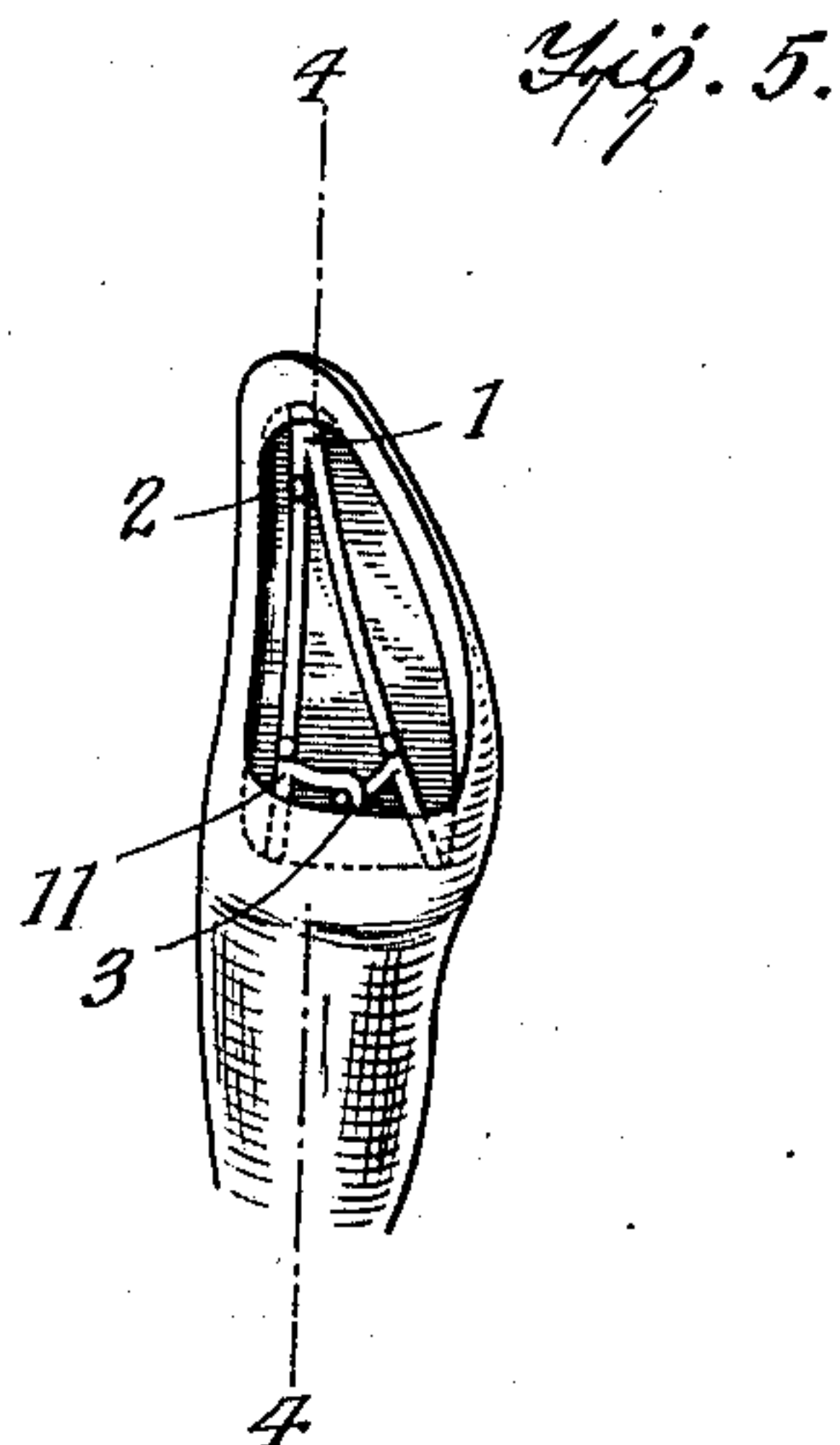
