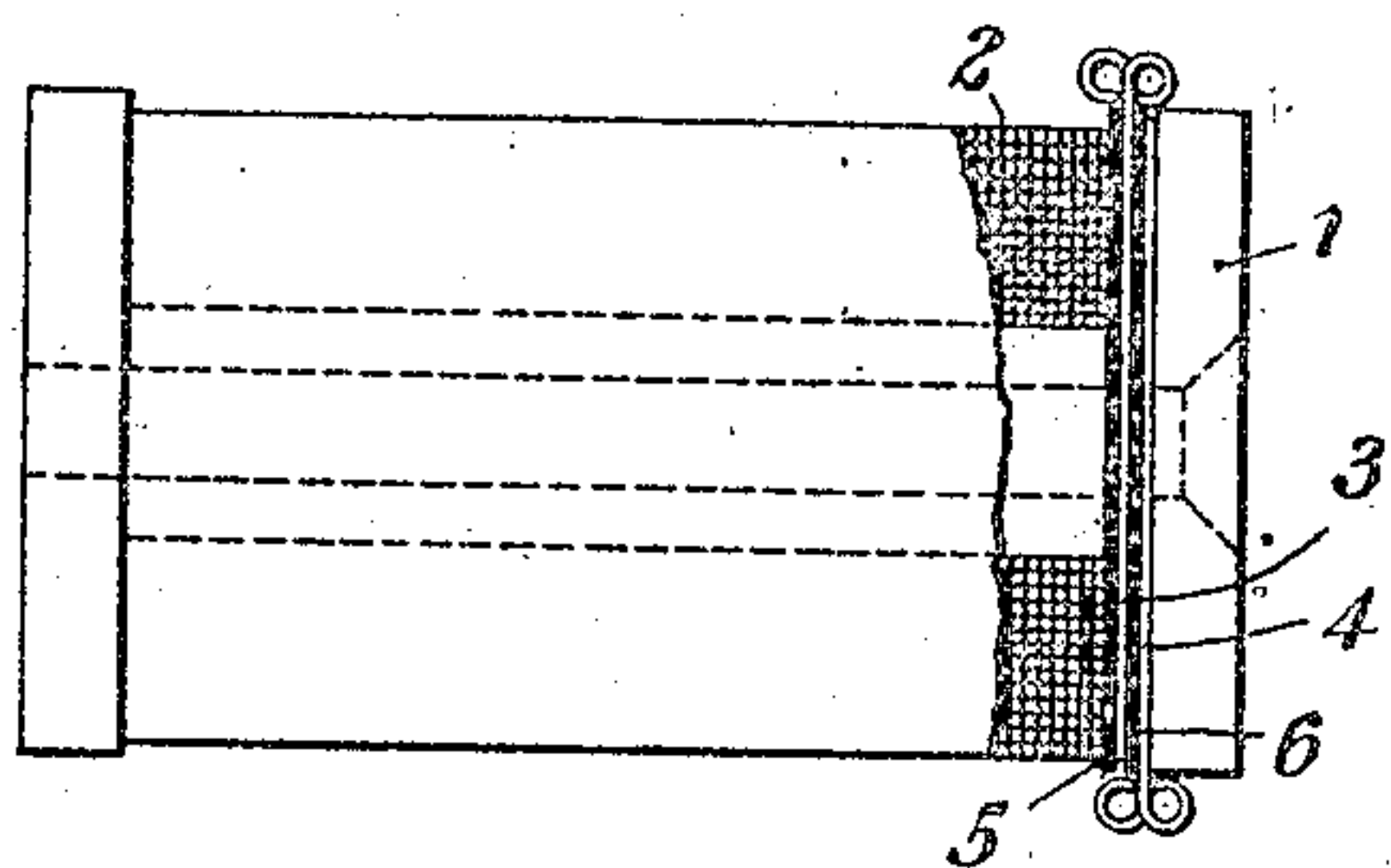


936,669.

