

W. LEWIS.
ADJUSTABLE SAW TOOTH.
APPLICATION FILED MAY 25, 1904.

FIG. 1.

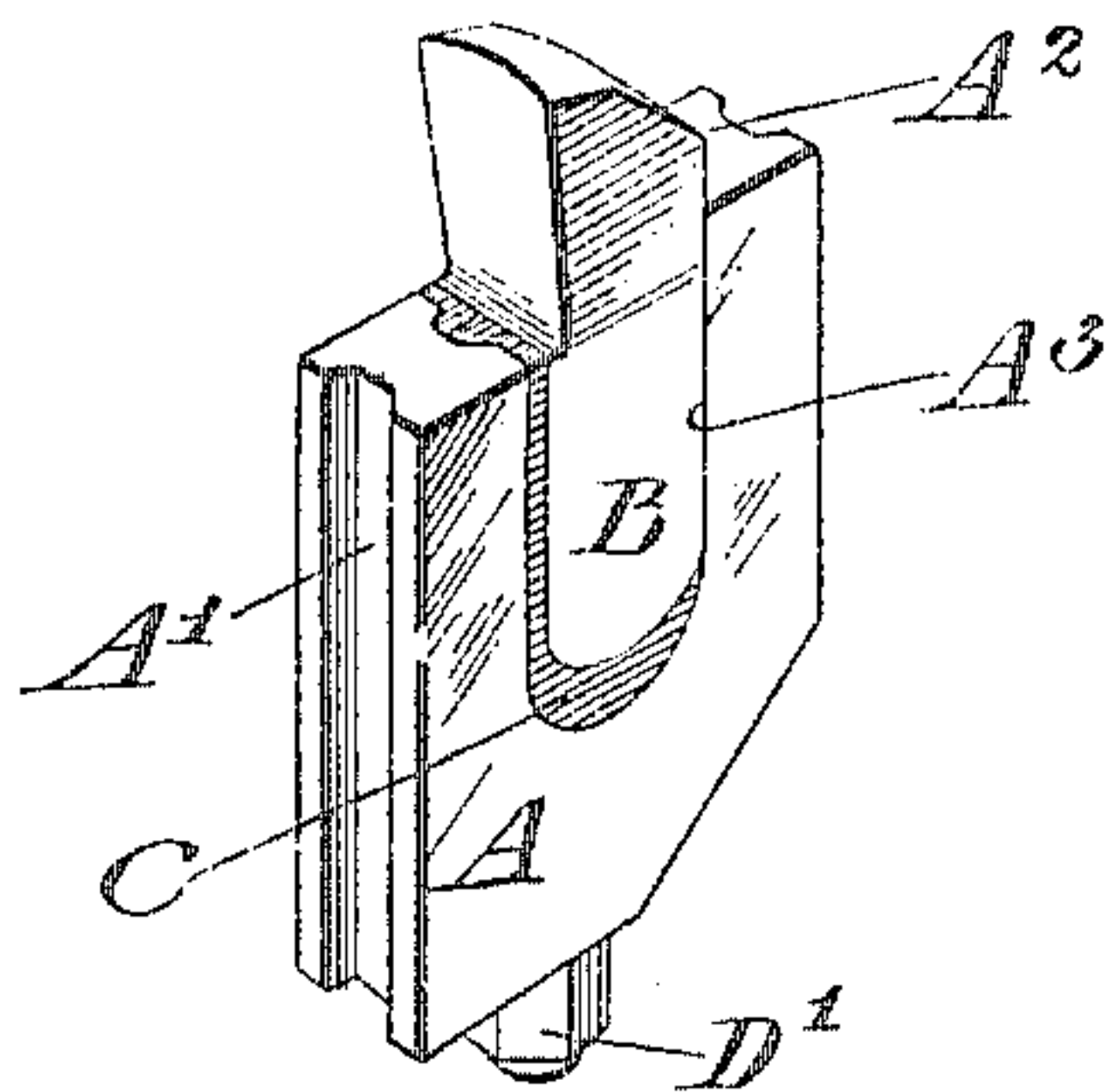


FIG. 2.

