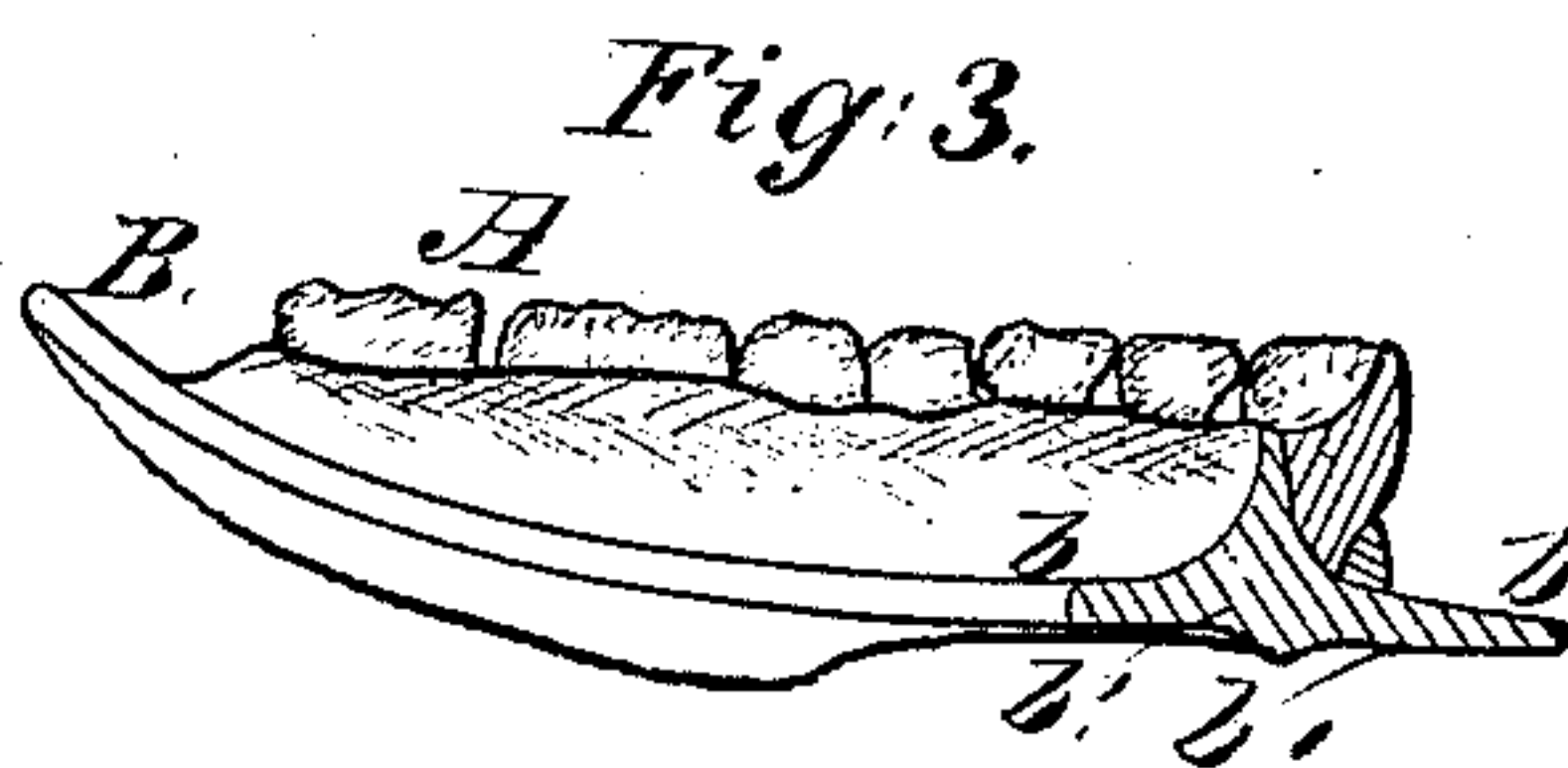
