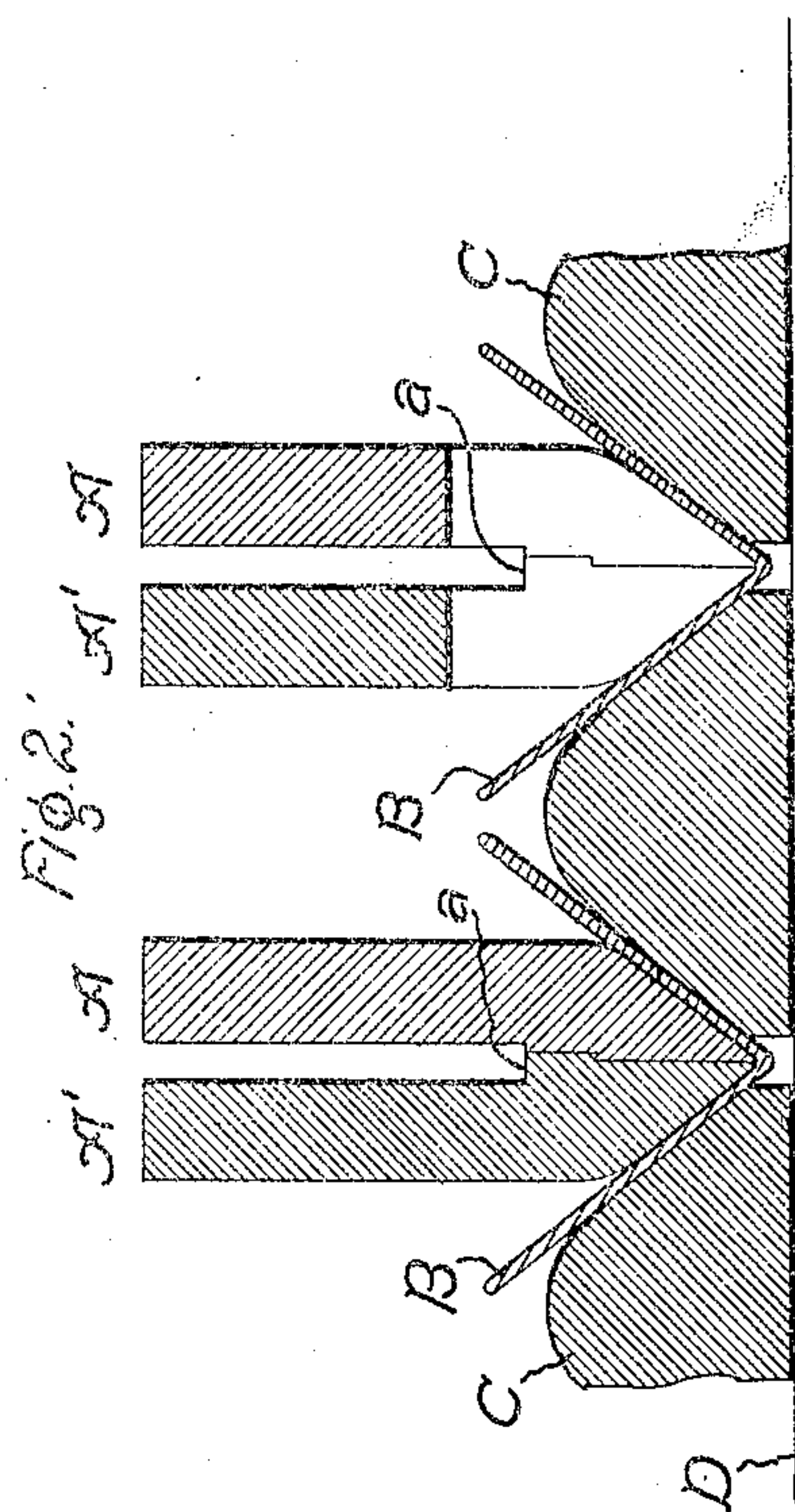
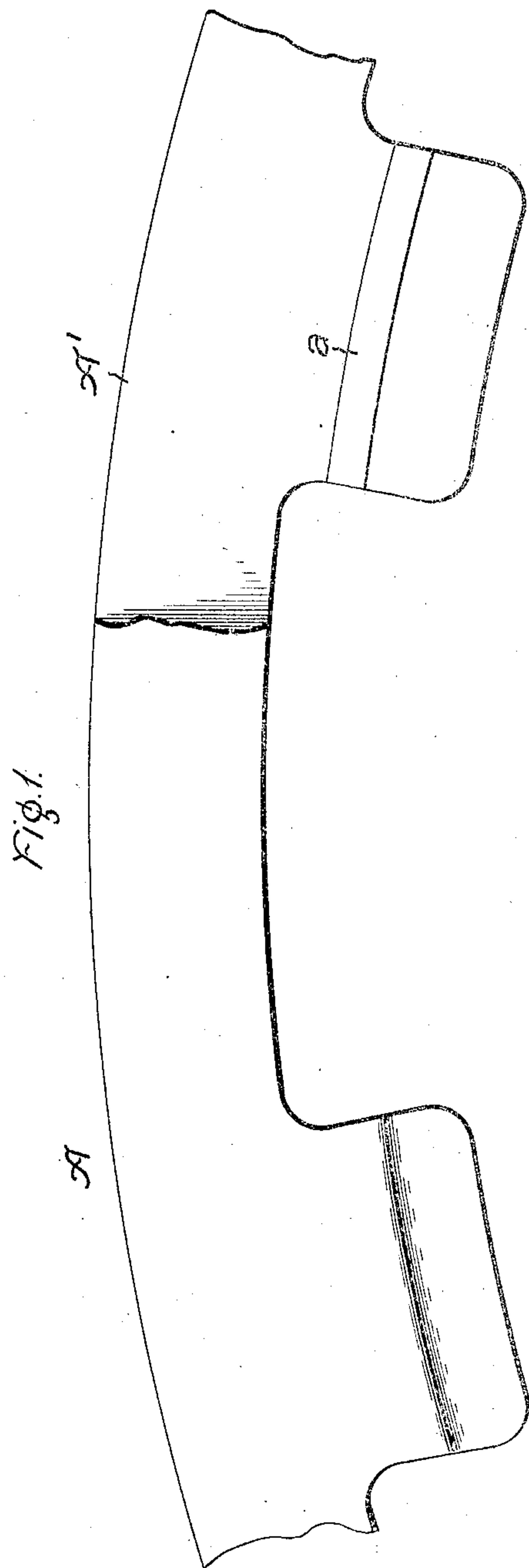


