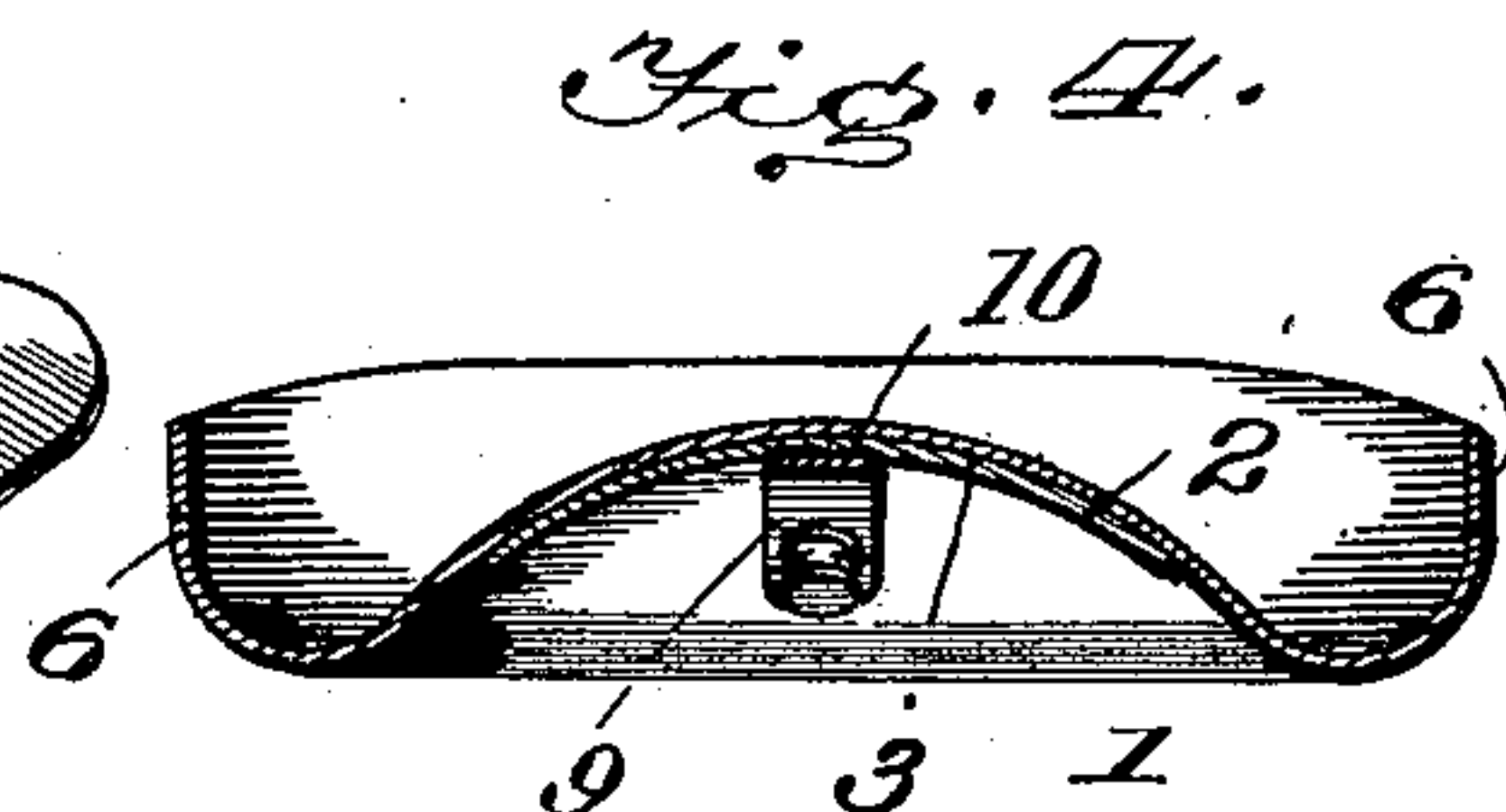
