

No. 712,705.

Patented Nov. 4, 1902.

W. H. MOSLEY & H. G. ROBB.
PORCELAIN FACING FOR CROWN AND BRIDGE WORK.

(Application filed Sept. 29, 1900.)

(No Model.)

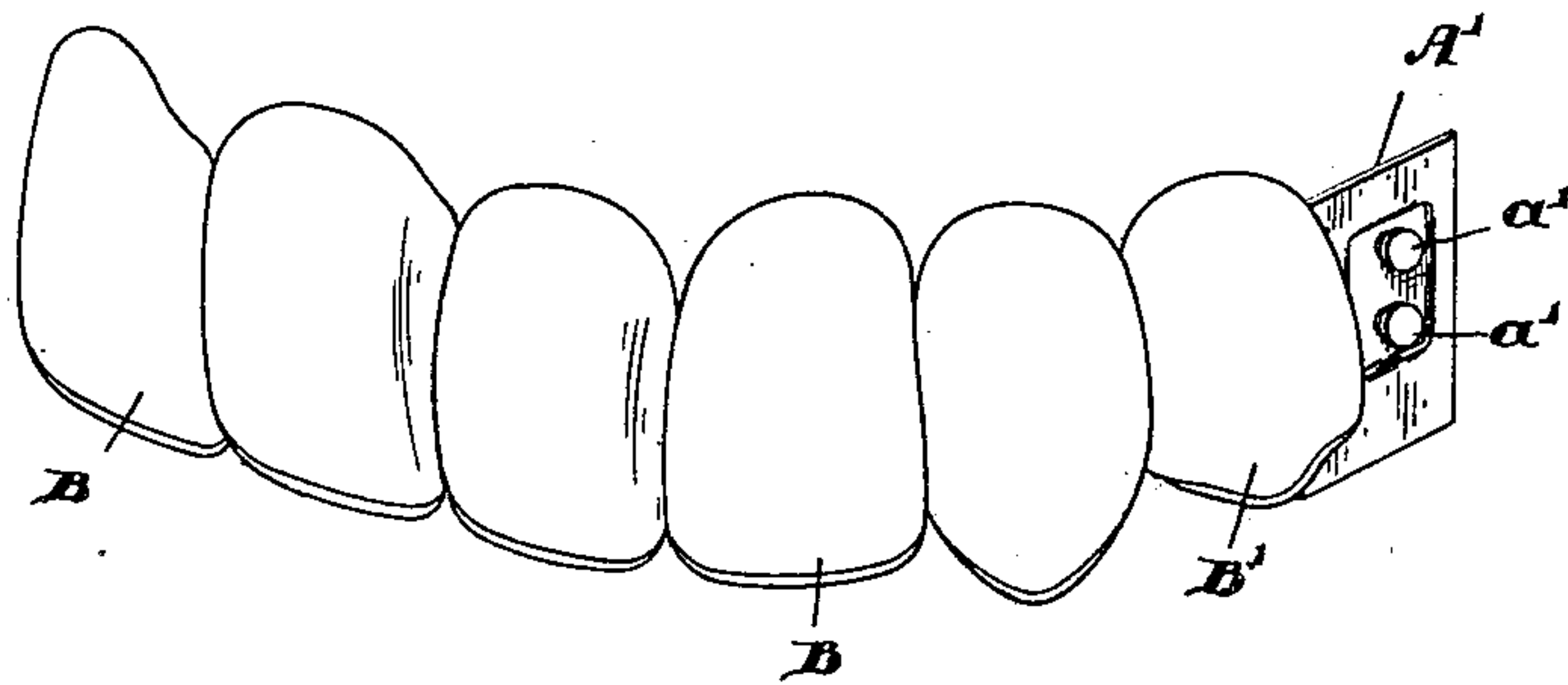


Fig. 1.



Fig. 6.

