

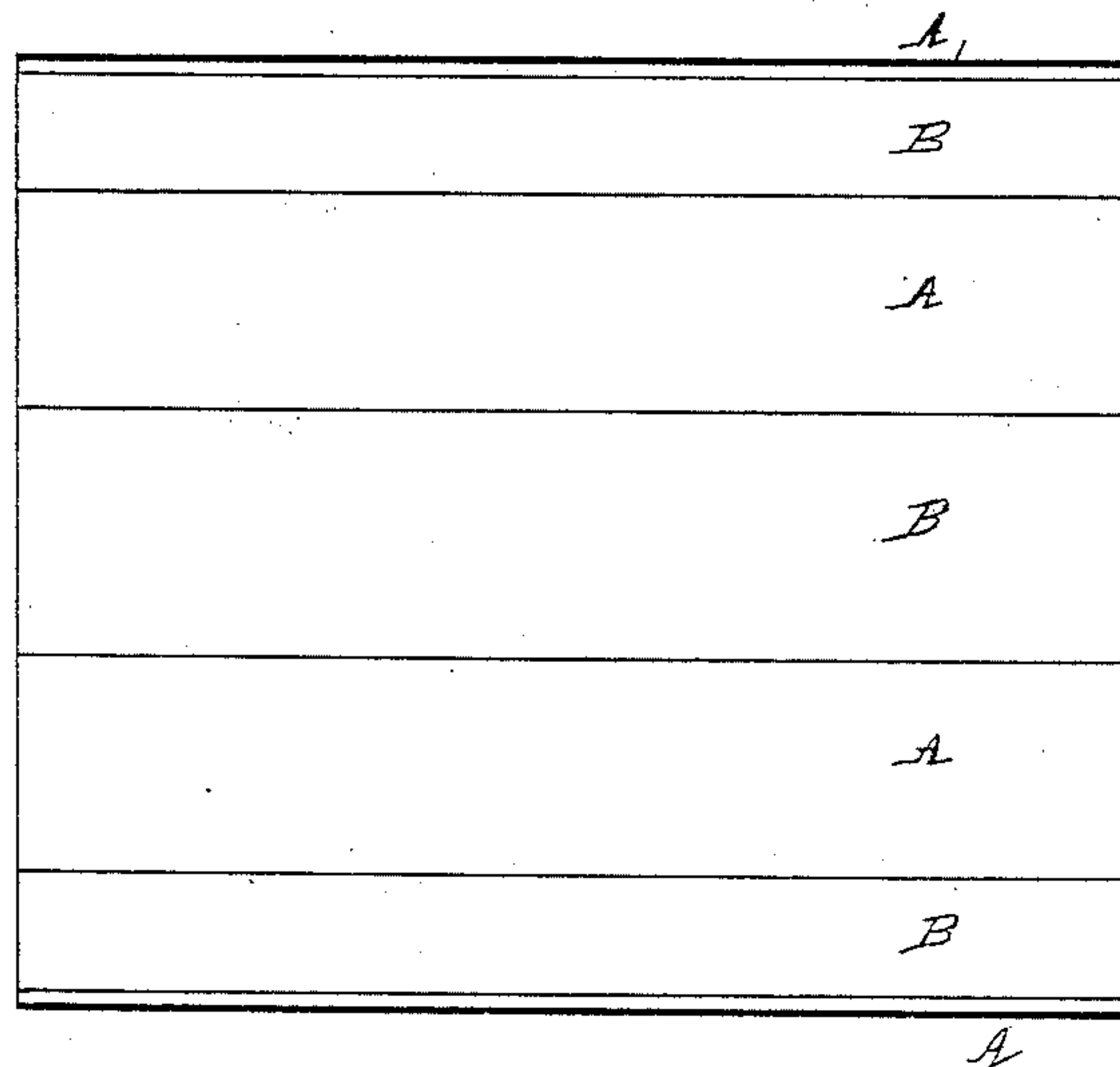
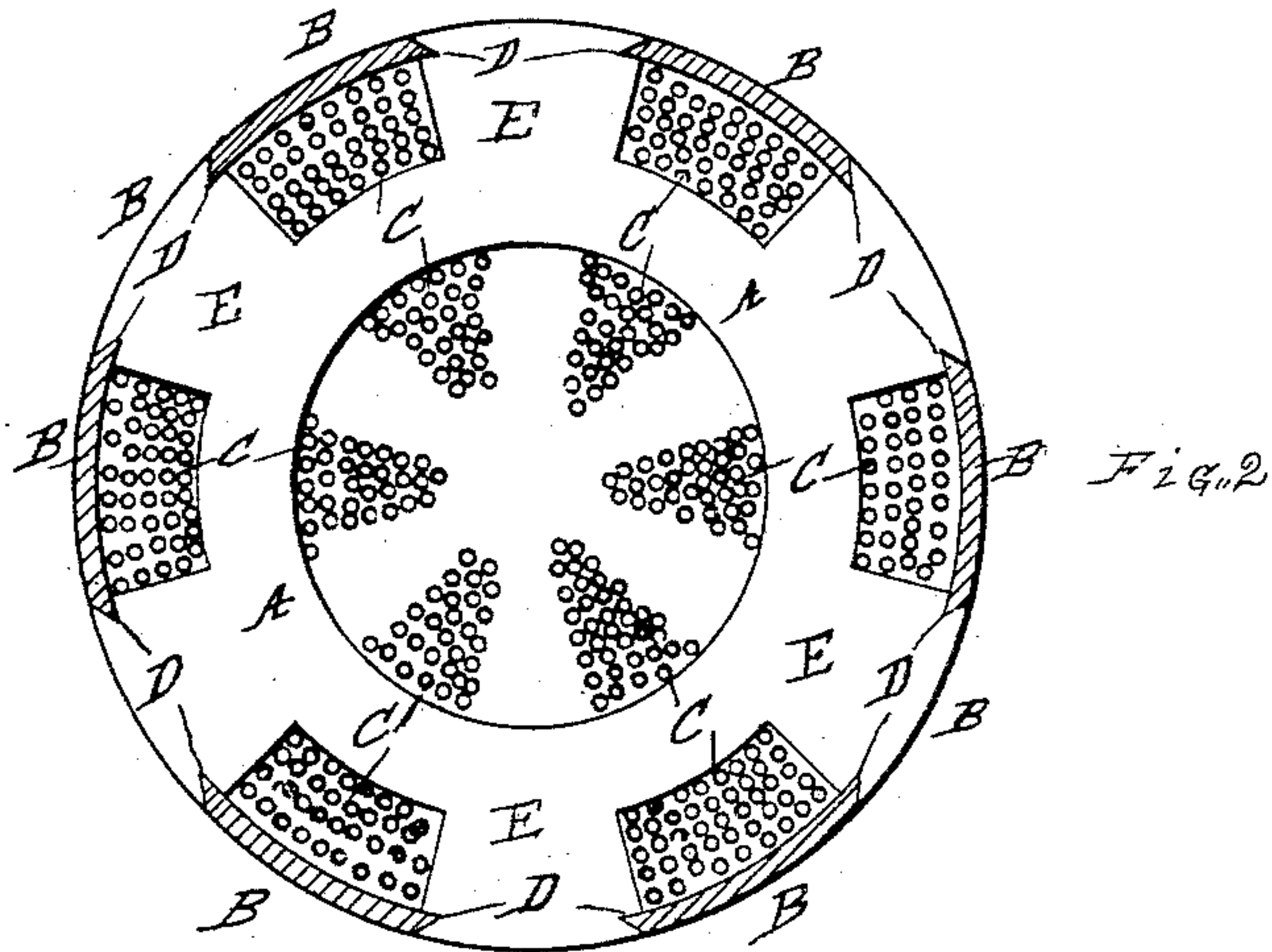
(No Model.)