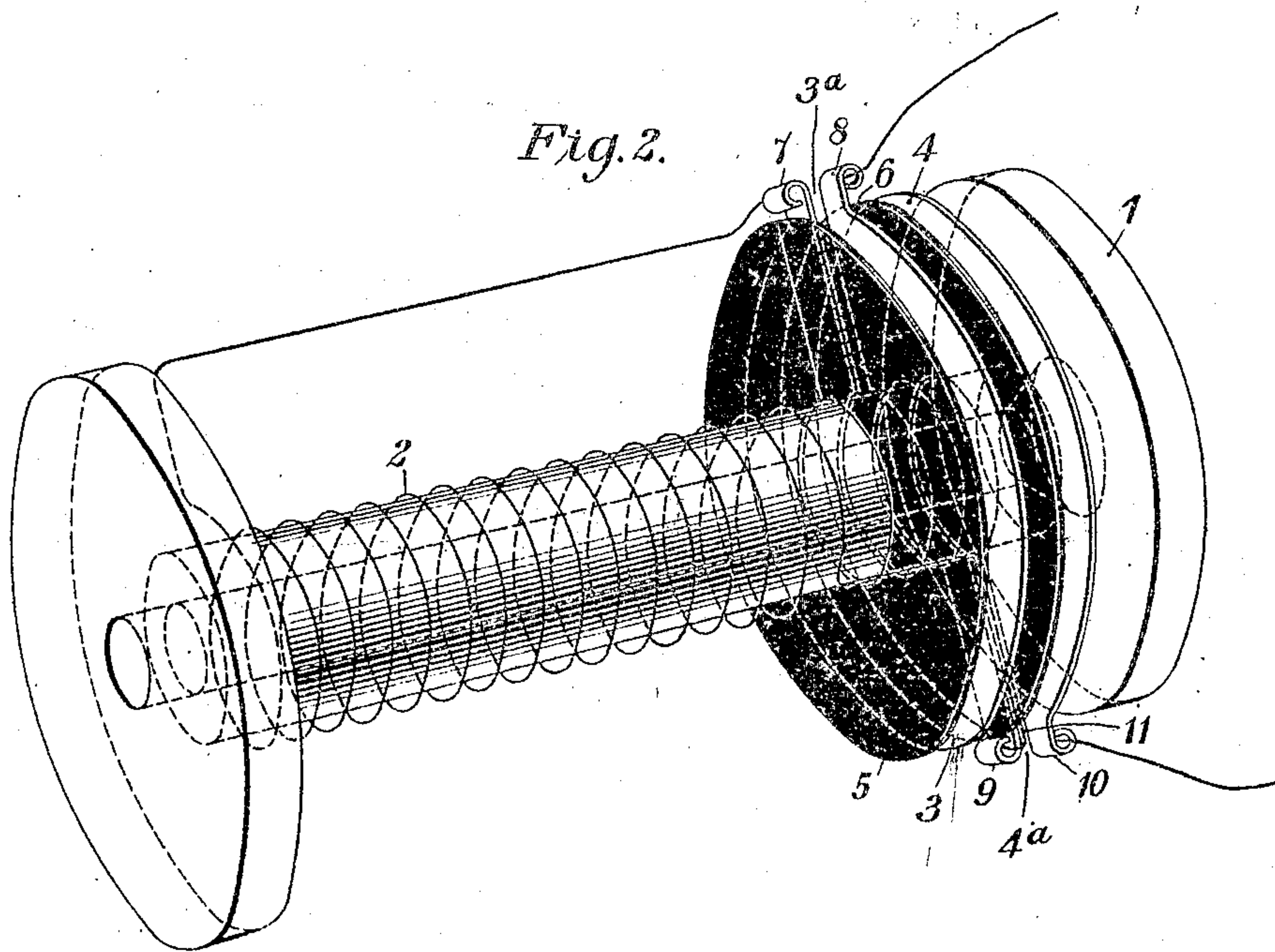
M. C. RYPINSKI.  
ELECTRICAL COIL.  
APPLICATION FILED NOV. 18, 1907.

Patented Oct. 12, 1909.

*Fig. 1.*



*Fig. 2.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

MAURICE C. RYPINSKI, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR, BY MESNE ASSIGNMENTS, TO WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY, OF EAST PITTSBURG, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

## ELECTRICAL COIL.

936,669.

Specification of Letters Patent.

Patented Oct. 12, 1909.

Application filed November 18, 1907. Serial No. 402,728.

*To all whom it may concern:*

Be it known that I, MAURICE C. RYPINSKI, a citizen of the United States, and a resident of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Electrical Coils, of which the following is a specification.

My invention relates to electrical coils, and it has for its object to provide a coil having such structural characteristics that it may be readily connected to an external circuit and all danger of breaking or otherwise injuring the terminal leads thereof may be avoided.

Figure 1 of the accompanying drawing is a side view of a coil constructed in accordance with my invention, a portion thereof being broken away for the sake of clearness of illustration, and Fig. 2 is a perspective and diagrammatic view, on an enlarged scale, of the coil shown in Fig. 1.

A spool or bobbin 1, upon which is wound a comparatively fine wire coil 2, is provided near one end with two conducting disks 3 and 4 having oppositely extending radial slits 3<sup>a</sup> and 4<sup>a</sup>. The disks 3 and 4 are insulated from each other and from adjacent parts by means of insulating disks 5 and 6, which are also provided with radial slits in order to permit of ready application to the spool. The conducting disks 3 and 4 are provided, at the sides of the slits therein, with outwardly extending portions 7, 8, 9, and 10 that are bent to form loops for the reception of conductors. The loop 9 is connected to the inner terminal of the winding

2 by means of a conductor 11 that extends inwardly from the said loop, through the slit in the disk 4, and then longitudinally, along the smaller cylindrical portion of the spool, through the several disks, to the winding 2. The outer terminal of the winding 2 is connected to the loop 7, and the remaining loops 8 and 10 are adapted to be connected to external circuit conductors. The arrangement is such that the conducting disks 3 and 4 serve as end convolutions of the coil, and, if the coil is intended for use as a solenoid, the connections may be arranged, as illustrated, so that the magnetizing effects of the said end convolutions may act in conjunction with the magnetizing effect of the winding 2.

I claim as my invention:

1. The combination with a coil of wire, of a disk located at one end of said coil and having a radial slit and having projections at the respective sides of its slit for connection to a terminal of the coil and to an external circuit.

2. The combination with a cylindrical coil of wire, of two disks located at one end of said coil and having radial slits and projections at the sides of the slits for connection to terminals of the coil and to an external circuit.

In testimony whereof, I have hereunto subscribed my name this 7th day of November, 1907.

MAURICE C. RYPINSKI.

Witnesses:

WM. BRADSHAW,  
BIRNEY HINES.