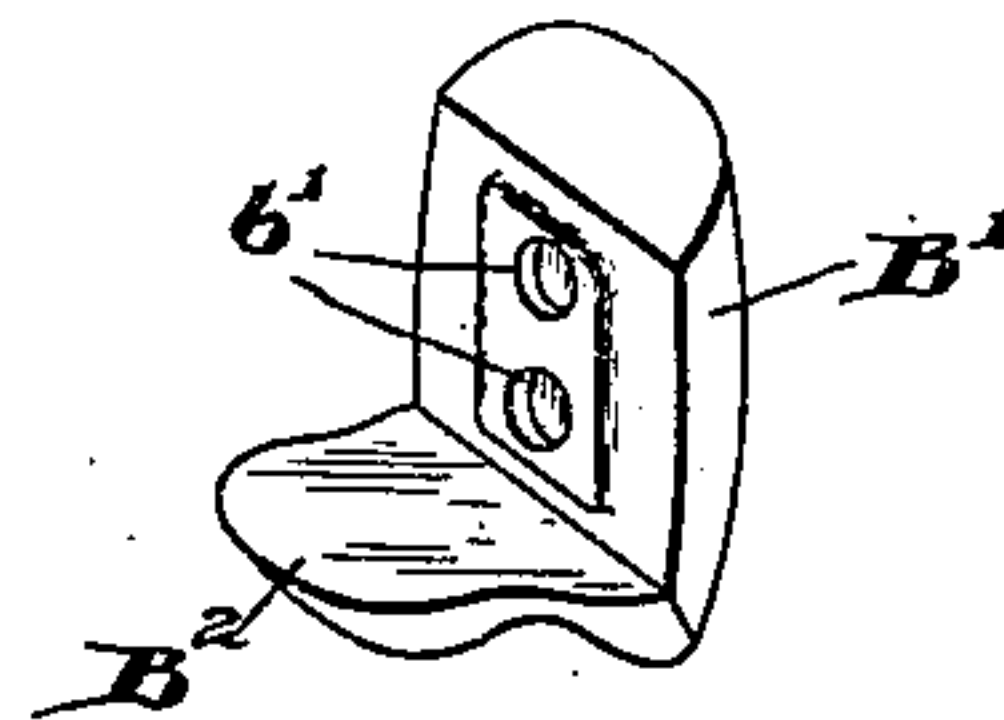


Fig. 2.

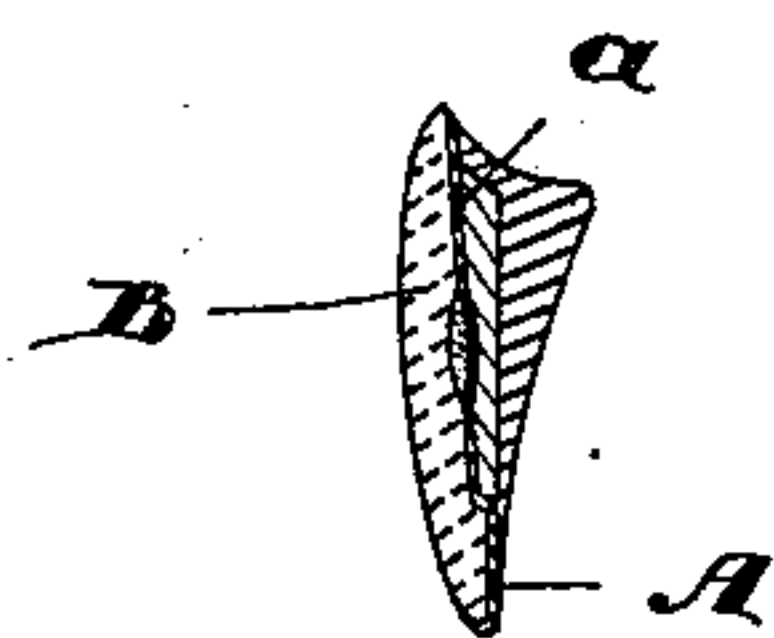


Fig. 3.

