

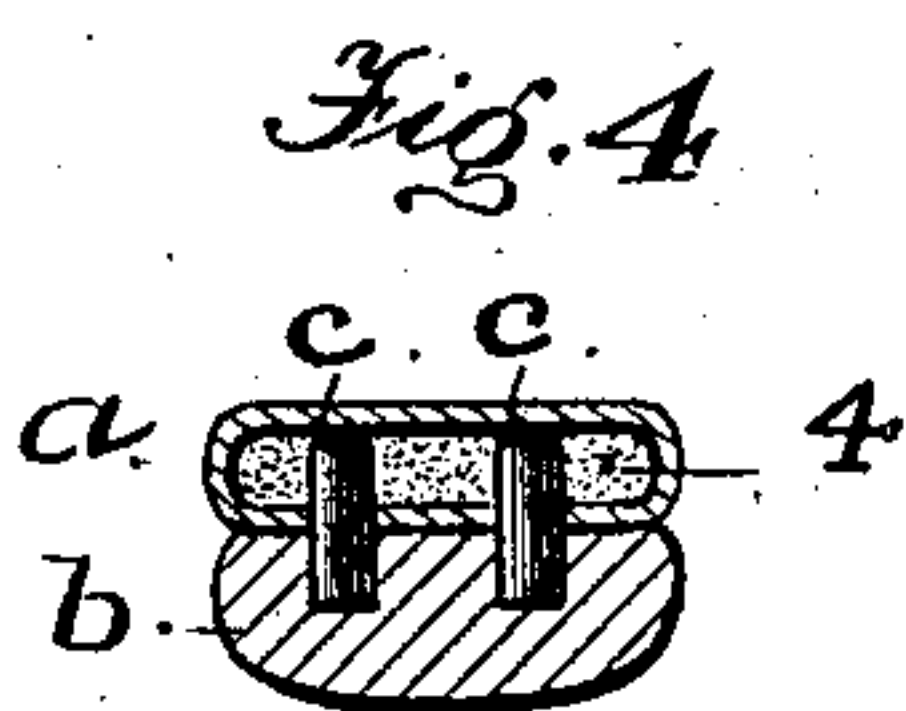
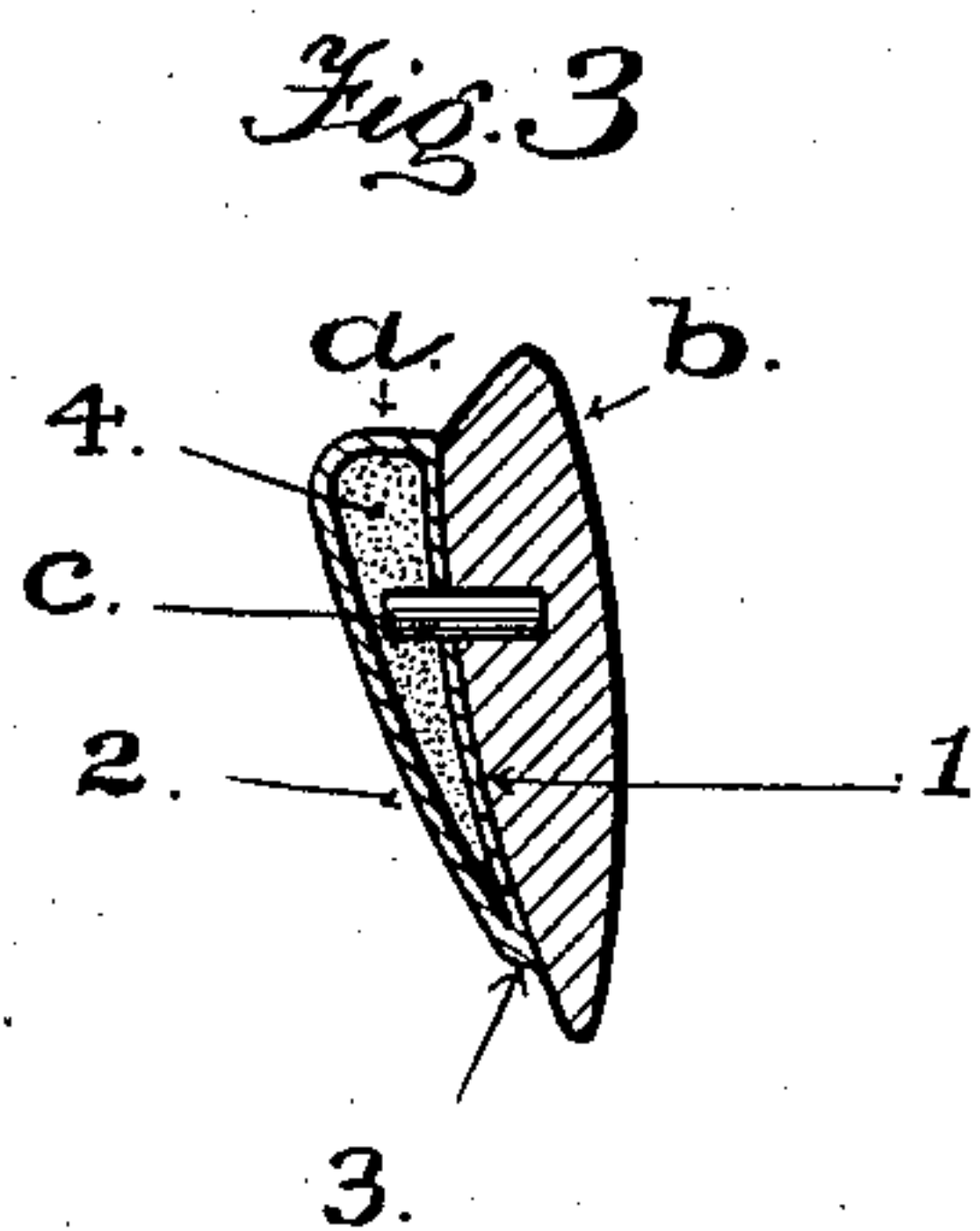
