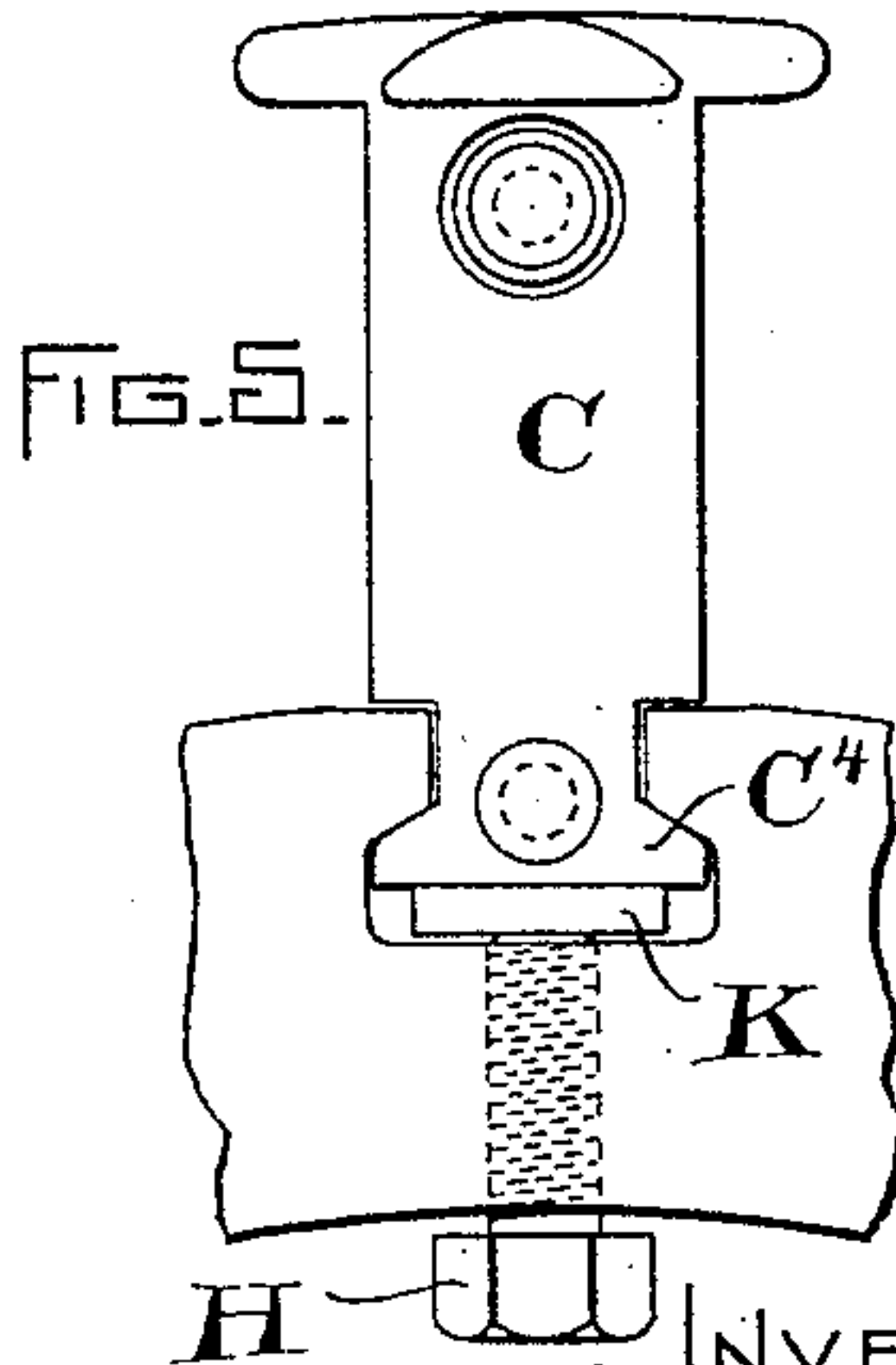