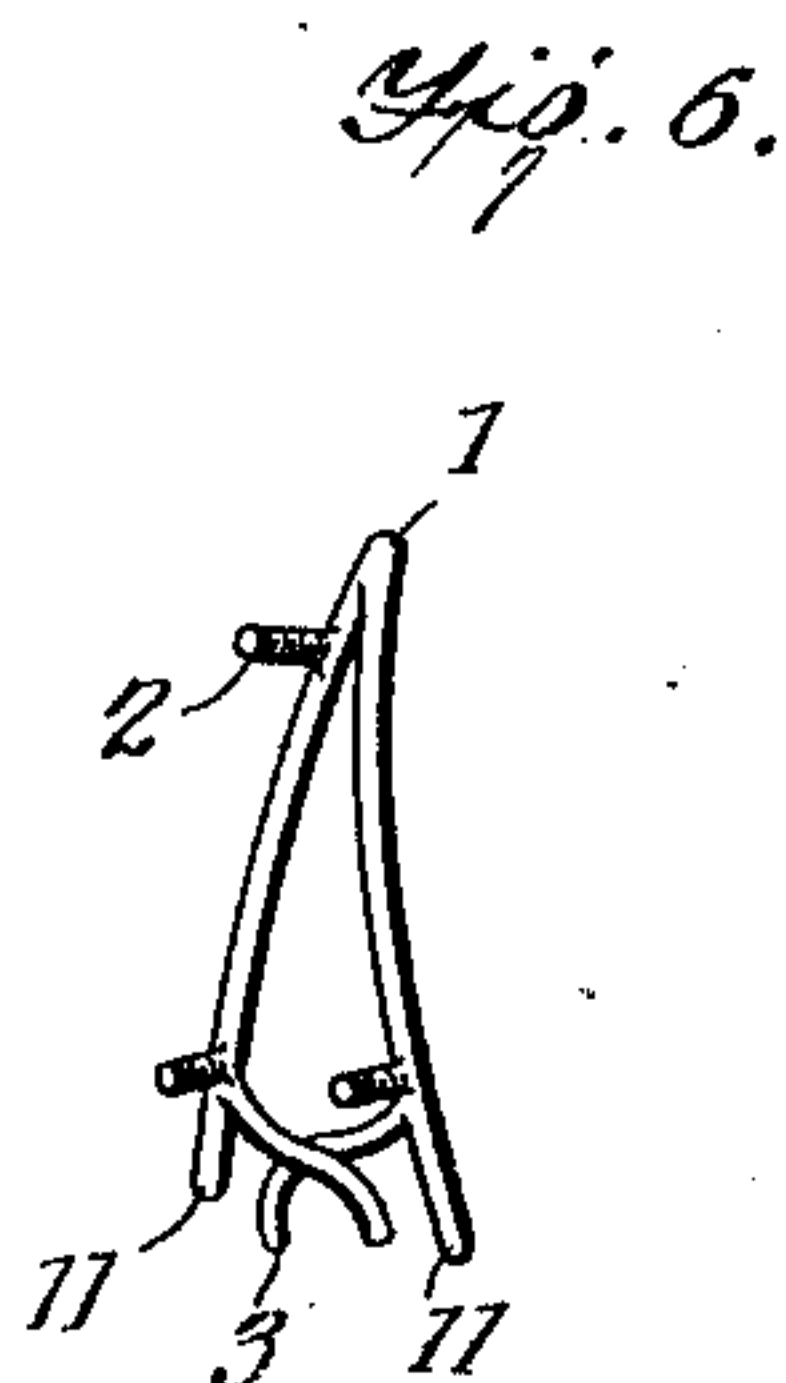
