No. 696,080. Patented Mar. 25, 1902.

H. G. REIST.

CONNECTOR FOR SPOOLS OF DYNAMOS.

(Application filed Aug. 30, 1901.)

(No Model.)

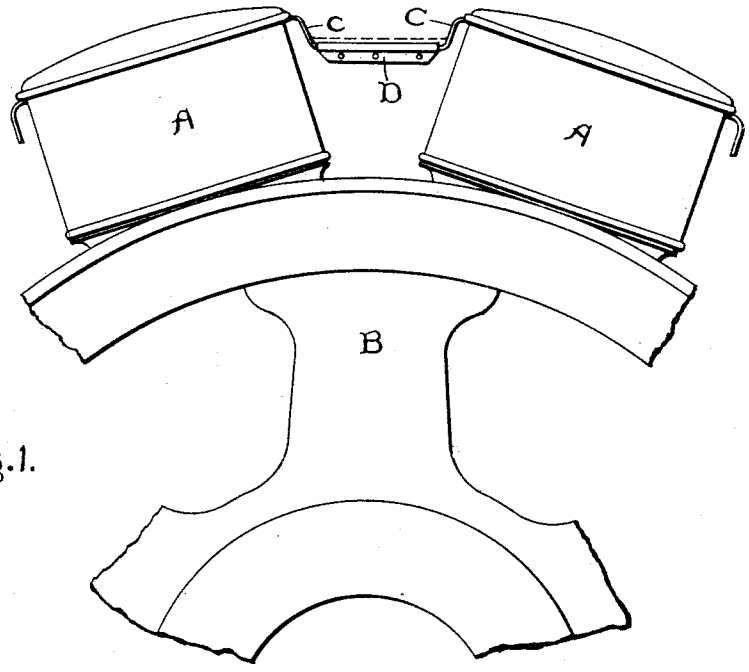


Fig. 1.

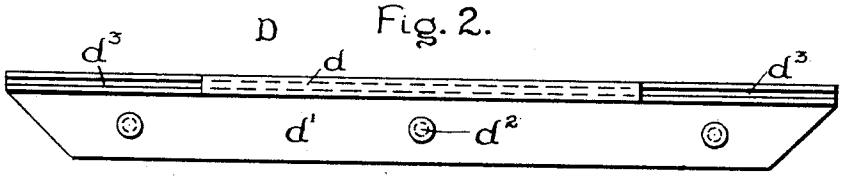


Fig. 2.

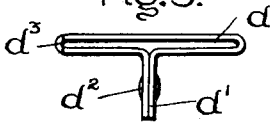


Fig. 3.

Witnesses.

Erving P. Gurney.

Benjamin B. Hines.

Inventor.

Henry G. Reist.

by Albert G. Davis

Atty.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

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

CONNECTOR FOR SPOOLS OF DYNAMOS.

SPECIFICATION forming part of Letters Patent No. 696,080, dated March 25, 1902.

Application filed August 30, 1901. Serial No. 73,774. (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, county of Schenectady, State of New York, have invented certain new and useful Improvements in Connectors for Spools of Dynamos, (Case No. 2,241,) of which the following is a specification.

This invention relates to dynamo-electric machines; and its object is to provide a simple and reliable means for connecting the windings on adjacent spools, especially in machines of the revolving-field type. It is found that where the distance between the spools is of some length the effect of the constant vibration, together with the centrifugal force of the rapidly-rotating-field structure, is to put such vibrating, bending, and other strains upon the ordinary flexible connectors that they soon break, thus causing frequent stoppages for repairs. My invention obviates this difficulty by providing a connector which is rigid enough to resist all bending strains and yet light enough not to exert too great a centrifugal pull on the winding terminals. Moreover, it does away with the necessity of providing a support for the connector.

In the accompanying drawings, Figure 1 is an end elevation of a portion of a revolving-field structure embodying my invention. Fig. 2 is a side elevation of my improved connector on an enlarged scale. Fig. 3 is an end view of the same.

The field-spools A are carried on the rim of the wheel or spider B. The terminals C of the windings on said spools are connected to a light rigid connector D, preferably made of sheet metal. The windings are usually flat copper ribbons, so that the connector D is preferably provided with end sockets of corresponding form to receive said ribbons. A convenient mode of making the connector is to double a strip of copper into a flat tube d, the meeting edges d' being turned outwardly at right angles to the tube and secured together, as by rivets d^2. This makes a webbed T-shaped structure of great stiffness. At one or both ends the tube d may be cut away on one side, as at d^3, to enable the corresponding terminal C to be slid in without special fitting as to its width. The terminals may be soldered to the connector or otherwise secured to give a good electrical connection.

The terminals are bent inward toward the wheel B, so that their tips are bent almost at right angles to enter the connector. The inwardly-turned portions resist the outward thrust due to centrifugal force, while the rigid connector prevents all vibration and avoids the necessity of using a support.

It is evident that many different shapes of connector may be devised, the essential feature being to have a rigid light structure. It is also evident that instead of sheet metal some non-conducting material may be used for the connector, the terminals of the windings being directly connected, as indicated by dotted lines in Fig. 1.

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

1. The combination with the revolving spools of a dynamo-electric machine, of a light, rigid connector for the terminals of the windings.

2. The combination with the spools of a revolving-field dynamo, of a rigid metal connector between the terminals of the windings.

3. The combination with the spools of a revolving-field dynamo, of a sheet-metal connector for the terminals of the windings, said sheet metal being bent to form a rigid structure.

4. A connector consisting of a flat tube having a stiffening-web.

5. A connector for the windings of dynamo-spools, consisting of a flat tube having a stiffening-web, and being cut away on one side at one or both ends.

6. The combination with the spools of a dynamo, of windings therefor having their terminals bent inward, and a rigid, light connector attached to the tips of said inwardly-bent terminals.

7. In a revolving-field dynamo, means for preventing the vibration of the connections between the several spools.

In witness whereof I have hereunto set my hand this 28th day of August, 1901.

HENRY G. REIST.

Witnesses:
BENJAMIN B. HULL,
MARGARET E. WOOLLEY.