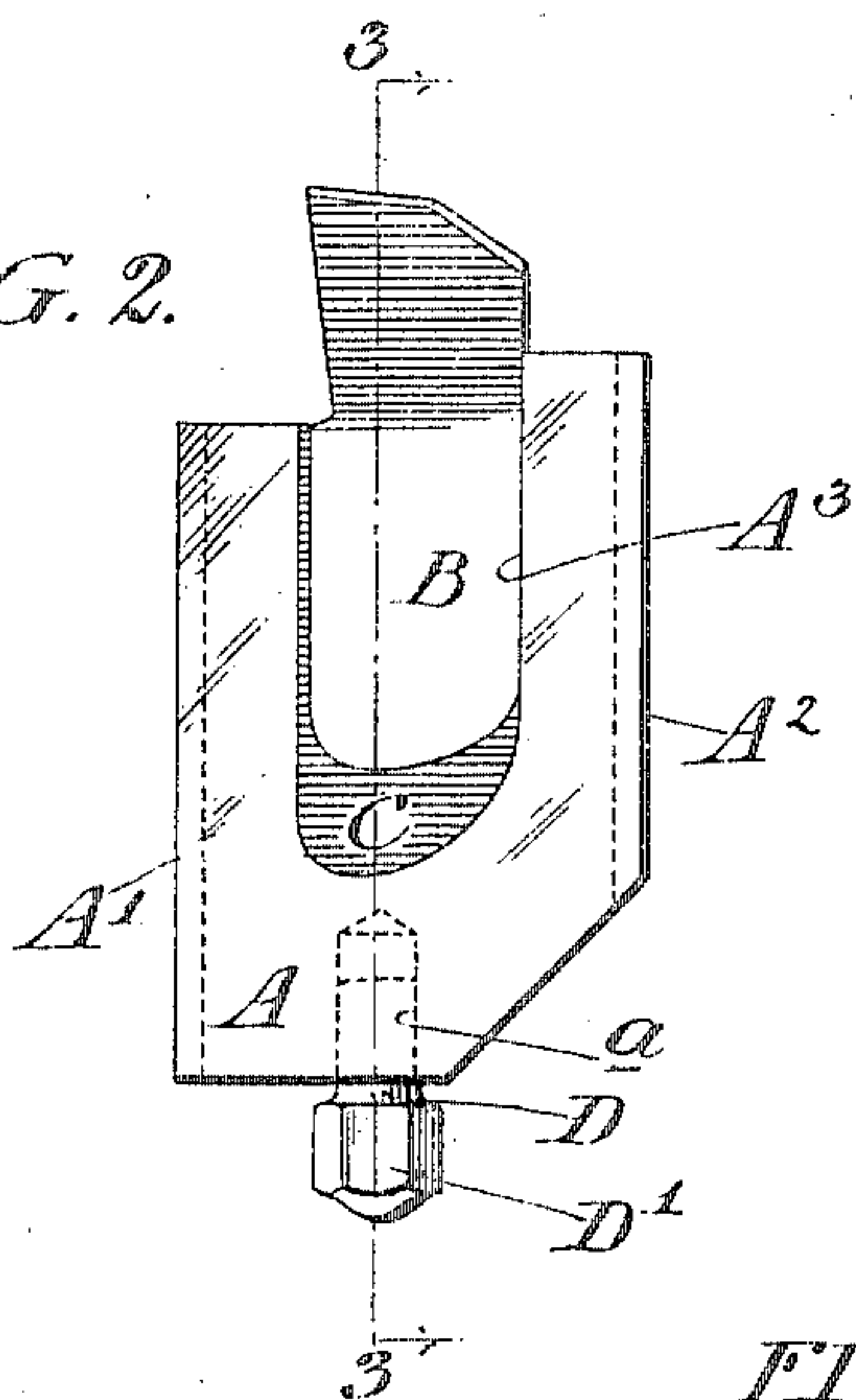


FIG. 3.