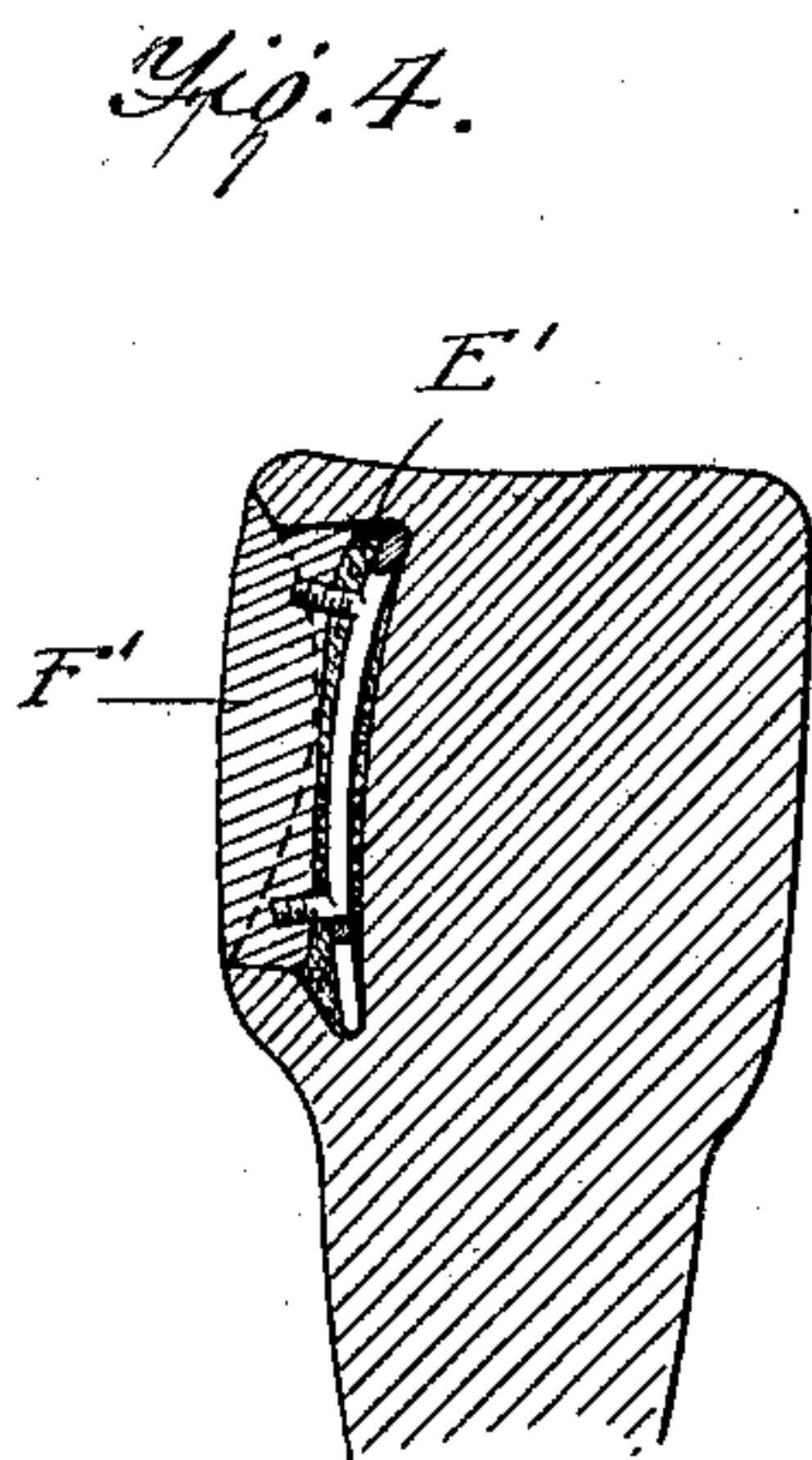
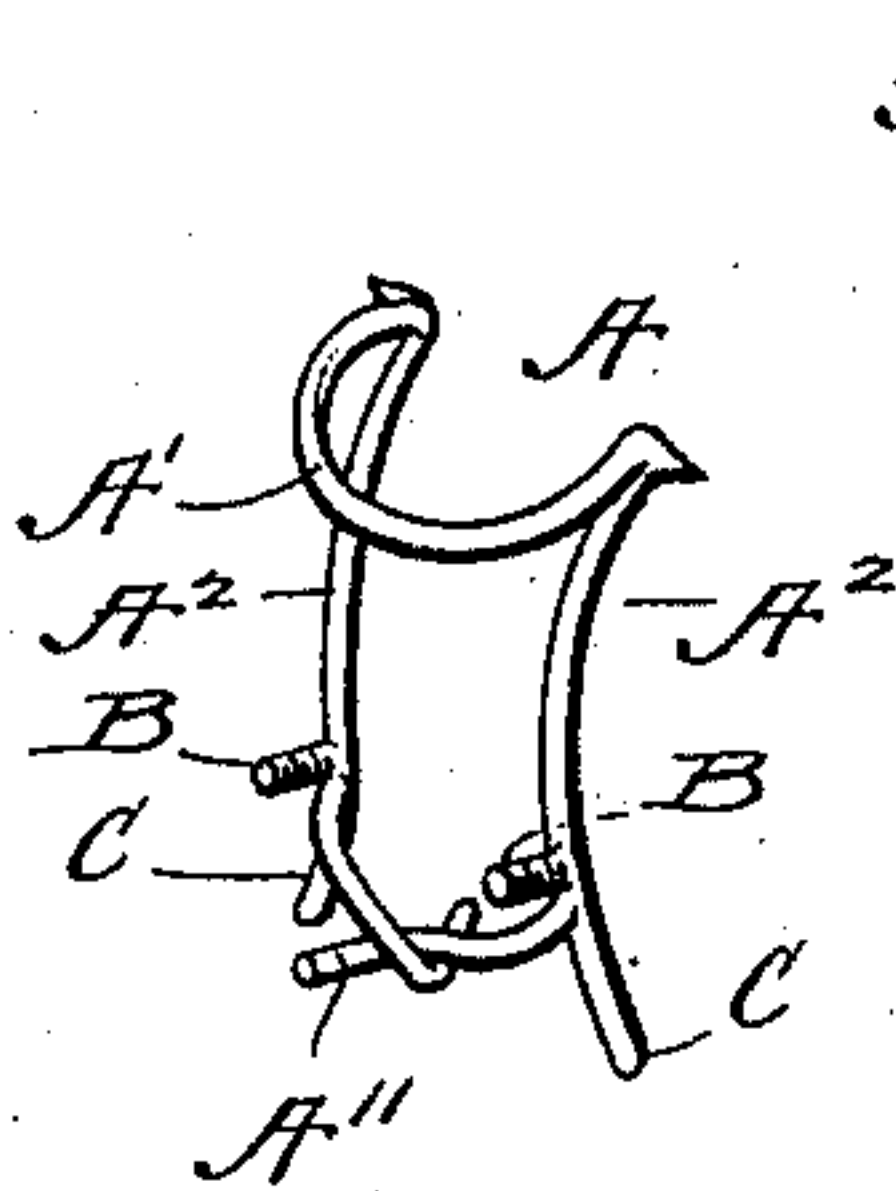
