(Model.)

C. H. LAND.

ARTIFICIAL TEETH.

No. 271,476. Patented Jan. 30, 1883.

Fig. 1

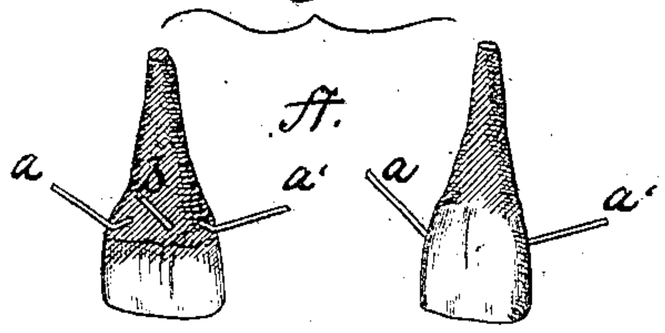


Fig. 2.

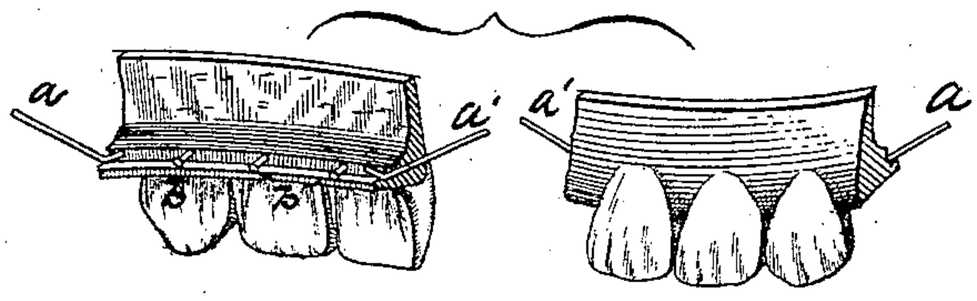


Fig. 3.

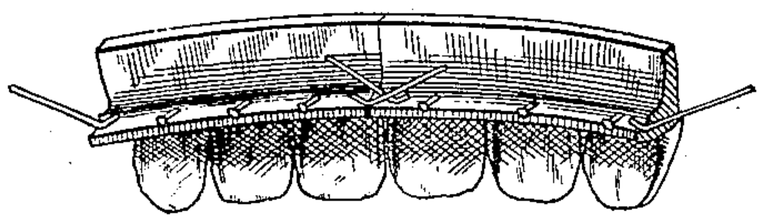
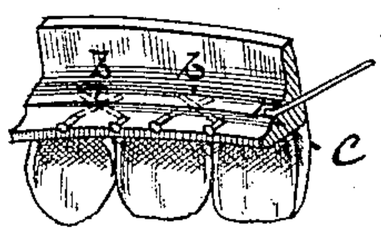


Fig. 4.



Witnesses;

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UNITED STATES PATENT OFFICE.

CHARLES H. LAND, OF DETROIT, MICHIGAN.

ARTIFICIAL TEETH.

SPECIFICATION forming part of Letters Patent No. 271,476, dated January 30, 1883.

Application filed May 19, 1882. (Model.)

To all whom it may concern:

Be it known that I, CHARLES H. LAND, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in the Manufacture of Artificial Teeth, and in means for mounting the same; 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.

This invention relates to certain improvements in the manufacture of artificial teeth and mounting the same.

In the manufacture of artificial dentures at the present time dentists experience great trouble and annoyances in consequence of the pulling apart and by the shattering or breaking of the enamel of the bases of nearly all classes of work. In what is known as "rubber" work the teeth are made in sections, and frequently pull out from the pins, split between the joints, and finally become separated in two or more parts. These same difficulties exist with the celluloid or continuous-gum work. Also, in the manufacture of artificial dentures at the present day no provision is made to prevent breakage by lateral pressure upon the teeth when in use (operation) by the wearer.

The objects of my improvements are to remove the difficulties as to the shattering or breaking of the enamel of the bases of the work and to provide means for preventing the fracture of artificial dentures by lateral pressure.

My invention consists in arranging in the proximal side of each tooth a pin, preferably arranged diagonally.

My invention further consists in providing each intermediate tooth with three fastening pins or projections, two of said pins being arranged in the proximal sides of the tooth.

In the accompanying drawings, forming a part of this specification, Figure 1 is a perspective view of one single tooth provided with my improved proximal pins and a central pin. Fig. 2 is a like view of a section of block-teeth, showing the pins. Fig. 3 is a view of two sections of "block-teeth" joined together, with the arrangement of the intersecting pins shown in dotted lines; and Fig. 4 is a modification.

The letter A represents an artificial tooth provided with the proximal pins *a a'* and the center pin, *b*. These pins *a* and *a'* are made longer than the center pin usually employed or inserted, and are set at nearly right angles to the direction of the intermediate pin or pins now employed as fastening means in the art. The teeth or blocks are arranged so that the proximal pins cross each other about midway between the teeth, and in what are known as "section-teeth" the intermediate pins cross each other directly in front of the space between the teeth, and are embedded within the porcelain, as shown in Fig. 2 of the drawings, the blocks being secured to each other by the proximal pins, as hereinbefore set out. It will be seen by reference to the drawings that the pins in the proximal sides are inserted and arranged higher up the tooth than the center pins now in use. By this arrangement and location I obtain the greatest possible strength in a lateral direction, as well as adding security in other directions.

The letter *c* represents a small slot or groove cut in the tooth on both sides of the long pins, for the purpose of allowing the pin to be bent easily and conveniently out of the way when grinding the joint, and, also, that in bending the pin toward the joint there is more of a space cut, so as to give a greater range in bending, and making it better adapted to each individual case. It will be seen by reference to Fig. 2 that the intermediate pins, as shown in the dotted lines, cross each other directly in front of the space between the teeth, and are adapted to be embedded within the base or plate. It will be readily seen from this arrangement and construction that in order to separate the teeth the pins will have to be broken, and that, although the enamel may crack, still the teeth would be held secure to the mounting.

The process of mounting the teeth to the rubber or celluloid base are well known, and need not be herein described.

I do not wish to confine myself to the exact

location of the pins *a a'*, since they may be embodied in the ends to produce substantially the same result.

What I claim is—

1. An artificial denture provided on the proximal sides with connecting pins or projections, substantially as described.

2. An artificial denture provided with three fastening pins or projections, two of which are arranged on the proximal sides of the tooth, as an improved article of manufacture.

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

CHARLES H. LAND.

Witnesses:
JNO. B. CORLISS,
J. M. CURTISS.