No. 829,799.

PATENTED AUG. 28, 1906.

J. E. NOEGGERATH,
COLLECTOR RING.

APPLICATION FILED SEPT. 22, 1905.



Witnesses.
J. Ellis Glen.
Helen Alfred.

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Att'y.

UNITED STATES PATENT OFFICE.

JAKOB E. NOEGGERATH, OF SCHENECTADY, NEW YORK, ASSIGNOR TO
GENERAL ELECTRIC COMPANY, A CORPORATION OF NEW YORK.

COLLECTOR-RING.

No. 829,799.

Specification of Letters Patent.

Patented Aug. 28, 1906.

Application filed September 22, 1905. Serial No. 279,625.

To all whom it may concern:

Be it known that I, JAKOB E. NOEGGERATH, a citizen of the United States, residing at Schenectady, county of Schenectady, State of New York, have invented certain new and useful Improvements in Collector-Rings, of which the following is a specification.

My invention relates to collector-rings for dynamo-electric machines; and its object is to provide a novel construction which is particularly adapted for obtaining good ventilation and which is consequently especially suited for use in the collecting of large currents.

My invention is especially advantageous for use in large unipolar machines, since in this type of machine large amounts of current must be collected; but my invention is not limited to this particular type of machine, but may be used to advantage in any machine in which large currents must be taken from or supplied to a moving part.

My invention, broadly considered, consists in building up a collector-ring from a plurality of parallel rings separated by air-spaces and provided with portions adapted to engage each other and the support. By making these engaging portions thicker than the main portions of the rings the latter portions are separated by air-spaces. In order to raise the rings conveniently above the surface of the support, my invention further consists in arranging the engaging portions of the rings in the form of inwardly-projecting lugs. With this arrangement the main portions of the rings are raised above the support and separated from each other by air-spaces, so that excellent ventilation is secured.

My invention will best be understood by reference to the accompanying drawings, in which—

Figure 1 shows a side view of a portion of a collector-ring arranged in accordance with my invention, and Fig. 2 shows a cross-sectional view of such ring.

In the drawings, A and A' represent two parallel rings, which together compose a single collecting-ring.

In Fig. 1 the ring A is shown broken away for a portion of its length. The parallel rings are provided with inwardly-projecting lugs adapted to engage each other and the support. In order to secure a firm engagement

of the two parallel rings, one ring, as A', may be provided with a projecting flange a, adapted to engage a corresponding groove in the other ring A. This construction is clearly shown in Fig. 2, in which one ring is shown shifted a small amount circumferentially with respect to the other. The engaging portions of the two rings are made thicker than the main portions, so that the main portions are separated by an air-space.

In Fig. 2 the projecting lugs are shown tapered, so as to engage the tapering supporting-rings C, mounted on the periphery of the revolving body D. B represents insulation separating the collector-rings from the supporting-rings C. With this construction it will be seen that the main portions of the collector-rings are raised above the support and separated from each other by an air-space, so that free passage is afforded for the air thrown outward by centrifugal force and good ventilation is secured.

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

1. In a dynamo-electric machine, a collector-ring composed of a plurality of parallel rings separated by air-spaces and having portions adapted to engage each other and the support.

2. In a dynamo-electric machine, a collector-ring composed of a plurality of parallel rings having portions engaging each other and the support, said portions being thicker than the main portions of the rings so that adjacent rings are separated by an air-space.

3. In a dynamo-electric machine, a collector-ring composed of a plurality of parallel rings separated by air-spaces and provided with inwardly-projecting lugs adapted to engage each other and the support.

4. In a dynamo-electric machine, a collector-ring composed of a plurality of parallel rings provided with inwardly-projecting lugs adapted to engage each other and the support and to hold the main portions of the rings raised above the support, said lugs being thicker than the rings, so that the main portions of adjacent rings are separated by an air-space.

5. In a dynamo-electric machine, a collector-ring comprising a pair of parallel rings separated by an air-space and having portions adapted to engage each other and a support, one of each pair of engaging por-

tions having a flange and the other a corresponding groove adapted to receive said flange.

5 6. In a dynamo-electric machine, a collector-ring composed of a plurality of parallel rings separated by air-spaces and provided with inwardly-projecting lugs adapted to engage each other and tapered on their outer surfaces to engage a support..

10 7. In a dynamo-electric machine, a collector-ring comprising a pair of parallel rings separated by an air-space and provided with inwardly-projecting lugs adapted to engage

each other and a support, the outer surfaces of said lugs being tapered, and the inner 15 surface of a lug on one ring being provided with a flange and the inner surface of the lug on the other ring having a corresponding groove.

In witness whereof I have hereunto set my 20 hand this 19th day of September, 1905.

JAKOB E. NOEGGERATH.

Witnesses:

HELEN ORFORD,
G. C. HOLLISTER.