F. E. FISHER.

ARMATURE FOR DYNAMOS.

No. 383,567.

Patented May 29, 1888.



Witnesses  
*Cyrus C. Lothrop*  
*Emma Hesselbacher.*

Inventor.  
*Frank E. Fisher.*  
By his Attorney:  
*Geo. H. Lothrop.*

# UNITED STATES PATENT OFFICE.

FRANK E. FISHER, OF DETROIT, MICHIGAN.

## ARMATURE FOR DYNAMOS.

SPECIFICATION forming part of Letters Patent No. 383,567, dated May 29, 1888.

Application filed October 25, 1887. Serial No. 253,359. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK E. FISHER, of Detroit, in the county of Wayne and State of Michigan, have invented a new and useful Improvement in Armatures for Dynamo-Electrical Motors, of which the following is a specification.

My invention consists in an improvement in armatures for dynamo-electrical motors, hereinafter fully described.

Figure 1 is an elevation of the armature, and Fig. 2 a cross-section.

A represents a ring-armature having projecting studs E formed thereon, between which are wound the wire bobbins C in the usual manner.

D represents dovetail grooves cut in the opposite faces of the studs E, near the outer end of the studs, and B B represent metal plates, which may be either magnetic or diamagnetic, according to the purpose for which they are to be used, which are beveled on their edges to fit into dovetail grooves D, as clearly shown in Fig. 2.

When the armature is wound, the plates B

are slipped into the dovetail grooves D and prevent the bobbins C from becoming loosened or expanding by centrifugal force in the rotation of the armature.

If the plates B are made of diamagnetic material, they serve no other purpose but this, and when made of magnetic material they also serve as a magnetic shield to the bobbins.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a ring-armature having projecting studs between which the bobbins are wound, dovetail grooves on the opposing faces of the said studs and metal plates adapted to slide into the said grooves, substantially as and for the purpose described.

2. In combination with the armature A, having bobbins C and projections E thereon, the dovetail grooves D and plates B, substantially as shown and described.

FRANK E. FISHER.

Witnesses:

CYRUS E. LOTHROP,  
EMMA HESSELBACHER.