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P. H. A. VAN LIS
COIL SUPPORTING SPIDER

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Fig. 1

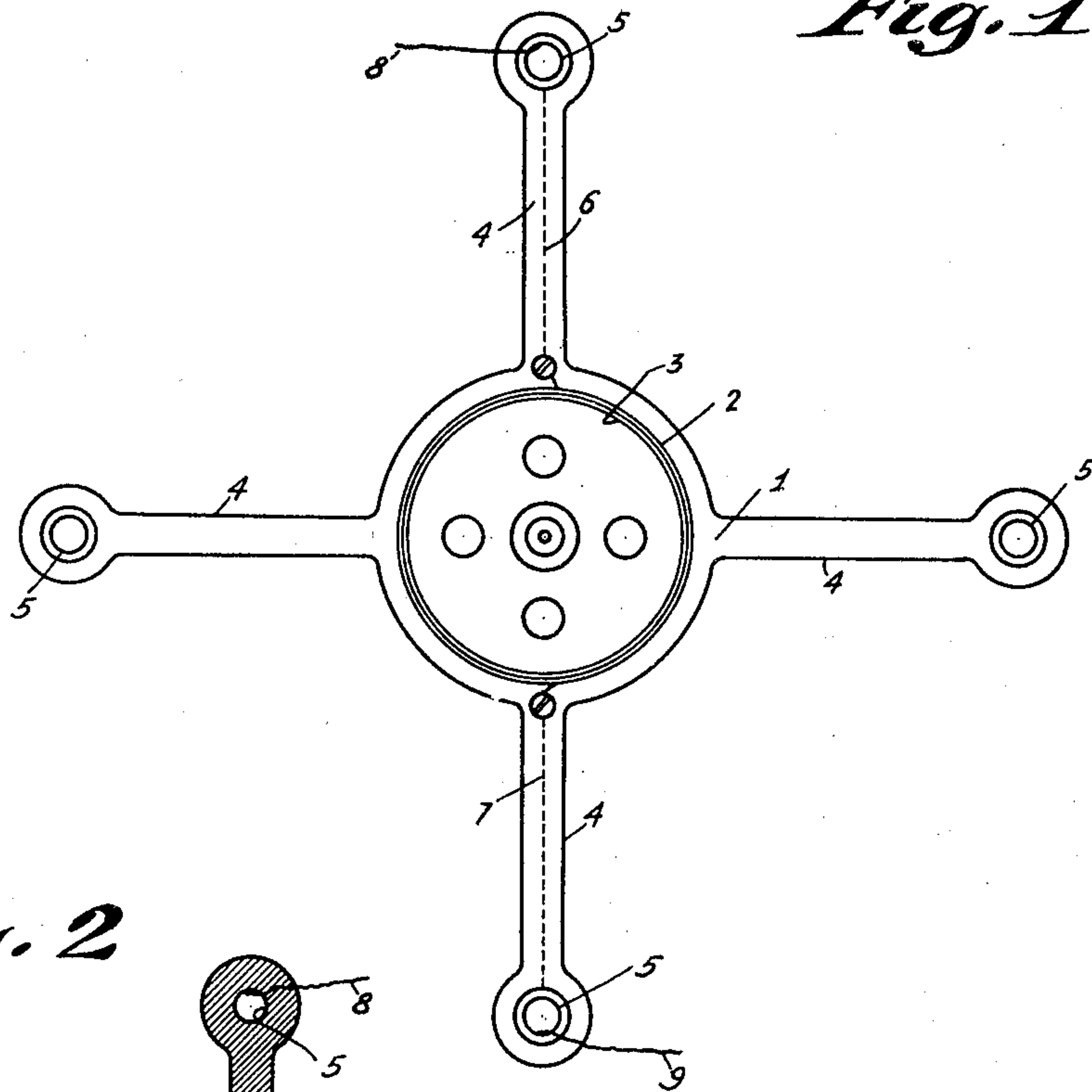
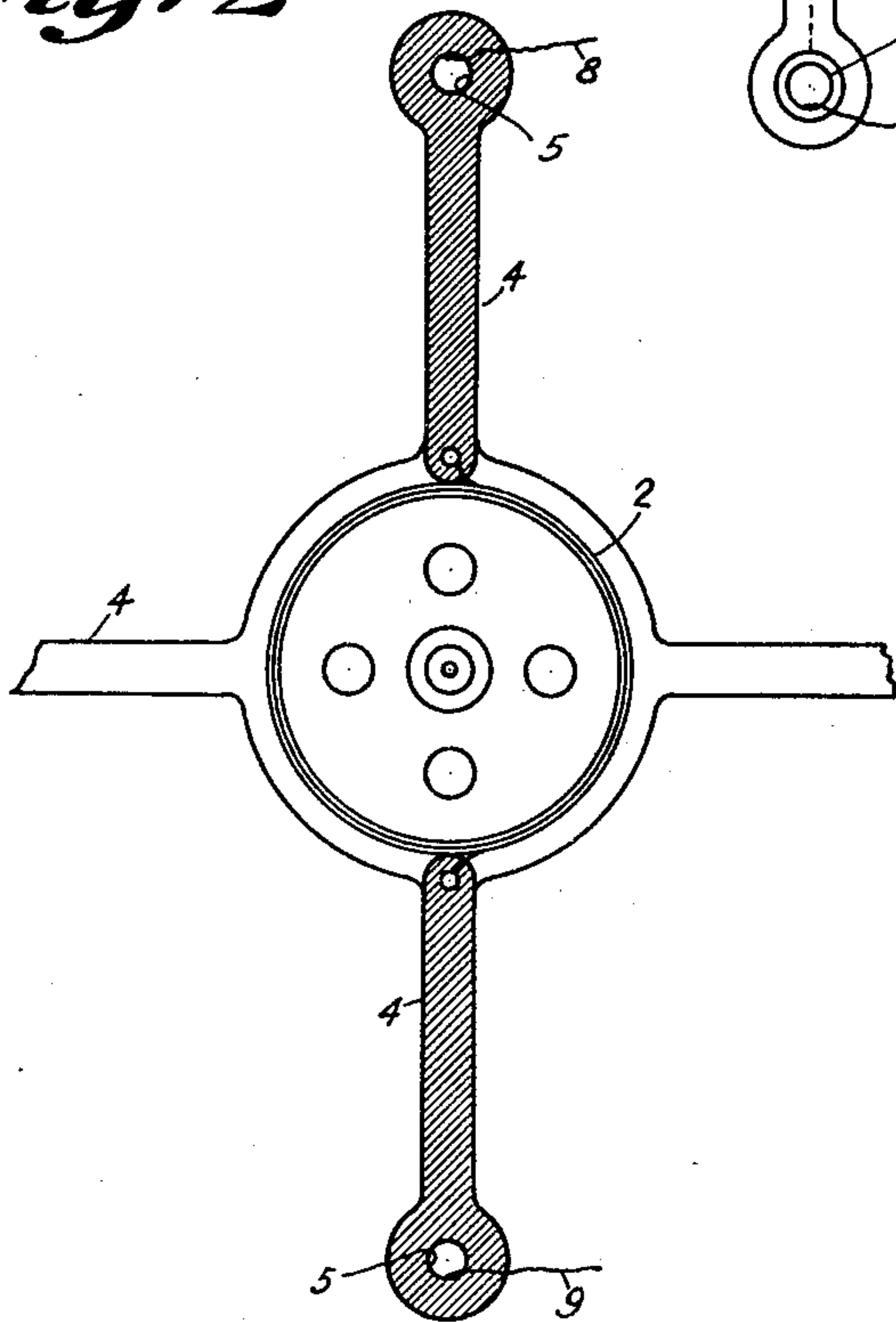