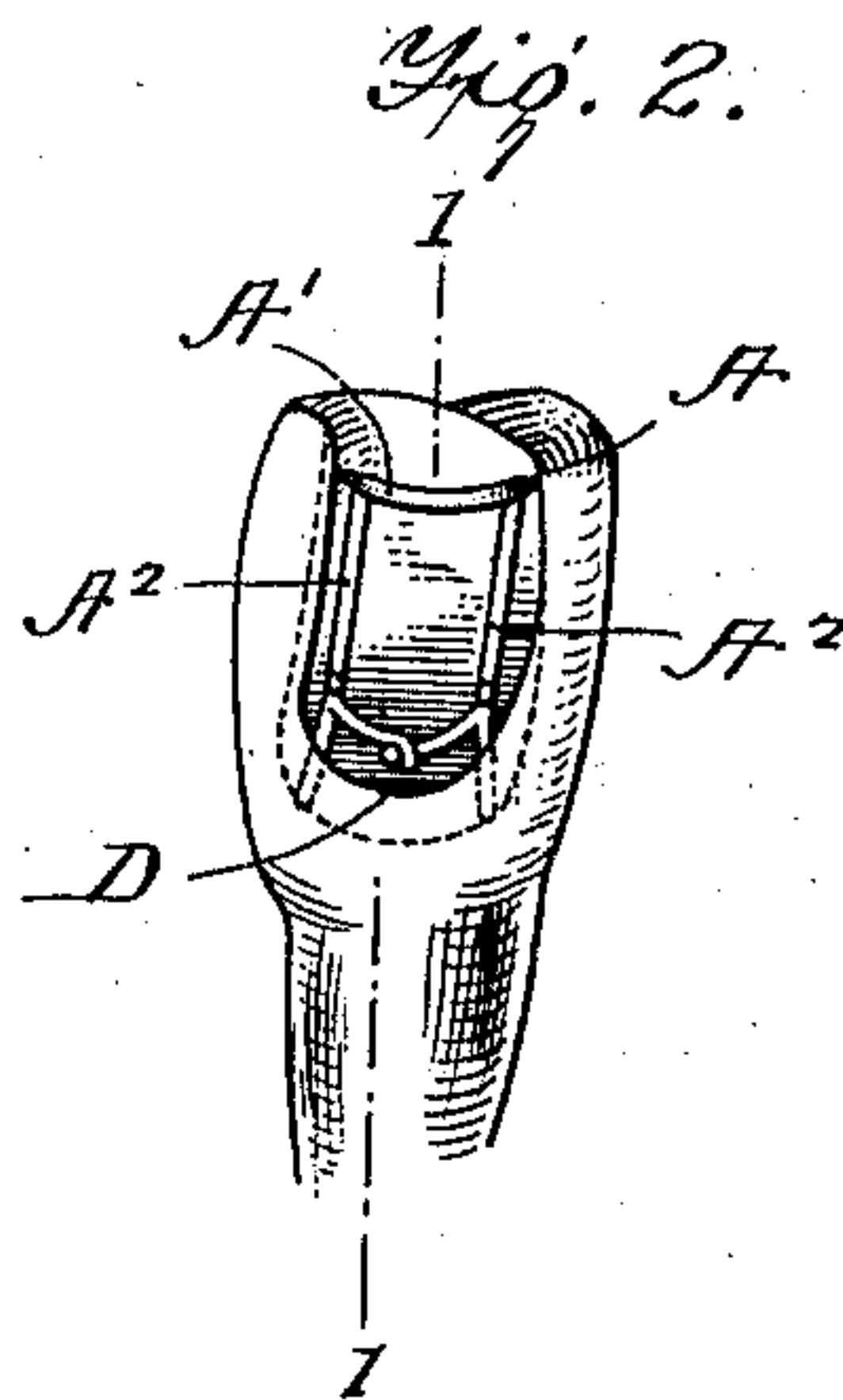
