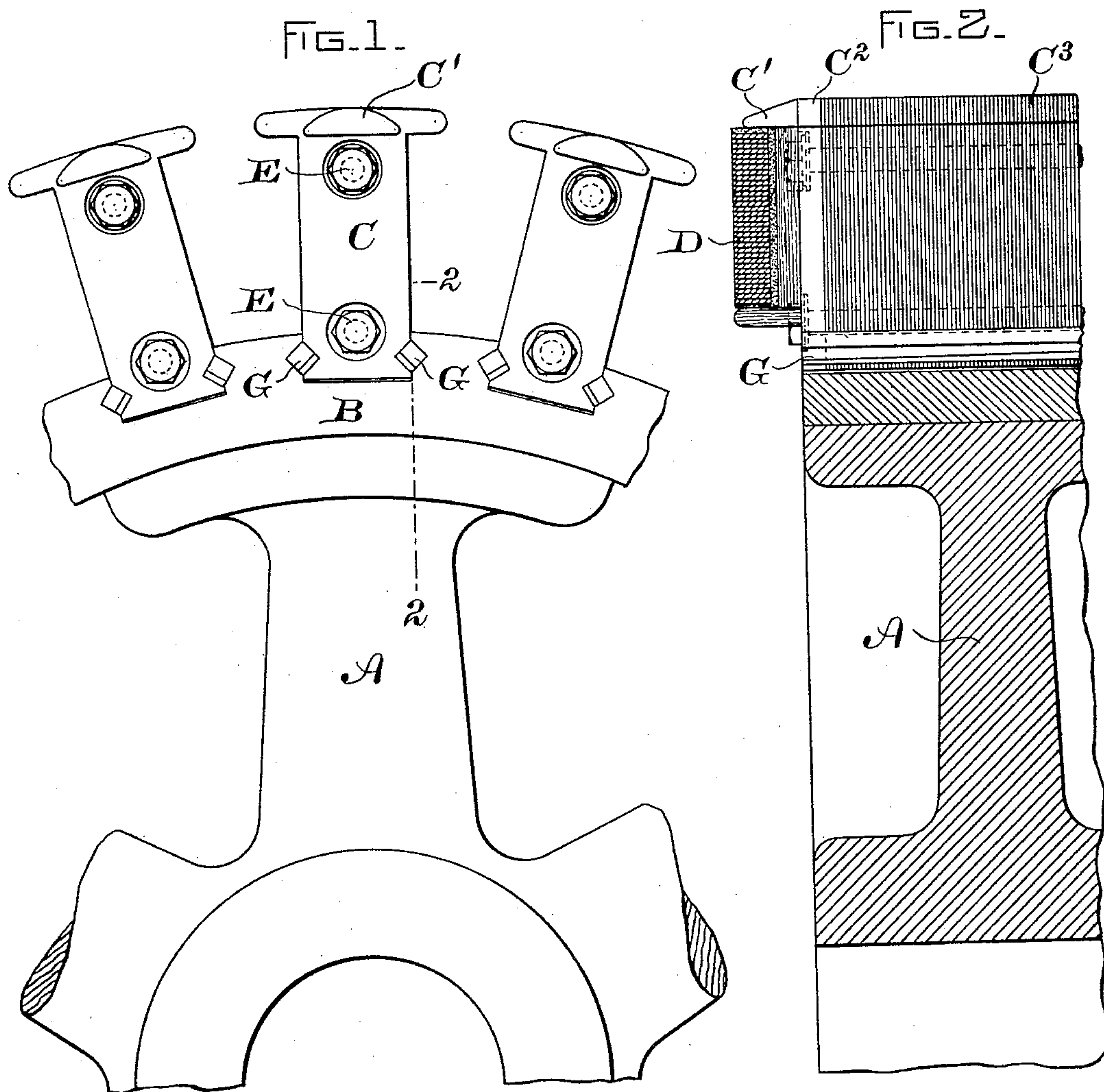


(No Model.)

F. O. BLACKWELL.  
ATTACHING FIELD MAGNET POLES.

No. 573,130.

Patented Dec. 15, 1896.



WITNESSES.

*A. H. Abell,*

*B. J. Hume,*

INVENTOR.  
*Francis O. Blackwell,*  
*Geo. R. Blodgett,*  
Att'y.

# UNITED STATES PATENT OFFICE.

FRANCIS O. BLACKWELL, OF SCHENECTADY, NEW YORK, ASSIGNOR TO  
THE GENERAL ELECTRIC COMPANY, OF NEW YORK.

## ATTACHING FIELD-MAGNET POLES.

SPECIFICATION forming part of Letters Patent No. 573,130, dated December 15, 1896.

Application filed August 24, 1896. Serial No. 603,702. (No model.)

*To all whom it may concern:*

Be it known that I, FRANCIS O. BLACKWELL, 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 Attaching Field-Magnet Poles, (Case No. 427,) of which the following is a specification.

My invention relates to attaching pole-pieces of dynamo-electric machines to revolving field-magnet structures, and has for its object to provide a simple, cheap, and effective means for accomplishing this purpose.

My invention is illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation, and Fig. 2 a section upon the line 2 2 of Fig. 1, of an embodiment of my invention.

A is the spider or supporting structure.

B is the surrounding ring, which may be solid or laminated.

C C are the field-magnet pole-pieces. Each of these is composed of a body of laminations  $C^3$  and end plates  $C^2$ , provided with overhanging flanges  $C'$  for retaining the field-magnet coils D in place. The pole-pieces are assembled as solid structures by bolts E E, passing through the laminæ and the end plates and holding them together. Registering notches are provided in the revolving field-magnet structure and pole-pieces, in which keys G G are inserted. The form of these notches might be indefinitely varied, provided they accomplish the object of secur-

ing the parts together by coöperating with a key or similar device. The arrangement, as will be seen, affords a secure construction, which permits the sidewise removal of the pole-pieces without removing the field-magnet from its position.

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

1. The combination with a revoluble field-magnet structure, of laminated pole-pieces separated from each other and arranged and located in sockets on the periphery of said revoluble structure, registering notches in the lower end of said pole-pieces in said sockets, and keys located in said registering notches securing the pole-pieces to the periphery of said revoluble structure, as set forth.

2. The combination with a revoluble field-magnet structure, having sockets in its periphery, of pole-pieces separated from each other and seated in said sockets, said pole-pieces being formed of a bundle of laminated and outside plates bolted together, and registering notches in said sockets and in the inner ends of said pole-pieces, and keys located in said registering notches and securing the parts together, as set forth.

In witness whereof I have hereunto set my hand this 21st day of August, 1896.

FRANCIS O. BLACKWELL.

Witnesses:

E. W. CADY,

A. L. MACDONALD.