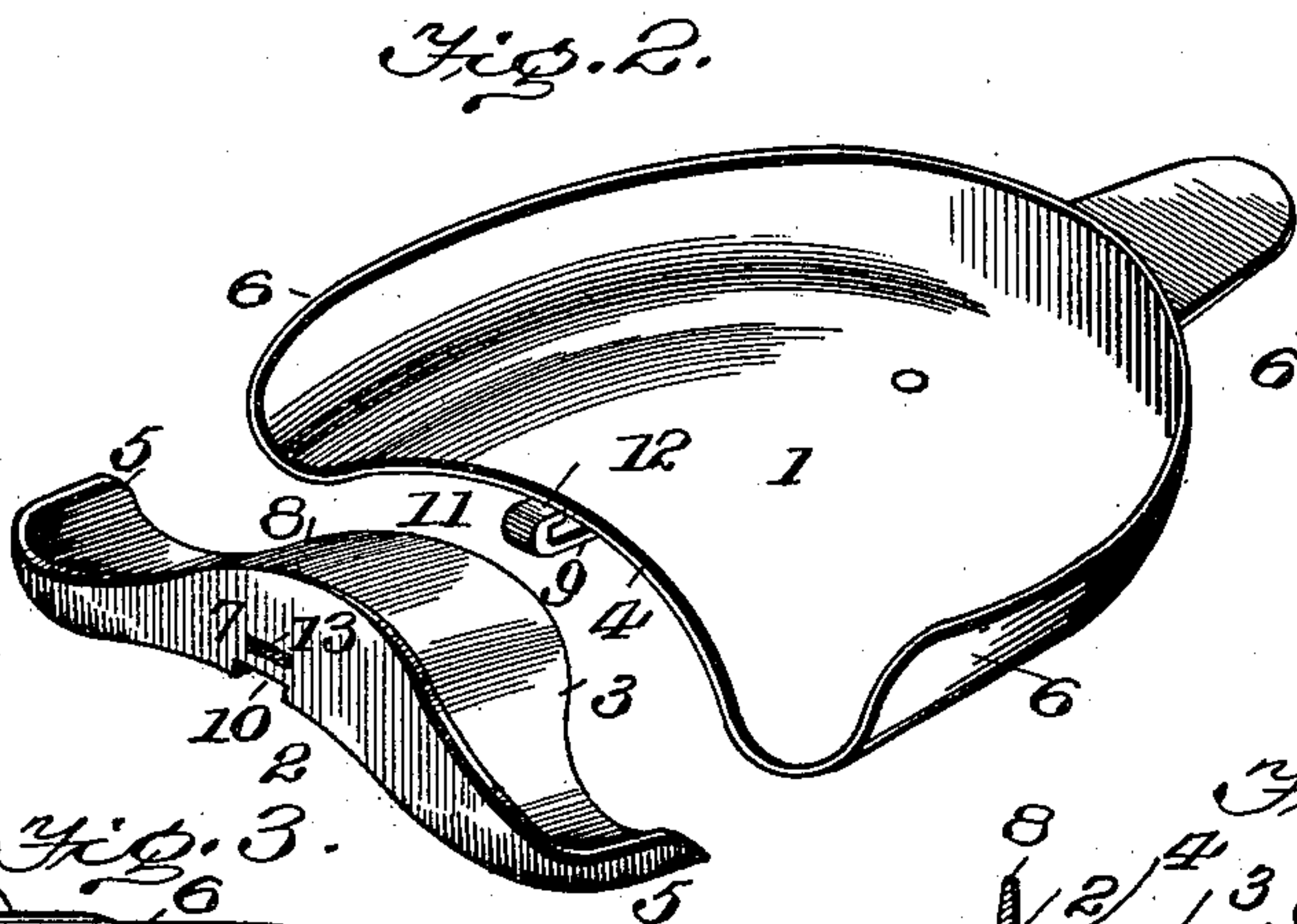