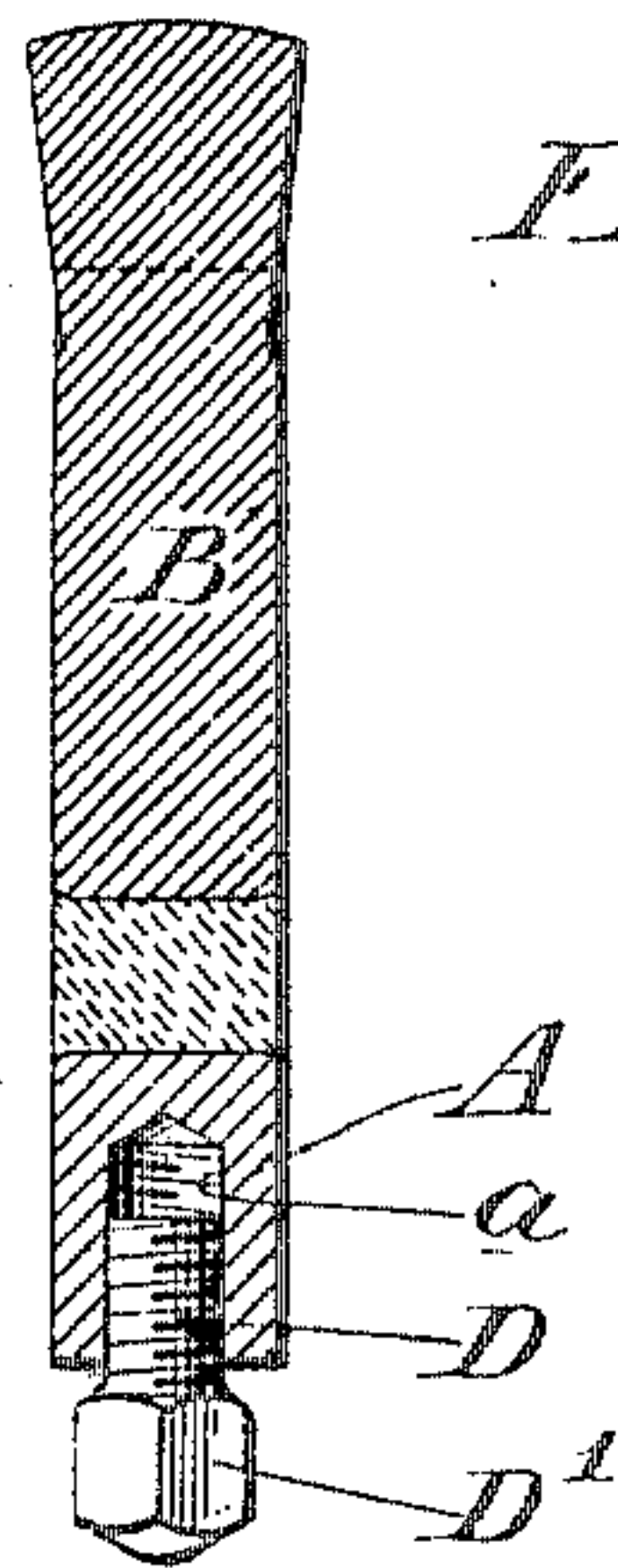


FIG. 4.

