

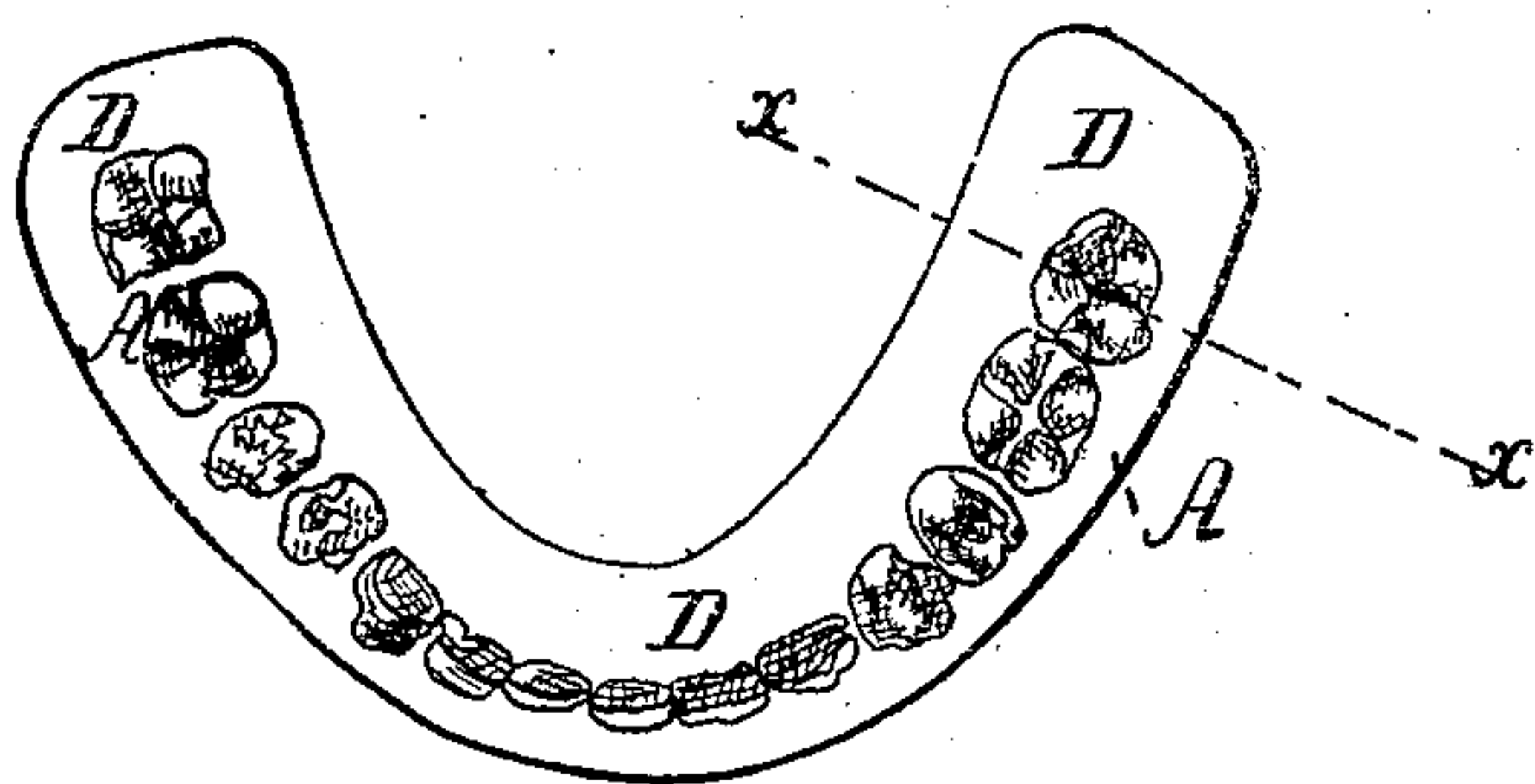
*W. C. Michaelis,*

*Artificial Teeth.*

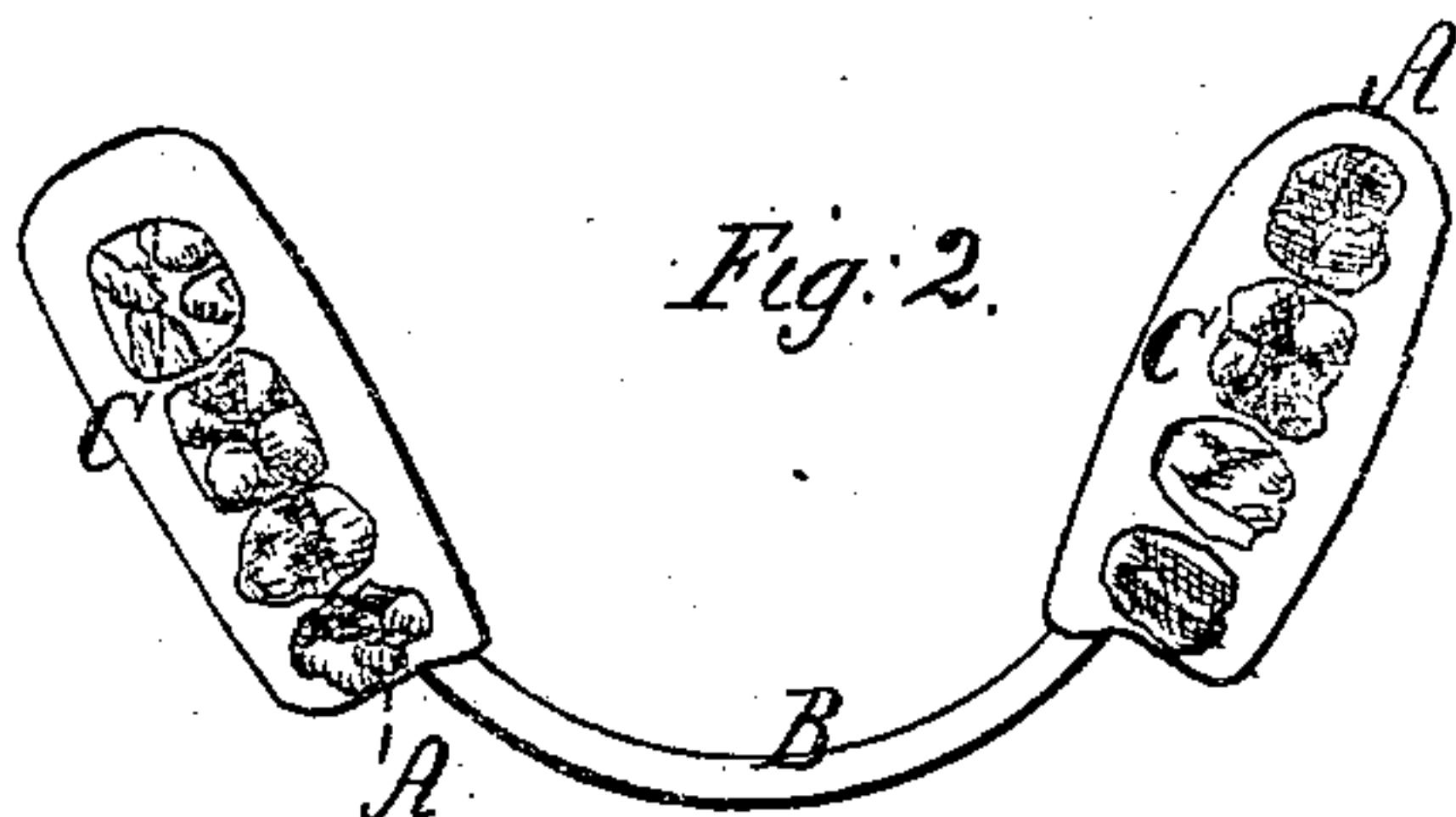
*No. 85,600.*

*Patented Jan. 5. 1869.*

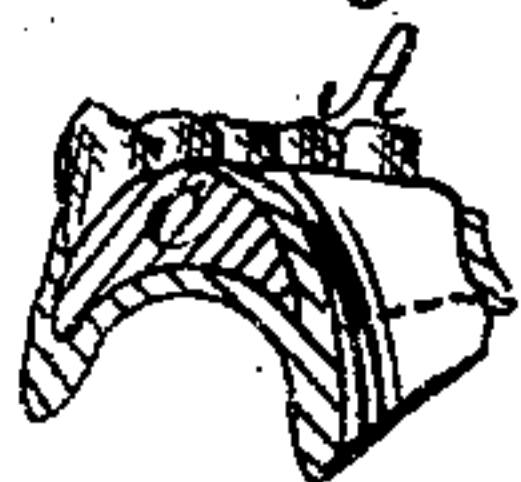
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Witnesses;*  
*A. W. Almqvist*  
*John A. Morgan*

*Inventor;*  
*W. C. Michaelis*  
*per Munn & Co*  
*Attorneys.*



WILLIAM C. MICHAELIS, OF NEW YORK, N. Y.

Letters Patent No. 85,600, dated January 5, 1869.

IMPROVED MOUNTING FOR ARTIFICIAL TEETH

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, WILLIAM C. MICHAELIS, of the city, county, and State of New York, have invented a new and useful Improvement in Mounting Artificial Teeth; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a set of teeth to which my improvement has been attached.

Figure 2 is the same view, showing the rubber base removed.

Figure 3 is a cross-section of the same, taken through the line *x x*, fig. 1.

Similar letters of reference indicate corresponding parts.

My invention has for its object to improve the construction of lower sets of artificial teeth, so as to make them stronger and better than when mounted in the ordinary manner, and at the same time less liable to move when used for masticating-purposes; and

