

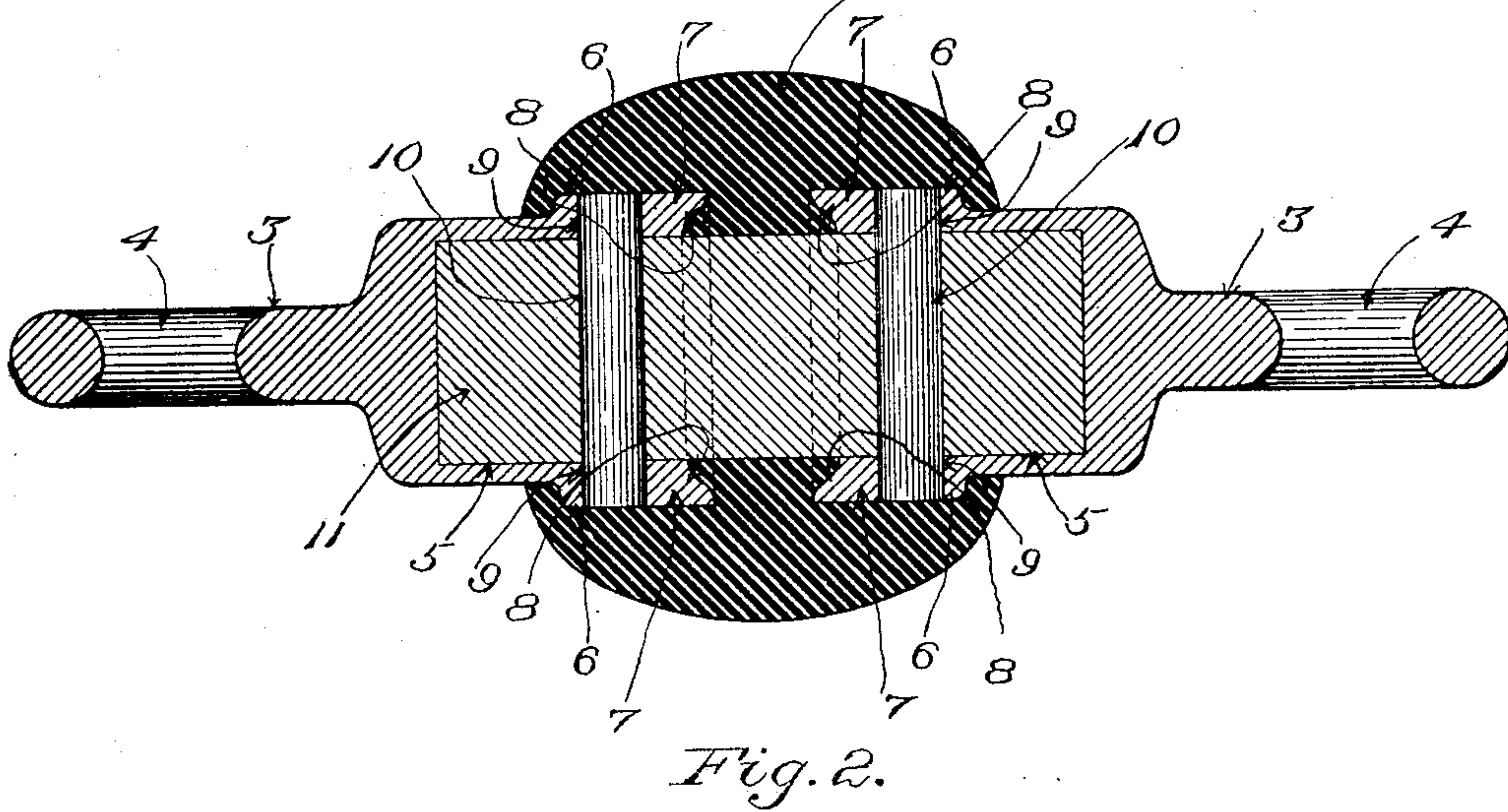
