## H. R. WELLMAN. CASE FOR FAN MOTORS.

(Application filed Nov. 16, 1901.) (No Model.) F1G.1. FIG.2. FIG.3. WITNESSES: INVENTOR

## UNITED STATES PATENT OFFICE.

HAROLD ROBINSON WELLMAN, OF NEW YORK, N. Y., ASSIGNOR TO GENERAL INCANDESCENT ARC LIGHT COMPANY OF NEW YORK, A CORPORATION.

## CASE FOR FAN-MOTORS.

SPECIFICATION forming part of Letters Patent No. 708,105, dated September 2, 1902.

Application filed November 16, 1901. Serial No. 82,528. (No model.)

To all whom it may concern:

Be it known that I, HAROLD ROBINSON WELLMAN, a citizen of the United States, residing at New York city, county and State of New York, have invented a new and Improved Case for Fan-Motors, of which the following is a specification.

My invention relates to a case, such as is employed for mounting the moving parts and

o commutator-brushes of fan-motors.

My invention consists, essentially, of a case formed of two parts, which when united serve to support the armature of a fan-motor, one part of said case, which is removable, also serving as a support for the brushes.

The object of my invention is to simplify and improve the construction of cases for fan-

motors.

The accompanying drawings will serve to

20 illustrate my invention.

Figure 1 is a horizontal section through the motor-case, taken on the line 1 1 of Fig. 2. Fig. 2 is a vertical section taken on the line 2 2 of Fig. 1. Fig. 3 is a transverse section looking to the right, taken on the line 3 3 of Fig. 2.

A, which is the larger, and B, the smaller, the latter adapted to be connected to A through the bolts C. In contour the case has a cylindrical exterior D, with flattened top and bottom E F. The part B is substantially circular in outline, as indicated at B', Fig. 3, with a convex face, as indicated at B<sup>2</sup>, Figs. 1 and 2.

In the interior of the part A of the case project the pole-pieces G, around which are placed the magnet-windings H. The armature of the motor (indicated in dotted lines I, 40 Fig. 2) has its bearings at J in the part A and J' in the part B of the case.

The part B of the case is perforated, as at K, for the purpose of ventilation. The part B is also provided with cylindrical tubes L,

in which are placed directing-tubes M for the 45 brushes or carbon contacts N. These tubes are covered with caps O, and between the caps and the carbon contacts are springs P.

By reason of the configuration of the part A and the part B a motor-case is produced 50 which is compact and pleasing in outline and well adapted for the purpose for which it is intended.

Having thus described my invention, I claim—

1. A motor-case formed of two parts, one of said parts substantially cylindrical in its vertical axis with a horizontal top and bottom and having on one cylindrical surface a circular opening, and the other part formed 60 as a convex disk adapted to be inserted in the circular opening of the other part, and means for securing said parts together.

2. A motor-case formed of two parts, one of said parts substantially cylindrical in out- 65 line, with flattened top and bottom, and the

other part formed as a convex disk.

3. A motor-case formed of two parts, one of said parts substantially cylindrical in outline, with flattened top and bottom, and the 70 other part formed as a convex disk carrying tubes for the commutator-brushes.

4. A motor-case formed of two parts, one of said parts substantially cylindrical in outline in its vertical axis, with flattened top 75 and bottom, pole-pieces projecting inward from said top and bottom and said part having a circular opening in its cylindrical surface, and the other part formed as a convex disk adapted to be inserted in and secured to 80 said first-named part.

In testimony whereof I affix my signature in the presence of two witnesses.

HAROLD ROBINSON WELLMAN.

Witnesses:

- I. WERTHEIMER,
- J. KRUEG.