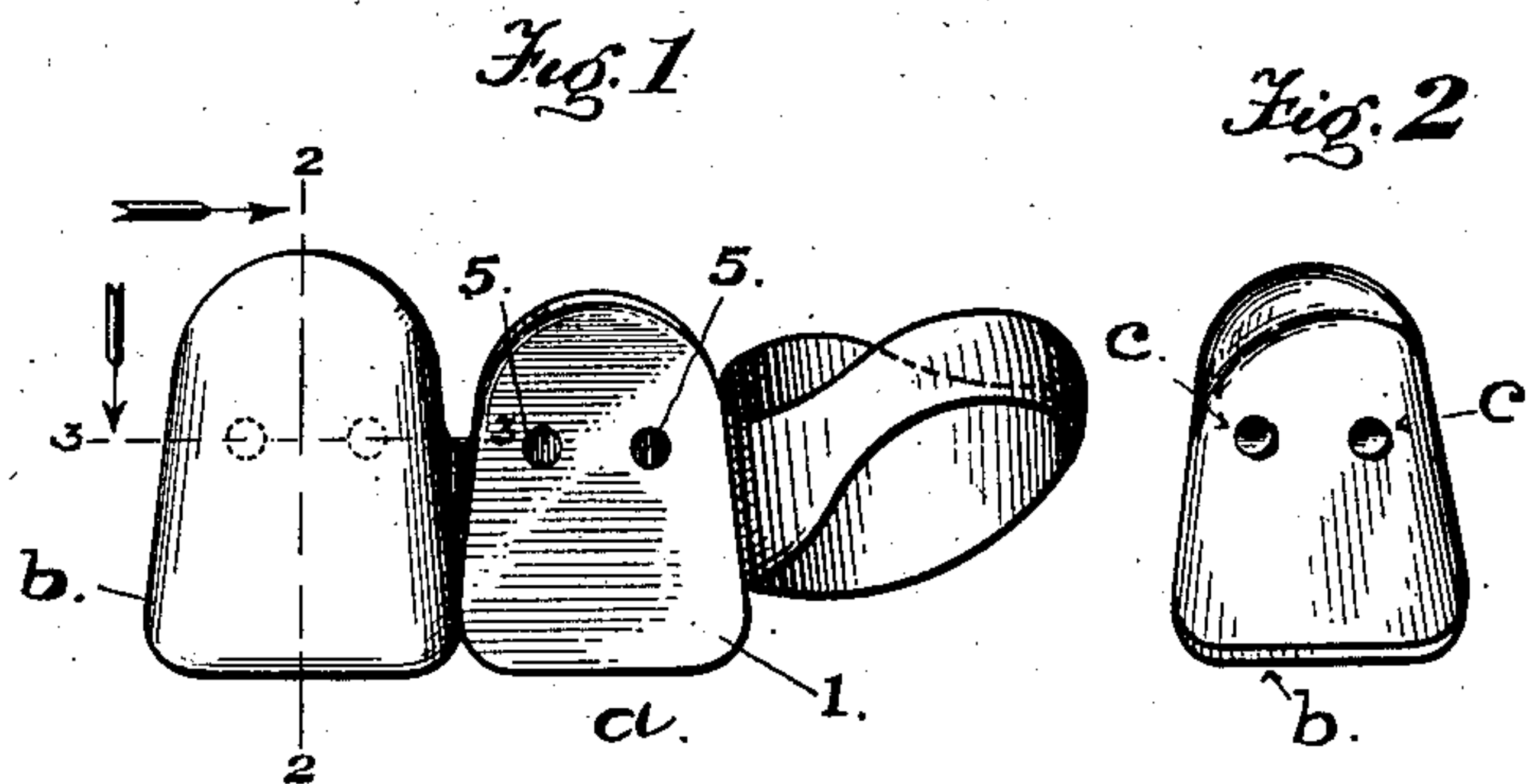
No. 753,529.