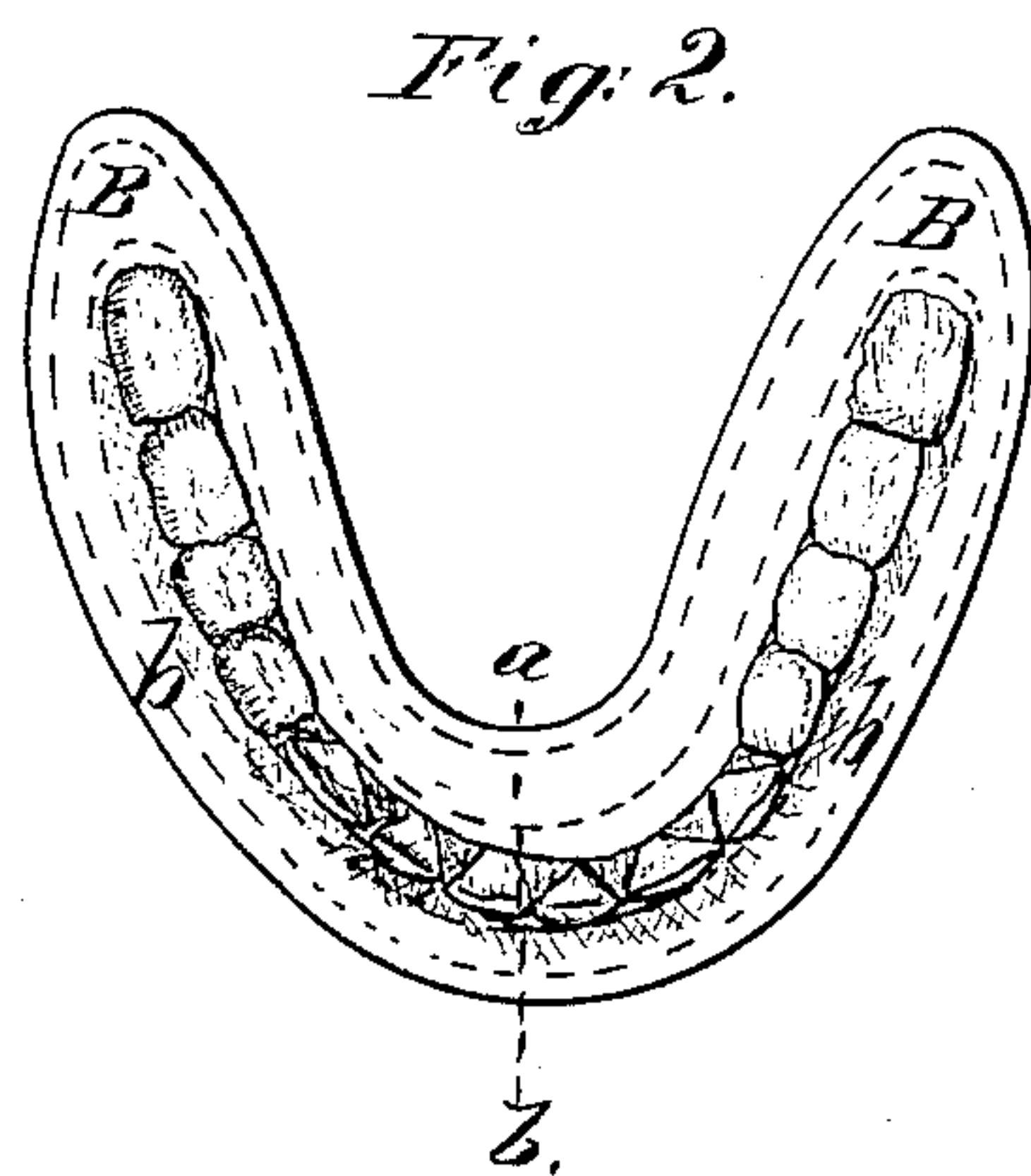