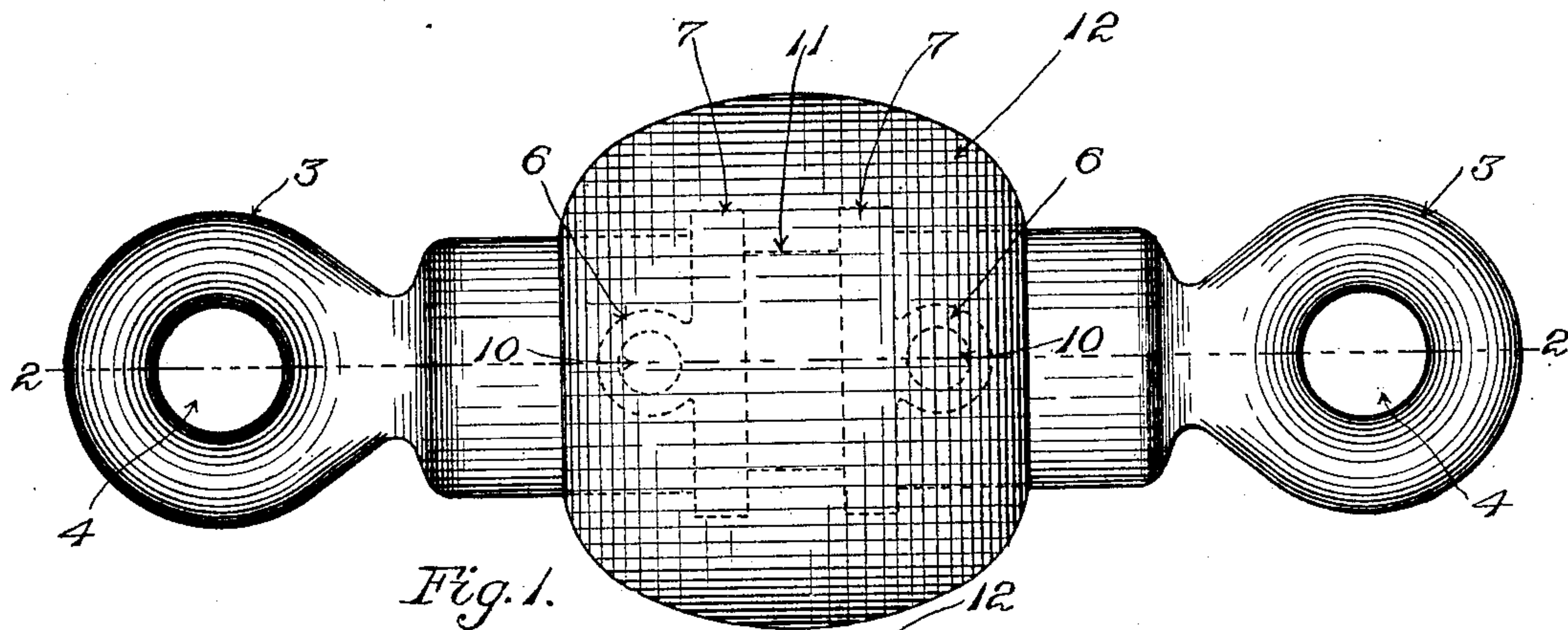
No. 706,194.