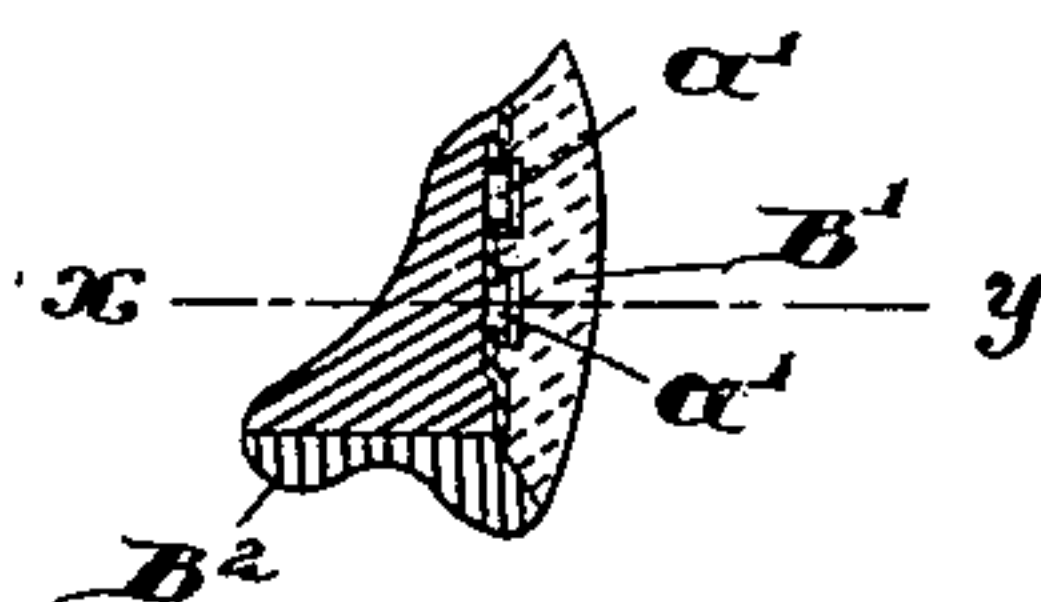


Fig. 4.

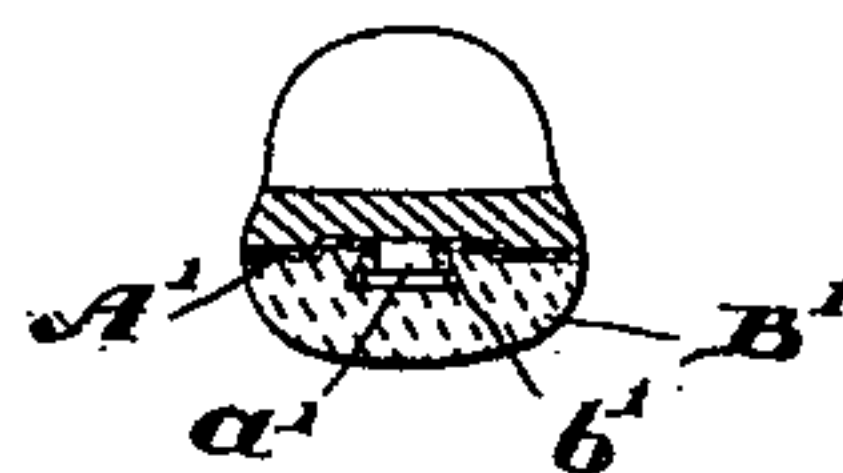


Fig. 5.

Witnesses.

Attestation
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UNITED STATES PATENT OFFICE.

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PORCELAIN FACING FOR CROWN AND BRIDGE WORK.

SPECIFICATION forming part of Letters Patent No. 712,705, dated November 4, 1902.

Application filed September 29, 1900. Serial No. 31,565. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM HAROLD MOSLEY and HENRY GEORGE ROBB, of the town of Midland, in the county of Simcoe, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Porcelain Facings for Crown and Bridge Work, of which the following is a specification.