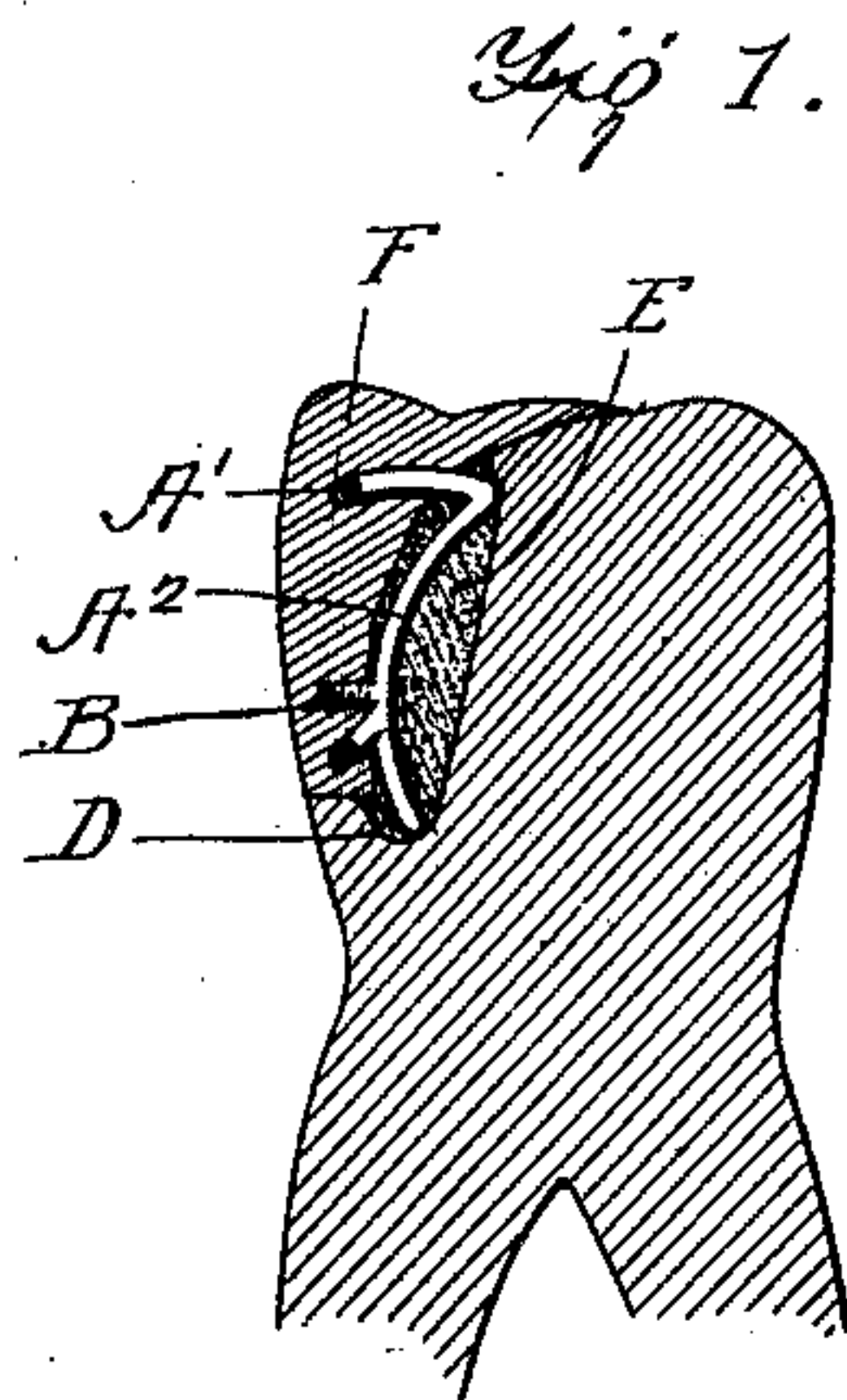