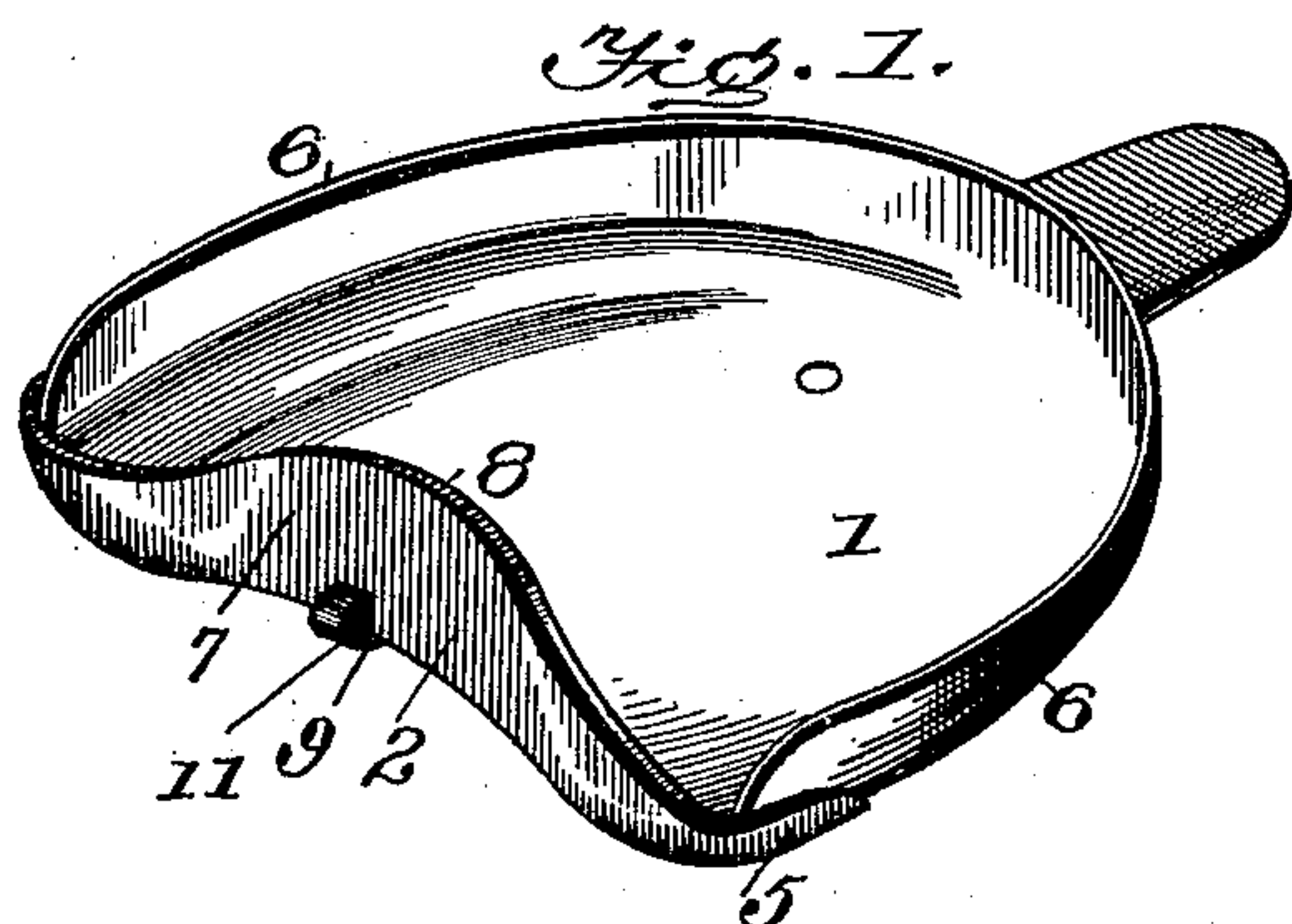