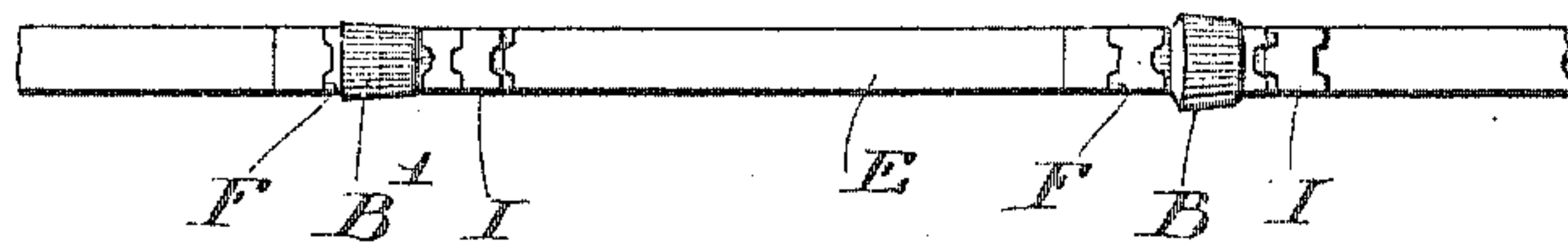
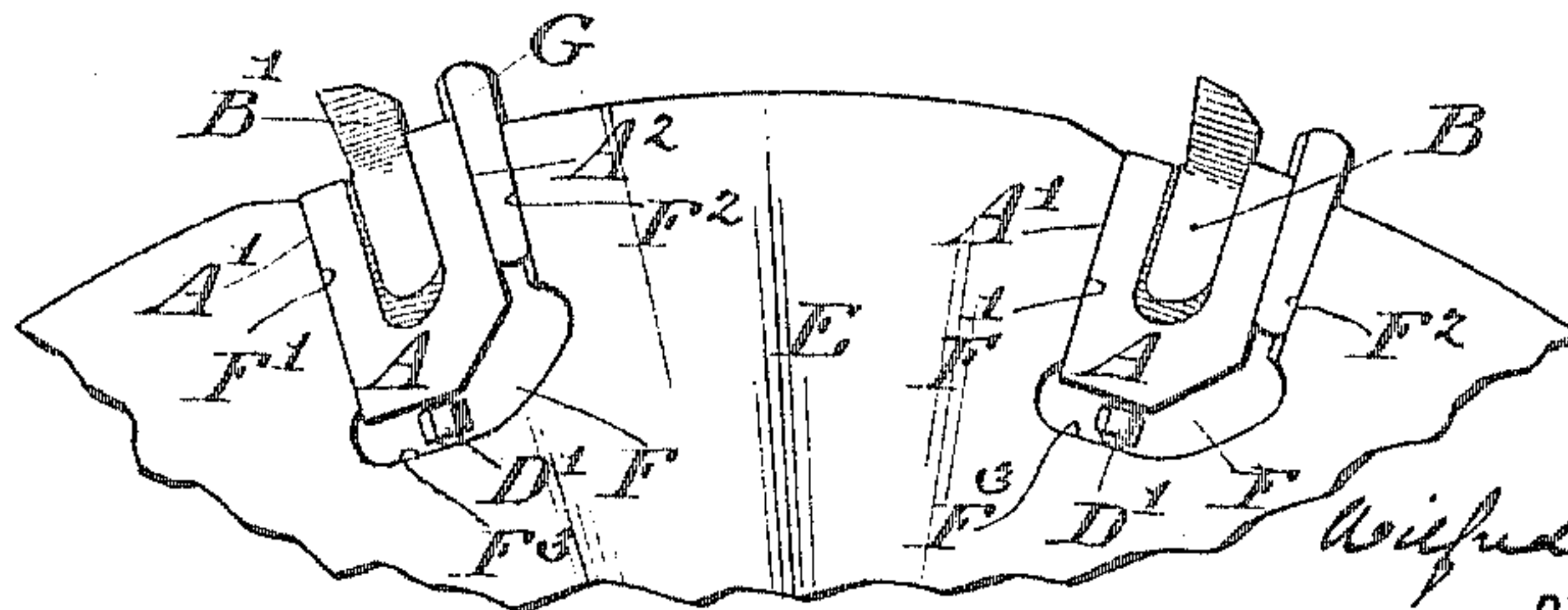


FIG. 5.



WITNESSES:

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ADJUSTABLE SAW-TOOTH.

No. 804,416.

Specification of Letters Patent.

Patented Nov. 14, 1905.

Application filed May 25, 1904. Serial No. 209,621.

