J. HISSINK.

COOLING DEVICE FOR THE ROTARY MEMBERS OF ELECTRIC MACHINES.

APPLICATION FILED OCT. 23, 1907.

914,046. Patented Mar. 2, 1909.

Fig. 1

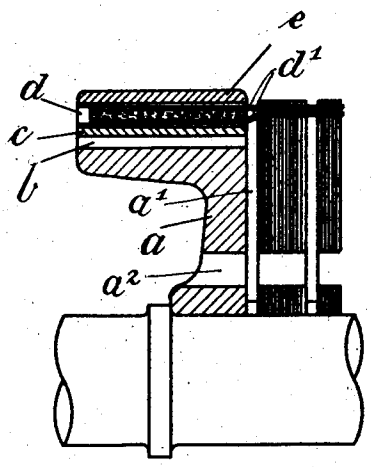
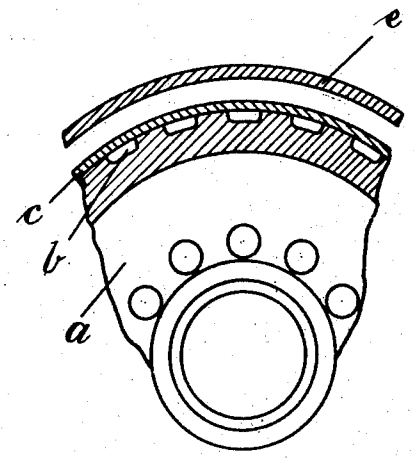


Fig. 2.



WITNESSES.

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UNITED STATES PATENT OFFICE.

JAKOBUS HISSINK, OF BERLIN, GERMANY, ASSIGNOR TO BERGMANN ELEKTRICITATS WERKE AKTIENGESELLSCHAFT, OF BERLIN, GERMANY, A CORPORATION OF GERMANY.

COOLING DEVICE FOR THE ROTARY MEMBERS OF ELECTRIC MACHINES.

No. 914,046. Specification of Letters Patent. Patented March 2, 1909.

Application filed October 23, 1907. Serial No. 398,715.

To all whom it may concern:

Be it known that I, JAKOBUS WILHELMUS HISSINK, a subject of the Queen of the Netherlands, and a resident of the city of Berlin, Germany, have invented certain new and useful Improvements in Cooling Devices for the Rotary Members of Electric Machines, of which the following is a specification.

My invention relates to electric machines having rotary members carrying wires, and has for its object to secure an efficient cooling of the wire ends or heads.

The invention is applicable to the armatures of continuous current motor and to the rotary members of alternating current machines or of multi-phase motors or dynamos.

The invention will be fully described hereinafter, and the features of novelty pointed out in the appended claims.

Reference is to be had to the accompanying drawings in which—

Figure 1 is a partial longitudinal section of a rotary member, embodying my invention, and Fig. 2 is a partial cross section.

The wire carrier *a*, which also serves as end plate for the rotary member, is provided at its periphery with longitudinally extending grooves *b*, which are covered by a metal ring *c*, slipped over said carrier. The ring practically forms part of the carrier, and if desired the carrier *a* and ring *c* may be cast of one piece. The heads *d* of the wires *d'* are placed on the outside of the ring *c* and are held in position in any suitable manner as by means of a cap *e* surrounding them. This cap is preferably in registry with the ring *c* and of substantially the same width, so that the wires *d'* with their heads *d* are held between the annular members *c*, *e* the inner one of which is cooled by the air circulating in the grooves *b*. The grooves *b* preferably connect at their inner ends with one of the transverse ventilating slits *a'* of the rotary member. Axial apertures a^2 may be provided in communication with the transverse slits *a'*.

By the arrangement described, a circulation of air is secured adjacent to the wires d^1 and their heads *d*, so that these wires, and especially their heads, are cooled efficiently during the rotation of the machine.

I claim as my invention:

1. A rotary member for electrical machines, comprising a carrier having longitudinal grooves on its periphery, a ring surrounding the grooved portion of the carrier, wires placed on the outside of said ring, and a cap surrounding said wires and registering with said ring.

2. A rotary member for electrical machines, comprising a carrier having longitudinal grooves at its periphery, a metal ring surrounding the grooved portion of the carrier, wires placed on the outside of said ring, and a cap of equal width with said ring and in registry therewith, surrounding said wires.

3. A rotary member for electrical machines, comprising two spaced annular members, one of which surrounds the other, wires extending between said members, and a carrier engaged by the inner member and provided with ventilating channels adjacent thereto.

4. A rotary member for electric machines comprising a carrier having longitudinal grooves on its periphery, a metal ring surrounding the entire grooved portion of the carrier and wires secured to the outer face of said ring.

In testimony whereof I have hereunto set my hand this first day of October, 1907, in the presence of two subscribing witnesses.

JACK HISSINK.

Witnesses:
WOLDEMAR HAUPT,
HENRY HASPER.