Fig. 2



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COIL SUPPORTING SPIDER

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This invention has reference to a supporting and centering body for the coil of an electro-dynamic device for converting electric oscillations into acoustic or conversely such, for example, as electro dynamic loudspeakers, microphones, pick-ups or the like.

According to the invention the body is made of insulating material and the electric connection between the coil and the point of connection for the speech currents consists of metal conductors which pass through or are mounted on the material of the said body.

If the body is made of the substance known under the registered trade mark "Bakelite" and if the connection consists, for example, of conductive wires they can be readily pressed into the "Bakelite" during the manufacture of the body.

It is thus possible for the body with the connecting wires to be pressed into the desired shape at one manipulation so that the product is particularly adapted to be manufactured in bulk.

In a different embodiment of the invention the electric connection is established by locally squirting the body with metal in a pulverized state.

In order that the invention may be clearly understood and readily carried into effect it will be described more fully with reference to the accompanying drawing in which

Figure 1 is a plan of one form of construction of a supporting and centering body according to the invention, and

Figure 2 is a plan of a different form of construction of such a body.

Referring to Figure 1, 1 designates the supporting and centering body, for example of "Bakelite", for the coil 2 of an electro-dynamic loudspeaker, said coil being movably arranged in a magnetic field. The windings of the coil are arranged on a small cylinder 3 integral with the body. The ends of the arms 4 have mounted in them copper rings 5 by means of which the body is secured to the magnet system (not shown). At least two of the points of attachment serve as points of connection to the conductors 6 and 7 by means of which the speech currents which are led through the conductors 8 and

9 to the body are transmitted to the coil. The conductors 6 and 7, which may consist, for example, of copper wire, are pressed into the "Bakelite" during the manufacture of the body, said manufacture and the pressing operation being effected at one manipulation. In order that it may stand out clearly that the wires are imbedded in the bakelite they are designated by dotted lines.

In the embodiment of the invention shown in Figure 2 the electric connection between the coil 2 and the points of attachment 5 is established by squirting two of the arms 4 with metal in a pulverized state, as is shown in the figure by hatching for the sake of clearness.

What I claim is:

1. A supporting and centering body for the coil of an electro dynamic acoustic device, comprising a central portion adapted to have said coil secured thereto, a plurality of flexible non-conducting elements extending outwardly from said central portion, and means for supplying speech currents to said coil, said means consisting of layers of conducting material deposited upon at least two of said flexible elements.

2. A supporting and centering body for the diaphragm and driving coil of an electro dynamic acoustic device comprising an annular central portion adapted to have said coil secured thereto, and a plurality of flexible non-conducting portions extending substantially radially therefrom, at least two of said flexible portions having metallic conductors formed thereon by locally squirting the body with metal in a pulverized state.

3. A supporting and centering body for the coil of an electro dynamic acoustic device, comprising a relatively rigid portion adapted to have said coil secured thereto, a plurality of flexible non-conducting elements extending outwardly from said rigid portion, and means for supplying speech currents to said coil, said means consisting of layers of deposited metal carried by at least two of said flexible elements.

4. A supporting member for the voice coil of an electro-dynamic acoustic device comprising a portion adapted to be secured to

the voice coil or the voice coil supporting member, a plurality of flexible arms extending outwardly from said portion, and conductors pressed into and carried by at least
5 one of said arms.

5. A supporting member for the voice coil of an electrodynamic acoustic device comprising a portion adapted to be secured to the voice coil or the voice coil supporting member, a plurality of flexible arms extending
10 from said portion, an unbroken layer of metallic material deposited on one side of one of said arms, and a second unbroken layer of metallic material deposited on one side of
15 another of said arms, said layers of metallic material constituting the leads for said voice coil.

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