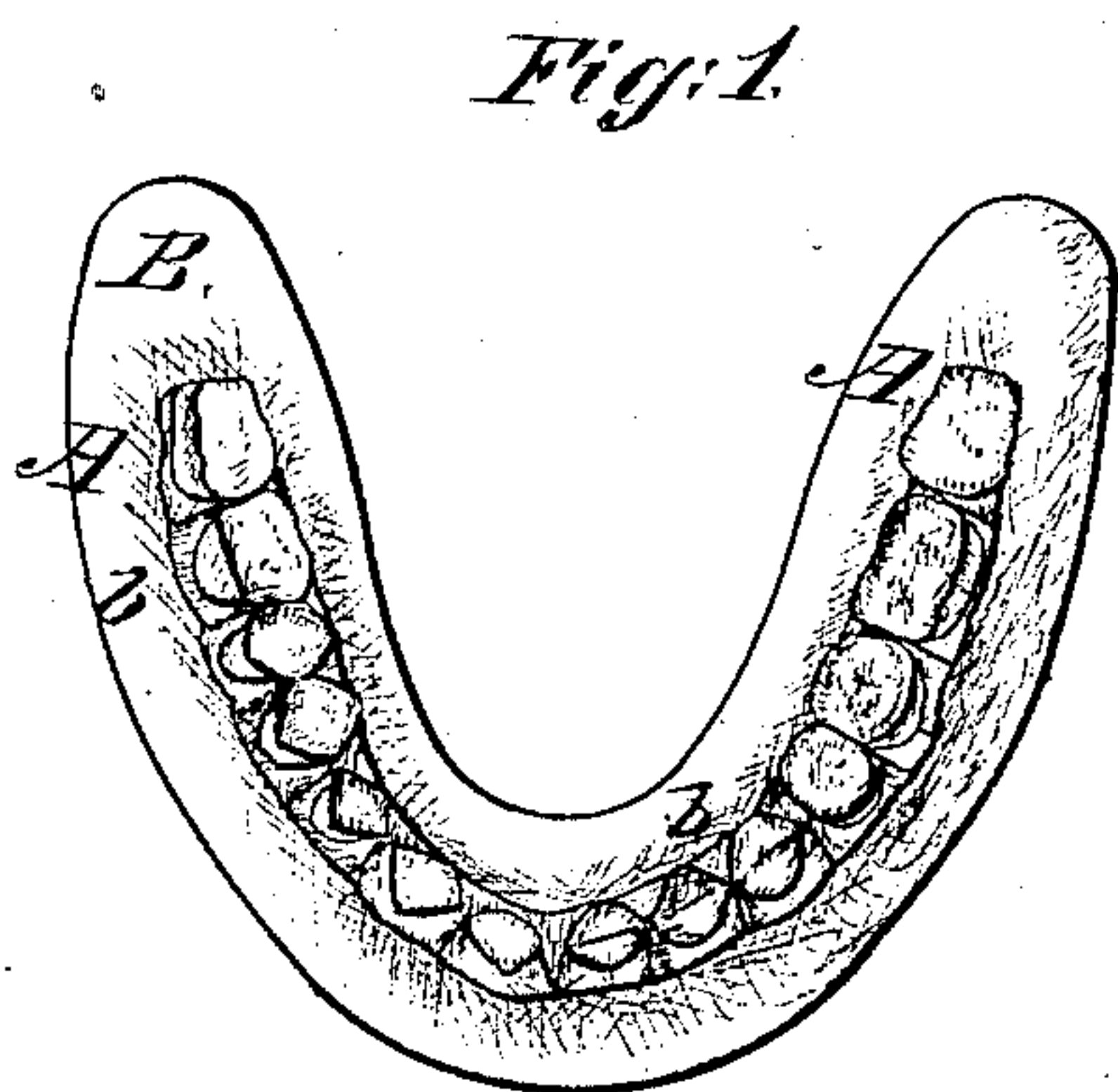