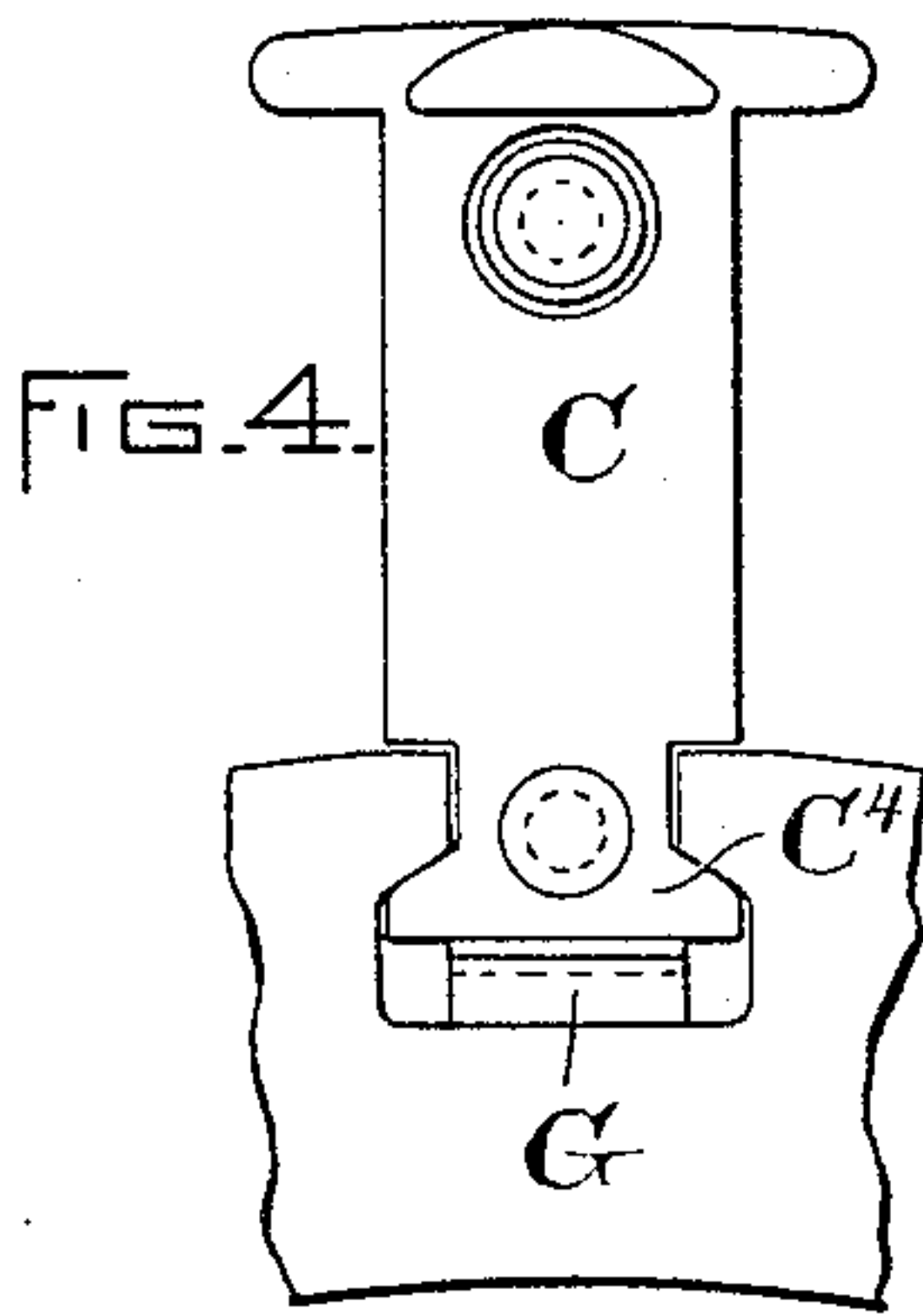
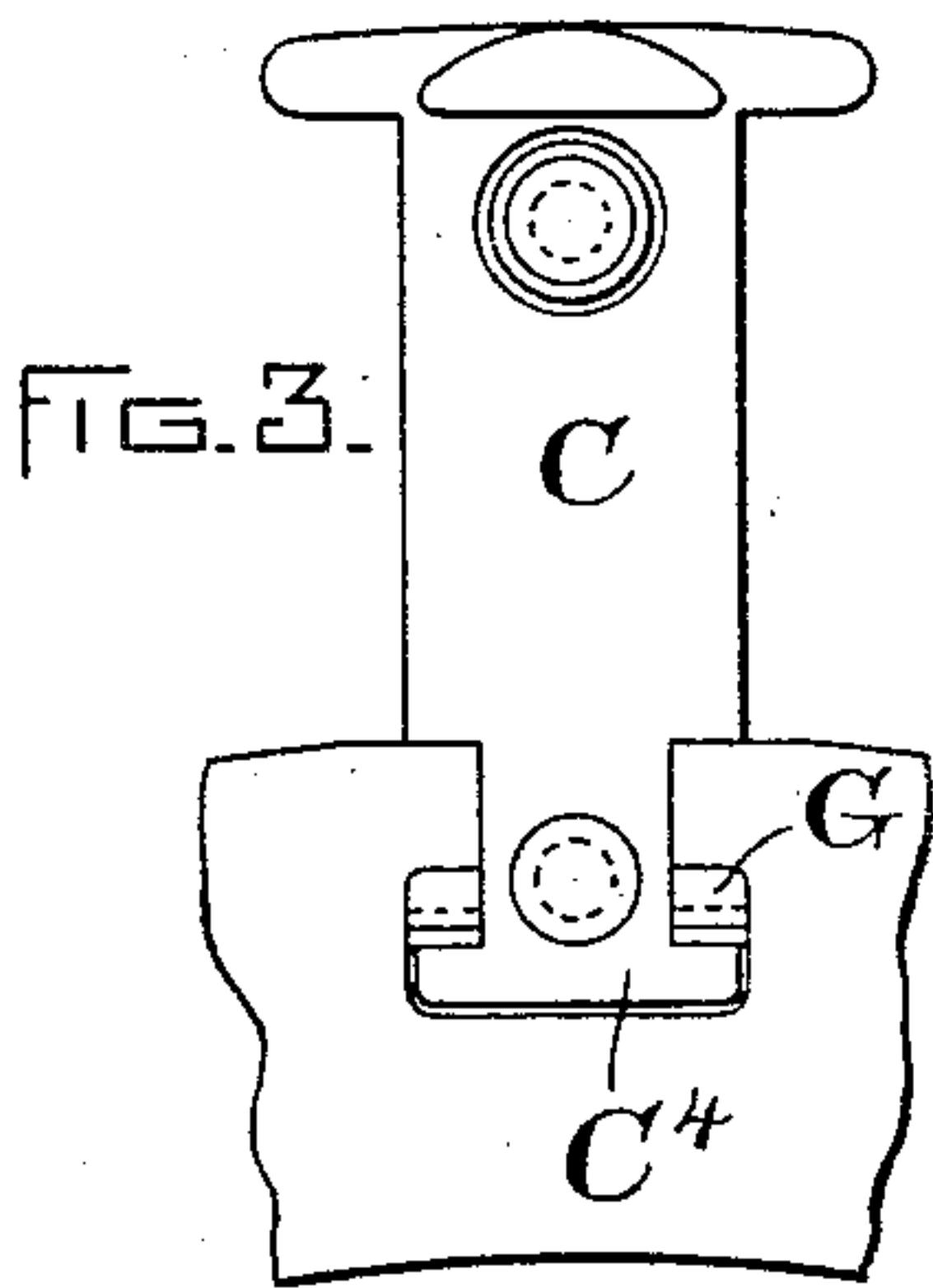