Patented Aug. 5, 1902.

L. McCARTHY.
INSULATOR.

(Application filed May 26, 1902.)

(No Model.)



Witnesses:

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UNITED STATES PATENT OFFICE.

LOUIS MCCARTHY, OF BOSTON, MASSACHUSETTS.

INSULATOR.

SPECIFICATION forming part of Letters Patent No. 706,194, dated August 5, 1902.

Application filed May 26, 1902. Serial No. 108,900. (No model.)

To all whom it may concern:

Be it known that I, LOUIS MCCARTHY, a citizen of the United States, residing at Boston, in the county of Suffolk, State of Massachusetts, have invented a certain new and useful Improvement in Insulators, of which the following is a specification, reference being had therein to the accompanying drawings.

10 My invention has for its object to provide a simple and effective insulator which shall not only possess high insulative quality, but shall also be capable of withstanding severe mechanical strains.

15 The invention is fully set forth in the following description, taken in connection with the accompanying drawings, and the novel features thereof are pointed out and clearly defined in the claims at the close of this specification.

20 In the drawings, Figure 1 is a plan view of an insulator embodying the invention, the interior construction of the central portion of the insulator, which is covered by molded insulating material, being indicated in dotted lines. Fig. 2 is a section on line 2-2, Fig. 1.

Referring to the drawings, 3 3 designate metallic end pieces or "connections," as they are sometimes termed. These connections or 30 end pieces, as shown, are identical in form and construction, although this is not essential. Each is provided with an eye 4 or other well-known means for securing it to a wire or the like. The body portion of the connection is substantially cup-shaped—that is, it is 35 provided with a recess or socket 5. At opposite sides thereof and preferably near the open end of the cup or socket a boss 6 is formed on the exterior of the connection. A 40 thickened portion or band 7 is preferably formed at the open end of the cup or socket. The edge of the band 7 is beveled, as at 8, to form an undercut when the parts of the device are assembled. Through each of the 45 bosses 6 a hole 9 is formed to receive a pin 10. The end pieces 3 are mechanically connected by means of a piece of wood 11 or equivalent insulating material which corresponds in cross-section with the cross-sectional shape of the cup or socket 5. In assembling the parts the ends of the wooden 50 connecting-piece 11 are inserted in the sock-

ets 5 and the pins 10 are driven into position. These pins pass through holes formed in the wooden connecting-piece 11 in registration 55 with the holes 9, formed through the bosses 6. The holes through the wooden connecting-piece 11 for the securing-pins 10 may be formed either after the ends of the said connecting-piece have been placed within the 60 sockets 5 or previously thereto, as may be desired. Instead of the pins 10 any other well-known securing means may be employed. In this manner a device which will withstand great mechanical strain may be readily constructed, while at the same time the wooden 65 connecting-piece is a good insulator and will prevent the passage of an electric current from one of the connections 3 to the other. For the purpose of increasing the insulative 70 quality of the device, as also for protecting the wooden insulation from the effect of exposure to the weather, moisture, &c., I cover the entire central portion with a mass of insulating composition 12 of any well-known 75 kind, which may be molded onto the insulator and then allowed to set and harden. I preferably give the insulating composition 12 the rounded exterior shape shown, although the precise shape thereof is not material. I 80 also prefer to extend this composition from about midway of one of the end pieces 3 to about midway of the opposite end piece 3, thus fully covering and protecting the joints and wooden connecting-piece 11 between the 85 said end pieces. The bevel or undercut 8 of the proximate edges of the connections or end pieces 3 permits the molded mass to be thoroughly anchored in place, thus preventing it from being accidentally broken off or 90 displaced. By this construction even if the outer portion of insulating material 12 should be chipped or broken off, as by a blow or otherwise, that portion of the molded insulating material adjacent the wooden connecting- 95 piece 11 and between the proximate ends of the connections 3 would remain in place and so materially increase the insulative quality of the device over that of a similar device which was not provided with such a molded cover- 100 ing of insulating material.

What I claim is—

1. An insulator comprising oppositely-disposed recessed metallic portions, an interme-

diating portion of insulating material, means for securing the said insulating material to the oppositely-disposed metallic portions, and a mass of molded insulating material filling the space between the proximate ends of the metallic portions, substantially as described.

2. An insulator comprising metallic end portions, each having a recess therein, the edge of said end piece at the open end of said recess being undercut or beveled, an intermediate connecting-piece of insulating material, secured to each of said end portions within the recess therein, and a mass of insulating material molded over the proximate ends of the end pieces and filling the space between the beveled edges thereof, substantially as described.

3. An insulator comprising recessed cup-shaped end pieces, an intermediate connecting-piece of insulating material, securing-pins passing through said end pieces and said piece of insulating material, and a mass

of molded insulating composition in which the said pins and the joint between the end pieces and the insulating connecting-piece are embedded, substantially as described.

4. An insulator comprising end pieces each provided with means for attachment to a flexible support, said end pieces being each provided with a socket or recess, a connecting-piece of insulating material intermediate said end pieces and projecting into the recess in each, means for securing the said end pieces to the said intermediate connecting-piece and a mass of insulating material covering the proximate ends of said end pieces and the space intermediate the same, substantially as described.

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

LOUIS MCCARTHY.

Witnesses:

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ALICE H. MORRISON.