W. F. BABER.  
 DEVICE FOR RETAINING FILLINGS IN TEETH.  
 APPLICATION FILED NOV. 21, 1910.

990,621.

Patented Apr. 25, 1911.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

WILLIAM FRANKLIN BABER, OF MONTGOMERY, WEST VIRGINIA.

DEVICE FOR RETAINING FILLINGS IN TEETH.

990,621.

Specification of Letters Patent.

Patented Apr. 25, 1911.

Application filed November 21, 1910. Serial No. 593,402.

*To all whom it may concern:*

Be it known that I, WILLIAM FRANKLIN BABER, a citizen of the United States, and a resident of Montgomery, in the county of Fayette and State of West Virginia, have invented certain new and useful Improvements in Devices for Retaining Fillings in Teeth, of which the following is a specification.

10 This invention is an improved retaining device for use in filled teeth and has for an object to provide a simple device to be placed in a large tooth cavity and to be cemented in place and having means which facilitate the anchoring of the retaining device in the cavity by cement in such manner as to secure the retaining device in place so that the cement will operate to support a weak tooth, the securing device having projecting means for engagement with the overlying metallic filling; and the invention consists in certain novel constructions and combinations of parts as will be hereinafter described and claimed.

25 In the drawing Figure 1 is a sectional view on about line 1—1 of Fig. 2. Fig. 2 is a face view of a tooth having a cavity in which is fitted the retaining device. Fig. 3 is a detail perspective view of the retaining device, the retaining device shown in Figs. 1, 2 and 3 being designed for use in posterior teeth. Fig. 4 is a sectional view on about line 4—4 of Fig. 5. Fig. 5 is an elevation of a tooth provided with the retaining device.

35 Fig. 6 is a perspective view of the retaining device, somewhat different from that shown in Figs. 1, 2 and 3, the retaining device shown in Figs. 4, 5 and 6 being especially designed for use in anterior teeth.

40 As before suggested, the retaining devices shown in Figs. 3 and 6 are somewhat different in their specific features but they each include projecting portions to enter the retention pits of the tooth cavity as well as outwardly projecting means shown as threaded posts to which the metallic filling is impacted after the retaining device is cemented into the cavity. The two devices also are bent in the form of frames whose ends are detached and lap one upon the other to facilitate the insertion of the frames into the filling and their subsequent spreading to insure the entry of the projecting portions in the retention pits formed to receive them, this spreading being effected before the cement which holds the device in position sets.