It consists in loading or weighting the lower molars and bicuspid upon each side of the mouth with an alloy of tin and bismuth, and in connecting the said molars and bicuspid upon the two sides of the mouth with a metallic wire and plate, either or both wholly or partially embedded in the hard-rubber base of the set of teeth, as hereinafter more fully described.

The teeth *A* are set in wax in the usual manner for an ordinary set of rubber teeth. After the teeth have been properly set upon the plaster cast, the four back teeth upon one side are removed, with the wax in which they are set. One end of a wire or plate, *B*, or of both a wire and plate, of any of the noble metals, of sufficient length to reach around to the four back teeth upon the other side, is then inserted in proper position in the wax.

The four teeth, wax, and wire or plate *B*, or both a wire and plate, are then placed in a mixture of plaster of Paris, sand, and water, to form a mould.

When the mould is dry, the wax is removed and replaced with an alloy, *c*, of block-tin and bismuth.

When cold, the plaster mould is removed and the other four back teeth connected with the other end of the wire and plate *B*; either or both, and provided with the alloy *c* in the manner hereinbefore described. The back teeth, weights *c*, and either or both the wire and plate *B*, are then arranged upon the plaster cast, in connection with the other or front teeth, when all or part of the front teeth are artificial, and the operation proceeded with in the ordinary manner, so that the said weights *c* and wire and plate *B*, either or both, may be wholly or partially embedded in the rubber base *D*.

The weights *c* may, if desired, be made entirely of tin, but I prefer to use an alloy of tin and bismuth, in the proportions of forty parts of tin to fifteen of bismuth, as forming a more fusible alloy, and at the same time one that will not melt under the heat required for vulcanizing the rubber. It should be observed, however, that almost any alloy of tin and bismuth will answer the purpose.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

1. Weighting the rear lower teeth upon each side with metallic weights, *c*, substantially in the manner herein shown and described, and for the purpose set forth.

2. Connecting the rear teeth upon the two sides of the mouth with a metallic wire or plate, *B*, either or both, wholly or partially embedded in the hard-rubber base of said teeth, substantially as herein shown and described, and for the purpose set forth.

The above specification of my invention signed by me, this 14th day of November, 1868.

WM. C. MICHAELIS.

Witnesses:

ALEX. F. ROBERTS,  
JAMES T. GRAHAM.