*G. H. Hurd,*  
*Plate for Artificial Teeth.*  
*N<sup>o</sup> 57,725.      Patented Sep. 4, 1866.*



*Witnesses:*

*Geo P Herthel Jr*

*Leah M. Boyle*

*Inventor:*

*Geo H Hurd*

*by M Randolph & Co Attys*

# UNITED STATES PATENT OFFICE.

GEORGE H. HURD, OF ST. LOUIS, MISSOURI.

## IMPROVEMENT IN PLATES FOR ARTIFICIAL TEETH.

Specification forming part of Letters Patent No. 57,725, dated September 4, 1866.

*To all whom it may concern:*

Be it known that I, GEORGE H. HURD, of St. Louis, in the county of St. Louis and State of Missouri, have invented certain new and useful Improvements in Artificial Teeth; and I do hereby declare that the following is a full and clear description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 of the accompanying drawings is a perspective view of a set of artificial teeth, prepared in the improved manner. Fig. 2 is a plan of a similar set. Fig. 3 is a sectional elevation taken on the line *x x* in Fig. 2.

The nature of this invention consists in a new and improved construction of the plate into which the artificial teeth are inserted.

It has been, up to the present time, the universal diction of dental works and the established practice of all dental surgeons to round off the lower portions of the plate where it joins up to the jaw. Chapin A. Harris, an eminent dental writer and established authority of our own country, says: "Cut away the plate until you think you have spoiled it."

There is little or no difficulty in fitting teeth to and retaining them in the superior jaw, since the employment of a suction-plate covering the entire roof of the mouth has been introduced.

As the tongue occupies the entire space in the inferior jaw, no such appliance can be introduced, and consequently springs and various other appliances have been adopted to remedy the difficulty, but frequently without avail, as it sometimes happens the alveolar ridge, which is usually depended upon to hold the teeth in place, is so much absorbed as to be scarcely perceptible and is covered over with the integuments of the lower jaw lying in loose folds upon it. In cases of this kind it has always been extremely difficult to fit and secure artificial teeth, and Harris says that "it would be better in cases of this kind wholly to dispense with their use."

It is to overcome these difficulties and to fit any mouth, however badly shaped, with an easy-wearing and serviceable set of teeth; and I propose to do it upon an entirely new principle—that is, by widening out the bot-

tom part of the plate into a flange instead of rounding it off, as formerly. The said flange will fit out tightly to the lip, the muscles of which will draw tightly over it and tend to hold it in place, and at the same time will prevent the passage of air under the plate, so that if the air be once sucked out from under the plate by the wearer the teeth may be held in place in either jaw by what is now called "the suction principle," as applied to the superior jaw.

To enable those skilled in the art to make and use my improved artificial teeth, I will proceed to describe their construction and operation.

The teeth *A* are inserted into the plate *B* in the usual manner. The latter may be formed of any material known to dental art.

Instead of rounding off or cutting away the bottom of the plate, as above described, it will be widened out into the flanges *b*, which will act against the lips and in the suction manner, as already recited. There may be suction-cavities *b'*, as shown by dotted lines in Fig. 2, in the bottom of the said flanges and extending the whole length of them, or the bottoms of the flanges may be made flat, as also shown in the drawings herewith submitted. In either case the teeth so fitted and prepared may be worn in either the superior or inferior jaw with the greatest ease and comfort.

The plate *B* may have its outer flange constructed of flexible rubber, or for tender gums the whole of its bearing portions may be cushioned with flexible rubber.

The inner flange will form in the inferior jaw a shelf for the tongue to lie upon, and hold it down during mastication.

Having described my invention, what I claim is—

The plate *B*, when constructed with the flanges *b*, either with or without the suction-cavities *b'*, so that artificial teeth may be fitted into mouths of bad formation and secured there either by suction or by muscular power, or by both.

GEO. H. HURD.

Witnesses:

M. RANDOLPH,

GEO. P. HERTHEL, Jr.