Referring particularly to the construction shown in Figs. 1, 2 and 3, it will be noticed that the retention device A is in the form of a frame bent from a rod of metal with its ends A<sup>11</sup> lapped one upon the other and detached and with its middle portion bowed forwardly in the form of a curved arch A', which is designed to project out of the securing cement to assist in retaining the metallic filling. Threaded posts B project outwardly from the arms A<sup>2</sup> of the frame, and the metallic filling is impacted upon said posts, which aid in retaining the filling. At the end opposite the bowed portion A', stud-like portions C project in such manner as to enter the retention pit D of the cavity, see Figs. 1 and 2. When the retaining device is applied and cemented in position, the stud-like extension C may be adjusted to properly enter the pits of the cavity before the cement sets. In the use of the device shown in Figs. 1, 2 and 3, as well as that shown in Figs. 4, 5 and 6, and presently described, in cases where the cavity is formed to receive the retainer in the same shape in which it is to remain permanently in the cavity, the projecting portions of the disconnected ends of the frame may be cut off and the said ends soldered together before the retention device is fitted into the cavity.

In the construction shown in Figs. 4, 5 and 6, the retaining device is in the form of a frame having projecting portions or points 1, 11 and 11 to be cemented into the retention pits of the cavity and also having outwardly projecting threaded posts 2, upon which the metal is impacted after the device is cemented into the cavity. This form of retaining device also has the free ends 3, which may be utilized in similar manner to the free ends A<sup>11</sup> of the device shown in Fig. 3.

In the use of the invention, the retaining device may be fitted into the properly prepared cavity, as shown in Figs. 1, 2, 4 and 5 and may be adjusted therein, when necessary, by spreading it at the separated end of the frame, the device being cemented in place so that the filling anchorage devices B or 2 will project as well as the bow A' of the frame shown in Fig. 3, and so that the metallic filling, when applied in the usual manner, will have a strong, secure anchorage.

In Figs. 1 and 4 I show the cement filling and the overlying metallic filling, the cement filling being lettered E in Fig. 1 and



E' in Fig. 4, while the metallic filling is lettered F in Fig. 1 and F' in Fig. 4, the filling being shown in section in both figures.

5 By the invention, it will be noticed I secure an efficient retention form at the inside surfaces to aid in holding the metal filling, the said retaining device being anchored in place by the cement which also aids in  
10 reinforcing the tooth, which is desirable especially in the filling of weak teeth.

I claim:

1. A retaining device for fillings in the form of a frame having its ends detached  
15 and lapped upon each other whereby the frame may be expanded or contracted at such end, the device being provided with projecting points adapted to enter the retention pits of a cavity, the frame being  
20 also provided with outwardly projecting threaded posts to receive and aid in securing an overlying metallic filling, substantially as set forth.

2. A retaining device for dental fillings  
25 comprising an open frame having projecting points to enter retention pits of a tooth cavity and outwardly projecting posts adapted to operate as anchorage for an overlying metallic filling.

30 3. A dental filling comprising an open

frame having projecting points to enter retention pits of a cavity and outwardly projecting anchorage posts, a cement base enveloping the frame and projecting points and an overlying metallic filling entered by  
35 the outwardly projecting anchorage posts, substantially as set forth.

4. A retaining device for dental fillings comprising an open frame having projecting points to enter retention pits of a cavity  
40 and outwardly projecting devices adapted to enter and anchor an overlying metallic filling.

5. A retaining device for dental cavities comprising a frame disconnected at one end  
45 whereby it may be expanded and contracted at such end and having projecting points to enter retention pits of a cavity and also provided with outwardly projecting anchorage devices for an overlying metallic filling,  
50 substantially as set forth.

6. A retaining device for dental fillings having projecting points to enter retention pits of a cavity and outwardly projecting devices adapted to enter and anchor an  
55 overlying metallic filling.

WILLIAM FRANKLIN BABER.

Witnesses:

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60 Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."