PATENTED MAR. 1, 1904.

F. TEAGUE.
DENTAL BRIDGE.

APPLICATION FILED MAR. 18, 1901.

NO MODEL.



Witnesses:

Edmund A. Thaus
M. Regner.

Inventor

Fredaue Teague
By Dmth Osborn
Atty's.

UNITED STATES PATENT OFFICE.

FREDERIC TEAGUE, OF OAKLAND, CALIFORNIA.

DENTAL BRIDGE.

SPECIFICATION forming part of Letters Patent No. 753,529, dated March 1, 1904.

Application filed March 18, 1901. Serial No. 51,643. (No model.)

To all whom it may concern:

Be it known that I, FREDERIC TEAGUE, a citizen of the United States, residing in Oakland, in the county of Alameda and State of California, have invented certain new and useful Improvements in Dental Bridges for Porcelain Teeth, of which the following is a specification.

This invention relates to improvements made in dental bridgework for fixing porcelain teeth in place; and it has for its object to dispense with the use of solder and like fastening means that requires the porcelain and the metal-work to be exposed to heat in order to fix one to the other and to provide a bridge or base with a substantially continuous walled cavity, to which the porcelain tooth may be quickly and rigidly secured without being subjected to strains or pressure, and from which it may be readily removed, and also to protect the inclosed cement from the deleterious effects of the saliva or other injurious fluids which, if the walls were not continuous, would find their way through the breaks or joints formed therein or between the walls and the porcelain tooth.

To these ends and objects my said invention consists in a bridge of novel construction, and means in combination therewith for securing the porcelain crown in place thereon, as hereinafter described, and pointed out in the claims at the end of the specification, in which reference is had to the accompanying drawings, forming part thereof.

Figure 1 of the drawings is a front elevation of a bridge embodying my invention and showing on an enlarged scale a bridge for fixing two porcelain teeth in place in the mouth in accordance with these improvements, one of the porcelain teeth being removed to disclose the setting behind it. Fig. 2 is a back view of the porcelain teeth removed. Fig. 3 is a vertical cross-section taken on the line 2 2, Fig. 1. Fig. 4 is a horizontal cross-section on the line 3 3, Fig. 1.

A hollow backing or setting *a* is formed with a front or labial side 1, ordinarily somewhat concave to make a close fit with the back of the porcelain teeth *b*, and the rear or lingual side 2, usually convex and inclined from the top toward the bottom 3, where it meets the

front at an acute angle and forms a thin edge. The hollow space 4 inclosed between these walls is filled with cement introduced through the small holes 5 in the front wall, which are provided to receive the pins or studs *c* on the back of the porcelain teeth. The shell is formed with tight joints at all points to inclose the cement and prevent the fluids and secretions of the mouth from reaching or coming in contact with the cement, and to the same end the pins *c* are made of proper size to fit closely the holes in the front side of the shell. In this manner the cavity within which the cement is retained becomes substantially hermetically sealed by the application of the porcelain tooth and the retaining qualities of the cement are uninjured so long as the porcelain tooth is retained in position. In addition to this the bridge possesses more rigidity and strength than if made of parts disconnected at any point, and the porcelain tooth is relieved from the strain which would naturally fall upon it if the top surface of the bridge were at a distance above the front wall and rested upon the upper edge of the porcelain tooth.

The porcelain tooth is applied and attached to the bridge by filling the hollow space 4 with cement in a plastic state through the holes in the front wall of the shell, after which the porcelain tooth is placed in position by inserting its pins in the holes and pressing the part firmly in contact with the front wall of the shell. The cement employed for this purpose is of the kind that becomes set and hardened in a cold state or without the application of heat, and after a sufficient time has been allowed for this to take place the pins become rigidly fixed in the cement.

Where in the following claims I employ the term "occluding," I refer to the portion integral with the back and front walls and closing the space at the end of the compartment formed by such walls.

It will be understood that the backings are to be soldered side by side to form a continuous bridge, as shown in Fig. 1.

Having thus fully described my invention, what I claim as new therein, and desire to secure by Letters Patent, is—

1. A hollow backing to receive the cement

and comprising in a single integral element back and front walls and an occluding surface joining said back and front walls, said front wall being perforated to receive the
5 pins from the porcelain front.

2. In dental bridgework, the combination with an artificial tooth-front of a hollow backing inclosing a cavity individual to the tooth-front, and to the front wall of which the tooth-
10 front is secured, a back wall integral with the front wall and a grinding-surface integral

therewith joining the front and back walls, said grinding-surface being supported behind the tooth-front and separately of the occluding surface thereof.

In testimony that I claim the foregoing I
have hereunto set my hand and seal. 15

FREDERIC TEAGUE. [L. s.]

Witnesses:

M. REGNER,
EDWARD E. OSBORN.