Our invention relates to improvements in porcelain facings for crown and bridge work; and the object of the invention is to devise a cheap simple stable means whereby the porcelain facings may be adapted to the backings and incorporated with the bridgework without the necessity of baking metal attachments in the porcelain or deleteriously affecting the porcelain facings and at the same time provide a means whereby the teeth so formed may be less bulky than that has heretofore been accomplished in this construction and also enable the backings being burnished over the edge of the teeth, so as to prevent breakage; and it consists in the particular construction and arrangement hereinafter described, and particularly pointed out in the claims.

Figure 1 is a perspective view of a bridge, showing one of the porcelain facings removed to exhibit an alternative form of making the backings. Fig. 2 is a detail of a porcelain facing being applied to a bicuspid. Fig. 3 is a vertical section through the porcelain facings of a central tooth backing and bridge when formed. Fig. 4 is a vertical section through a bicuspid porcelain-facing backing and bridge. Fig. 5 is a sectional plan of Fig. 4 on the line $x y$. Fig. 6 is a section of the preferred form of plate used for a backing for a bicuspid or molar porcelain facing.

In the drawings like letters of reference indicate corresponding parts in each figure.

In the back of the bicuspid shown at the right of Fig. 1 the backing A' is formed with pins a' with enlarged heads. The bicuspid porcelain facing B' is formed with corresponding recesses b' , the inner side edges of which are preferably of greater breadth than the outer side edges. The bottom of the tooth is formed of gold B^2 in the form shown or as may be found best adapted to fit against the opposing set of teeth. In this form the cusps are formed

so as to extend under the point of the facings and may be burnished as may be desired. The bottom of the backing A' of course fits down against the top of the cusps.

Before forming our bridge the proper occlusions are first obtained by applying the porcelain facings to the backings and in the usual manner known to dentists by the utilization of wax. After the proper occlusions have been obtained the porcelain facings are removed from in front of the backings and such backings are embedded at the front in investment material in the usual manner known to dentists, and the gold is then flowed over the backings, so as to form the bridge. The porcelain facings are then placed in position with cement, so that the recesses fit over the tongues or holes, and the cement serves to fill any spaces between the tongues and recesses, and thereby key and securely fasten the porcelain facings in position. At this period the bottom of the gold backing may be burnished underneath the point of the porcelain facings of the central, lateral, and eye tooth, and the cusps of the bicuspid tooth may be burnished underneath the points of the bicuspid facings, thereby serving to securely protect the porcelain facings at their biting edges.

It will be noticed from the construction hereinbefore described and the means whereby the porcelain facings are connected to the backings that such backings may be made of very thin gold, and therefore much cheaper than is the case at present. It will also be seen that there is no liability of discoloring the porcelain facings and that the space occupied from front to rear of the tooth is very much less bulky than heretofore and the manufacture of the porcelain facings much more cheaply effected from the fact that no metal has to be formed up in them.

What we claim as our invention is—

1. In dental bridgework, the combination with the backing having extending from the face thereof a retention-post provided with an enlarged head, of a facing provided with a hole or retention-cell with an undercut wall designed to be placed directly over and surround the post and a cement filling also surrounding the post and filling the space between the post and the cells of the wall where-

by the facing is securely held from lateral displacement, the said backing having a locking depression surrounding the post and the said facing, a corresponding elevation designed to fit into such depression, whereby the facing is reinforced or strengthened as to turning as specified.

2. In dental bridgework, the combination with a vertical flat backing-plate having extending horizontally from the face thereof a retention-post, of a vertically-placed facing having a flat back provided with a cell designed to be placed over or surround the post, a biting portion of metal soldered or connected to the backing, so as to protect the

porcelain previous to the final affixing of the porcelain, the said backing having a locking depression surrounding the post, a corresponding elevation on the facing designed to fit such depression, and a cement filling designed to fill the space between the post and the wall of the cell and permanently connect the facing and backing after the bridge is soldered and formed as specified.

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Witnesses:

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D. S. STOREY.