

No. 671,235.

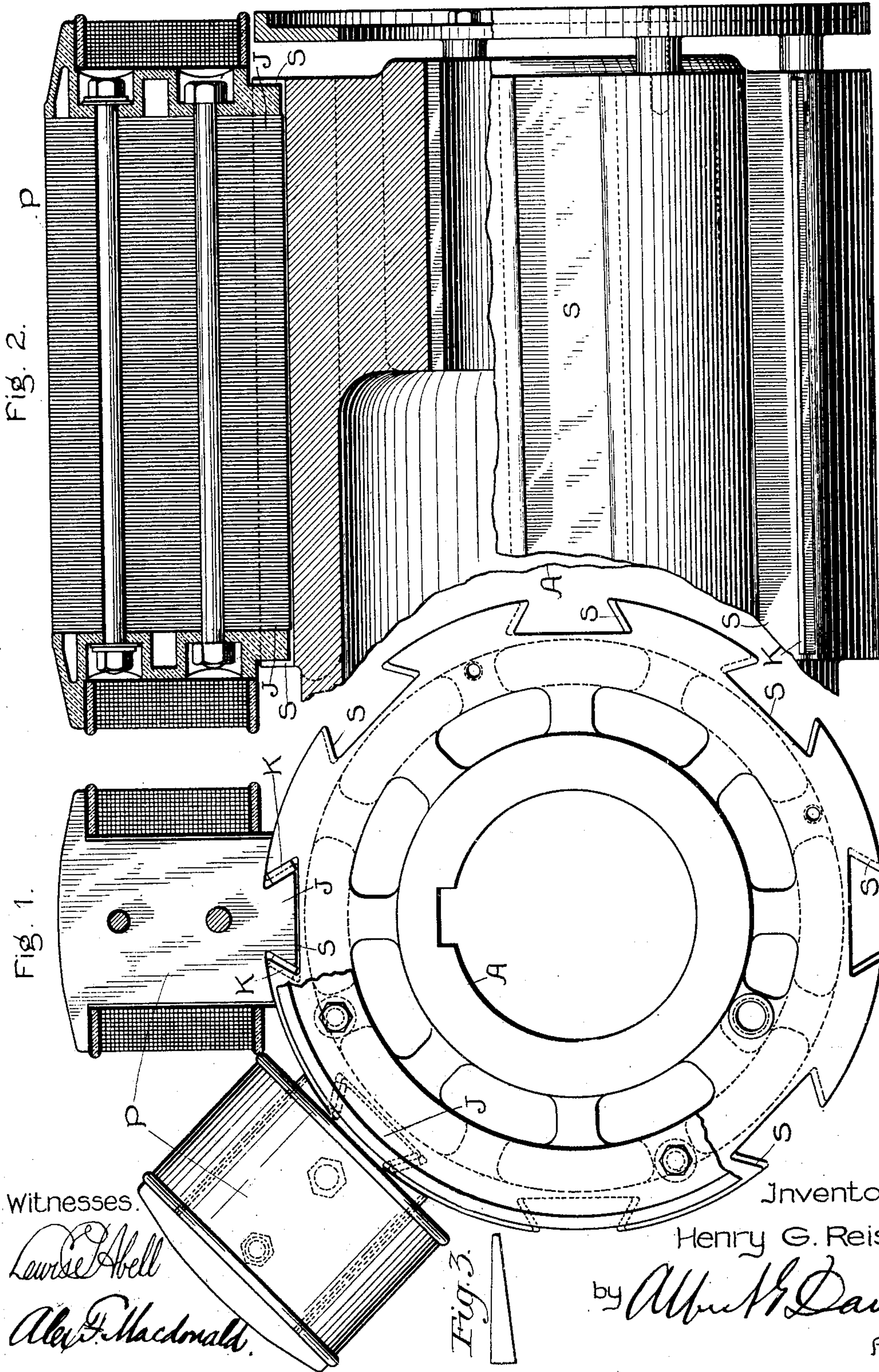
Patented Apr. 2, 1901.

H. G. REIST.

MEANS FOR ATTACHING POLE PIECES.

(Application filed Jan. 29, 1900.)

(No Model.)



UNITED STATES PATENT OFFICE.

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

MEANS FOR ATTACHING POLE-PIECES.

SPECIFICATION forming part of Letters Patent No. 671,235, dated April 2, 1901.

Application filed January 29, 1900. Serial No. 3,128. (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, in the county of Schenectady and State of New York, have invented certain new and useful Improvements in Means for Attaching Pole-Pieces, (Case No. 1,141,) of which the following is a specification.

This invention relates to electric machines; and it consists in means for attaching pole-pieces to the structure. It is particularly useful in machines having rotating fields.

Figure 1 is an elevation of a structure embodying my invention. Fig. 2 is a section thereof, and Fig. 3 is a detail view of a securing-key.

The pole-pieces are represented by P and are secured to a suitable support A in a manner to be described. Dovetail slots S of uniform width throughout their length are formed diagonally across the periphery of the support A. The pole-pieces P are provided with straight dovetail projections J, which may be formed of punched laminæ, as shown, and which are adapted to be inserted parallel with the shaft on which the support A is mounted in the slots S. Keys K, having one straight side and one inclined side, thus forming a right-triangular structure, are inserted from opposite directions into the slots S between the sides of the projections J and the walls of the slots, the straight sides of the keys lying against the sides of the projections J and the inclined sides lying against the walls of the slots S. In securing the pole-pieces by these means the projections J of the pole-pieces are inserted in the slots. One key K is inserted loosely from one direction and the other key K is driven in to secure the pole-piece rigidly in position. When it is desired to loosen the pole-piece, one key is forced loose by a blow applied to its small end, when the other key and the pole-piece may be readily removed. The slots S are formed diagonally or at an angle with respect to the axis of the support in order that the straight projections J may lie parallel with said axis after the keys K are driven in.

The adjustment of the parts can be effected from either end alone of the support, which is especially advantageous in machines wherein only one end is accessible, as in motor-generator sets. In such machines the two sets

of pole-pieces comprising the two fields are set so closely together that it is impracticable to reach the inner sides of the pole-pieces to knock out the keys.

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

1. In an electric machine, the combination with a pole-piece support having dovetail grooves of pole-pieces having dovetail projections, and two tapered keys having their tapers extending in opposite directions between the two sides of the projections and the two side walls of the slots.

2. In an electric machine, the combination with a pole-piece support having diagonal dovetail slots of uniform width, of a pole-piece having a straight dovetail projection adapted to be inserted in one of the slots, a right-triangular key between one side of the projection and a wall of the slot, and inserted from one direction, and a right-triangular key between the other side of the projection and the other wall of the slot, and driven in from the opposite direction.

3. In an electric machine, the combination with a pole-piece support provided with slots, of pole-pieces having projections adapted to engage in the slots, and two tapered keys having their tapers extending in opposite directions between the opposite sides of the projections and the two walls of the slots, whereby either one of the keys can be forced loose by a blow on its small end, and the pole-piece can then be removed.

4. In an electric machine, the combination with a pole-piece support having diagonal slots, of pole-pieces having projections adapted to be inserted in the slots, and means whereby the pole-pieces may be both tightened and loosened from either end of the slots.

5. In an electric machine, the combination with a pole-piece support having diagonal dovetail slots, of pole-pieces having dovetail projections adapted to be inserted in the slots, and means whereby the pole-pieces may be both tightened and loosened from either end of the slots.

In witness whereof I have hereunto set my hand this 27th day of January, 1900.

HENRY G. REIST.

Witnesses:

BENJAMIN B. HULL,
MABEL E. JACOBSON.