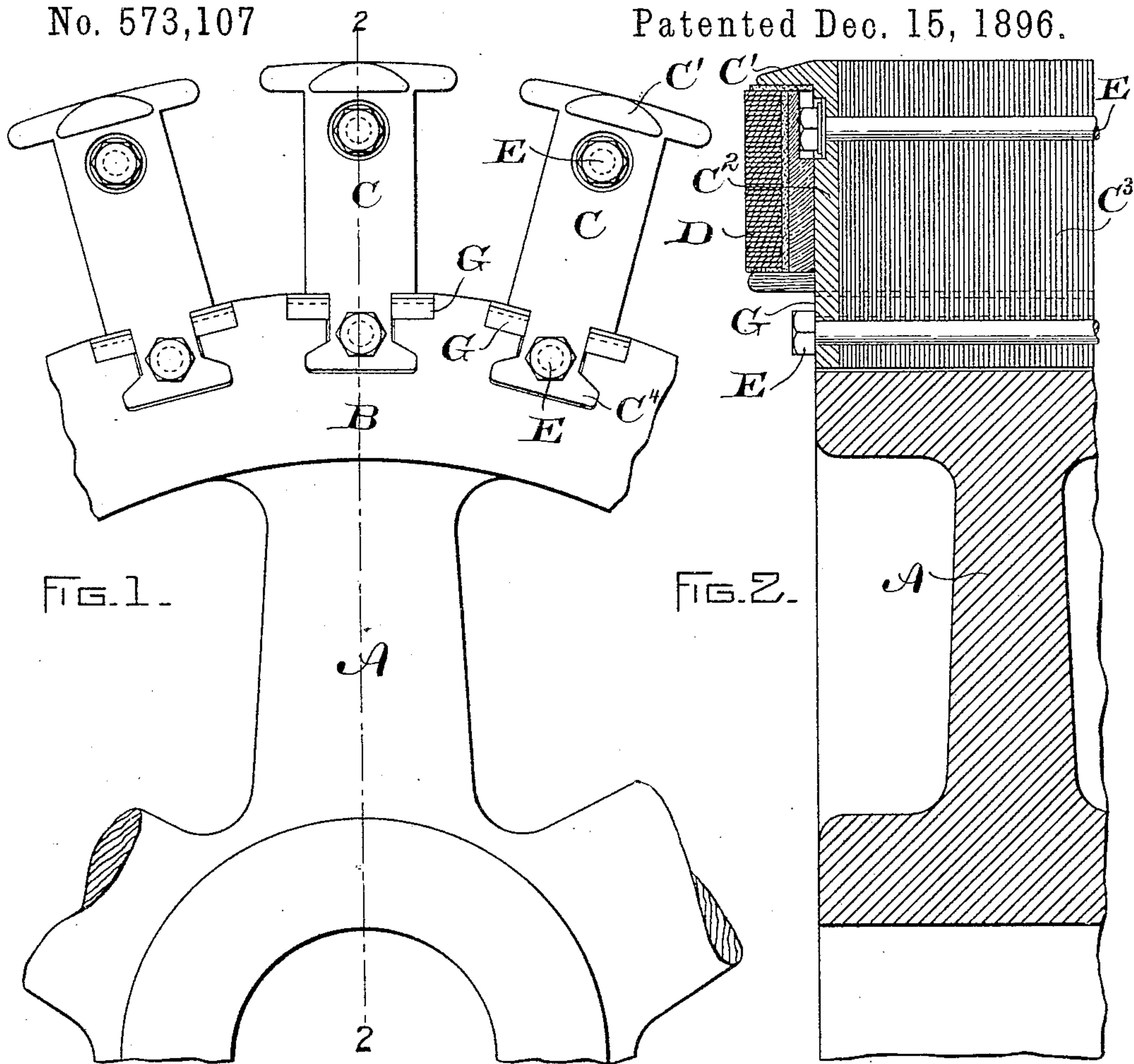