(No Model)

R. A. DUNLAP.  
DENTAL IMPRESSION CUP.

No. 583,848.

Patented June 1, 1897.



Witnesses

*John D. Smith*  
*Mary McLean.*

Inventor

*R. A. Dunlap*  
by *R. A. Lacy.*

his Attorney.



# UNITED STATES PATENT OFFICE.

ROBERT A. DUNLAP, OF CARROLLTON, OHIO.

## DENTAL IMPRESSION-CUP.

SPECIFICATION forming part of Letters Patent No. 583,848, dated June 1, 1897.

Application filed April 1, 1897. Serial No. 630,284. (No model.)

*To all whom it may concern:*

Be it known that I, ROBERT A. DUNLAP, a citizen of the United States, residing at Carrollton, in the county of Carroll and State of Ohio, have invented certain new and useful Improvements in Dentists' Impression-Cups; and I do hereby 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.

My invention has relation to improvements in dental impression-cups; and the object is to provide an impression-cup with a safety guard or shield which shall prevent any surplus plaster from coming in contact with the softer tissues of the mouth or palate, and consequently prevent the possibility of even the smallest particle of the plaster slipping down the throat.

To these ends the novelty consists in the construction, combination, and arrangement of the same, as will be hereinafter more fully described, and particularly pointed out in the claims.

In the accompanying drawings the same reference-characters indicate the same parts of the invention.

Figure 1 is a perspective view of my improved dental impression-cup. Fig. 2 is a similar view showing the shield detached and removed a short distance from the cup. Fig. 3 is a bottom plan view of the cup. Fig. 4 is a transverse section through the cup and shield. Fig. 5 is a longitudinal section of the same. Fig. 6 is an end elevation of the shield.

1 represents an ordinary dental impression-cup, and 2 represents the shield, the upper face 3 of which conforms to the configuration or contour of the bottom of the cup contiguous to its inner transverse edge 4, while the side flanges 5 5 of the shield extend upwardly and fit snugly around the ends of the walls 6 6 of the cup, practically forming a continuation of the same.

7 represents the transverse wall or guard formed integral with the shield and extending across between the flanges 5 5, and its upper edge 8 conforms in outline to the shape of that portion of the roof of the mouth with which it comes in contact, and the edge itself is sufficiently sharp and smooth to sufficiently

indent the flesh without pain and form a shield or barrier to the plastic composition passing this point of contact of the edge of the shield with the roof of the mouth.

9 represents a leaf-spring having one end detachably though rigidly secured to the under side of the cup by the thumb-screw and its body portion extending longitudinally in a corresponding groove 10 in the bottom face of the shield. The outer or free end of this spring terminates in a right-angular lug 11, having a rearwardly-projecting tooth 12, which engages a recess 13 in the outer face of the transverse wall 7, and which not only serves to hold the shield in contact with the cup but also absolutely prevents its accidental displacement. At the same time the spring 9, lying in the groove 10, prevents any lateral displacement of the shield with reference to the cup, and as the spring engages the shield midway of its width it acts as a spring fulcrum-point for the shield to work on, thus allowing it to conform to the mouth without particular regard to the level position in which the cup may be held. It will thus be seen that when the plaster or other plastic composition is placed in the cup and the cup adjusted to take the impression the wall 7 automatically adjusts itself to the roof of the mouth and remains fixed there by the spring, while the cup is pressed farther upward to secure the impression, and in this position it is absolutely impossible for any of the composition to work past the wall, and if any surplus escape from the rear edge of the cup it will be caught and retained by the upper face 3 of the shield, so that a perfectly satisfactory impression is obtained without a particle of the plaster escaping or even coming in contact with the more delicate and sensitive portions of the mouth.

Although I have specifically described the construction and relative arrangement of the several elements of my invention, I do not desire to be confined to the same, as such changes or modifications may be made as clearly fall within the scope of my invention without departing from the spirit thereof.

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

1. The combination with the cup 1, provided with the spring 9 terminating in the lug 11, of the shield 2 adapted to engage said spring, substantially as and for the purpose  
5 set forth.

2. The combination of the cup 1, the spring 9 fixed thereto, and provided with the lug 11, with the shield 2, provided with the transverse wall 7, and the longitudinal groove 10, and  
10 adapted to be detachably secured to said cup by said spring, substantially as and for the purpose set forth.

3. The combination of the cup 1, the spring

9 detachably secured thereto and provided at its free end with the lug 11, having a projecting tooth 12, with the independent shield 2, provided with the longitudinal groove 10 and recess 13, substantially as shown and described.

In testimony whereof I affix my signature 20  
in presence of two witnesses.

ROBERT A. DUNLAP.

Witnesses:

ROBERT E. McDONALD,  
LILLIAN BRICKER.