To all whom it may concern:

Be it known that I, WILFRED LEWIS, a citizen of the United States of America, residing in the city and county of Philadelphia, in the State of Pennsylvania, have invented a certain new and useful Improvement in Adjustable Saw-Teeth, of which the following is a true and exact description, reference being had to the accompanying drawings, which form a part thereof.

My invention relates to saw-teeth which are detachable from the saw-blades with which they are used, and is particularly adapted, though not exclusively so, to such structures as are described in the Taylor and Newbold patent, No. 709,526, of August 29, 1902, in which the removable and adjustable parts consist of a holder in which the cutting-tool is permanently fixed and which, together with the tool, constitutes the removable saw-tooth.

The object of my invention is to provide means whereby the removable saw-tooth holders of the saw can be before insertion in the saw adjusted so that on insertion they will at once occupy the proper place relative to the blade and to each other.

My present invention consists, essentially, in providing the removable saw-tooth with a permanently-connected adjustable abutment which is inserted in the cavity of the saw-blade with the tooth, having been previously adjusted so that by the mere act of insertion the proper alinement of the tooth is secured.

Reference being now had to the drawings which illustrate my invention, Figure 1 is a perspective view of my improved saw-tooth; Fig. 2, a side elevation thereof; Fig. 3, an edge view taken on the section-line 3 3 of Fig. 2; Fig. 4, an edge view of a saw-blade having two removable teeth inserted therein, and Fig. 5 a side elevation of the same portion of the saw-blade shown in Fig. 4.

A is the U-shaped holder, having front and rear faces A' and A'' , preferably grooved, as shown, and having formed in its bottom a threaded perforation, (indicated at a .)

B is the cutting-tool, abutted against the rear face A'' of the U-shaped holder and held in place in the holder by fusible metal, as indicated at C.

In Figs. 4 and 5 the tooth of Figs. 1 to 3 is

indicated at the right-hand side of the figures, while a narrower tooth is shown at B' at the left-hand side of the figures.

D is the adjustable abutment-screw, screwing into the threaded perforation a and having a wrench-head D' . The screw preferably makes a wrench fit with the perforation.

E is the saw-blade, having tooth-receiving cavities, (indicated at $F F'$), in which the removable teeth are inserted, as shown in Figs. 4 and 5, the front wall F' of the cavity by preference fitting against the front wall A' of the holder while a wedge G is inserted, fitting against the rear wall F'' of the cavity and against the rear wall A'' of the holder, while the adjustment-screw rests in contact with the bottom F''' of the saw-blade cavity. It will readily be seen that proper adjustment of the abutment being made before insertion, and the cavities being carefully shaped so as to be identical with a saw-blade, can be equipped with teeth in a very short time and with absolute accuracy of alinement; also, that an individual tooth can be removed or replaced with assurance of its correct alinement with the other teeth.

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

1. A removable and adjustable saw-tooth holder adapted to be used as one of a series to be set in chambers formed in a saw-blade, said holder having an abutment adjustably secured to its base by which its position in the blade is determined.

2. A removable and adjustable saw-tooth holder adapted to be used as one of a series to be set in chambers formed in a saw-blade, said holder having a threaded perforation in its base and a screw-abutment adjustably screwing into said perforation in its base by which its position in the blade is determined.

3. A saw-blade having a series of chambers F , in its periphery said chambers having their bases F''' , arranged at the same distance from the center of the blade, in combination with removable and adjustable saw-tooth holders adapted to fit in chambers F , and having abutments adjustably secured to their bottoms and adapted to rest on the bases F''' , of the chambers F .

4. A saw-blade having a series of chambers F, in its periphery said chambers having their bases F³, arranged at the same distance from the center of the blade in combination with
- 5 removable and adjustable saw-tooth holders adapted to fit in chambers F, and having threaded perforations in their bottoms and abutment-screws screwing into said perforations and adapted to rest on the bases F³, of the chamber F.

WILFRED LEWIS.

Witnesses:

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D. STEWART.