(No Model.)

H. G. REIST.
SECURING FIELD MAGNET POLES.

No. 573,107

Patented Dec. 15, 1896.



WITNESSES,

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INVENTOR,
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UNITED STATES PATENT OFFICE.

HENRY G. REIST, OF SCHENECTADY, NEW YORK, ASSIGNOR TO THE
GENERAL ELECTRIC COMPANY, OF NEW YORK.

SECURING FIELD-MAGNET POLES.

SPECIFICATION forming part of Letters Patent No. 573,107, dated December 15, 1896.

Application filed August 24, 1896. Serial No. 603,698. (No model.)

To all whom it may concern:

Be it known that I, HENRY G. REIST, a citizen of the United States, residing at Schenectady, in the county of Schenectady, State of New York, have invented certain new and useful Improvements in Securing Field-Magnet Poles, (Case No. 426,) of which the following is a specification.

My invention relates to securing pole-pieces to revolving field-magnet structures, particularly in alternating-current dynamos, where the field-magnet poles are made of assembled laminations of sheet-iron. To this end I make the laminations with a dovetailed tenon upon the ends, so that when they are assembled the pole-piece may be slipped sidewise into the field-magnet structure. I then insert keys, so as to take up any lost motion between the pole-piece and the field-magnet, the end plates of the poles being provided with overhanging lips or flanges which serve to retain the field-magnet coils in place. I may then remove any field-magnet coil or any pole-piece without removing the field-magnet structure as a whole.

It is manifest that the invention may take a number of forms, all embodying the same general characteristics. Some of these forms I have illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of one form of my invention, Fig. 2 a section on the line 2 2 of Fig. 1, and Figs. 3, 4, and 5 side elevations of modifications, all, however, embracing the same general idea.

In Fig. 1, A is the field-magnet spider. B is its outer rim, which may or may not be laminated. C C are the field-magnet poles, composed of a body of laminations C³ and end plates C², having overhanging flanges C' for securing the field-magnet coils D in place. Bolts E E compress the parts, so as to make each pole-piece a solid structure. The bottom of each pole-piece is formed with a dovetailed

tenon C⁴, and keys G G serve to take up any lost motion or play between the parts.

In Fig. 3 I show substantially the same device, except that the dovetailed tenon is replaced by another of different form.

In Fig. 4 the keys G are inserted below the pole instead of between the shoulder upon the pole and the revolving spider or field-magnet structure, while in Fig. 5 the key K is supplemented by a bolt or set-screw H, locking the pole in place.

It is manifest that any of these forms come within my invention, which embodies such a mode of attachment as would permit the sidewise removal of any one of the pole-pieces without affecting the rest of the magnetic structure.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination with a revolving field-magnet structure, of pole-pieces separated from each other, and arranged on the periphery of said field-magnet structure, said pole-pieces being composed of laminated material, and being dovetailed into the periphery of said revolving structure, and means for taking up the play of the parts.

2. The combination with a revolving field-magnet structure, of pole-pieces projecting from the periphery of said field-magnet structure and separated from each other, said pole-pieces being each composed of a bundle of laminæ, and outside clamping-plates, the several parts being bolted together, the pole-pieces being dovetailed to the periphery of said revolving structure, and keys for taking up the play of the parts, as herein set forth.

In witness whereof I have hereunto set my hand this 22d day of August, 1896.

HENRY G. REIST.

Witnesses:

E. W. CADY,

A. F. MACDONALD.