G. WRIGHT.

INSULATED JOINT.

APPLICATION FILED FEB. 2, 1910.

963,846.

Patented July 12, 1910.

Fig. 1.

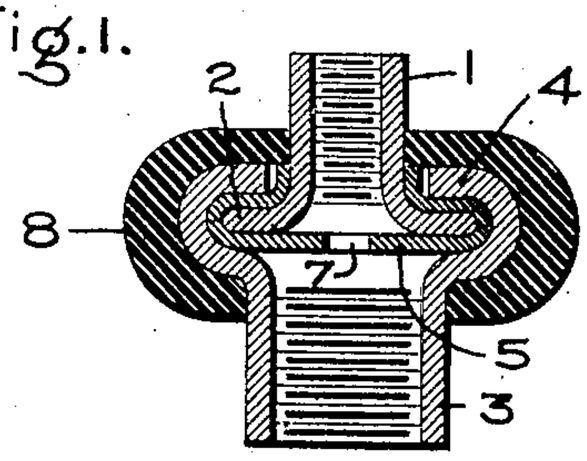


Fig. 2.

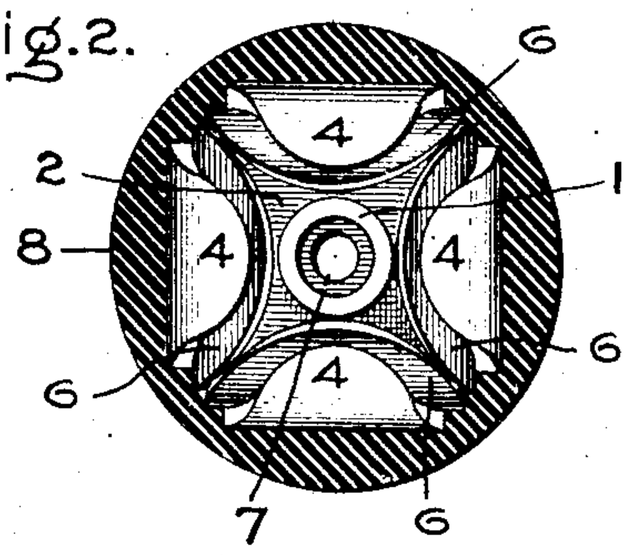


Fig. 3.

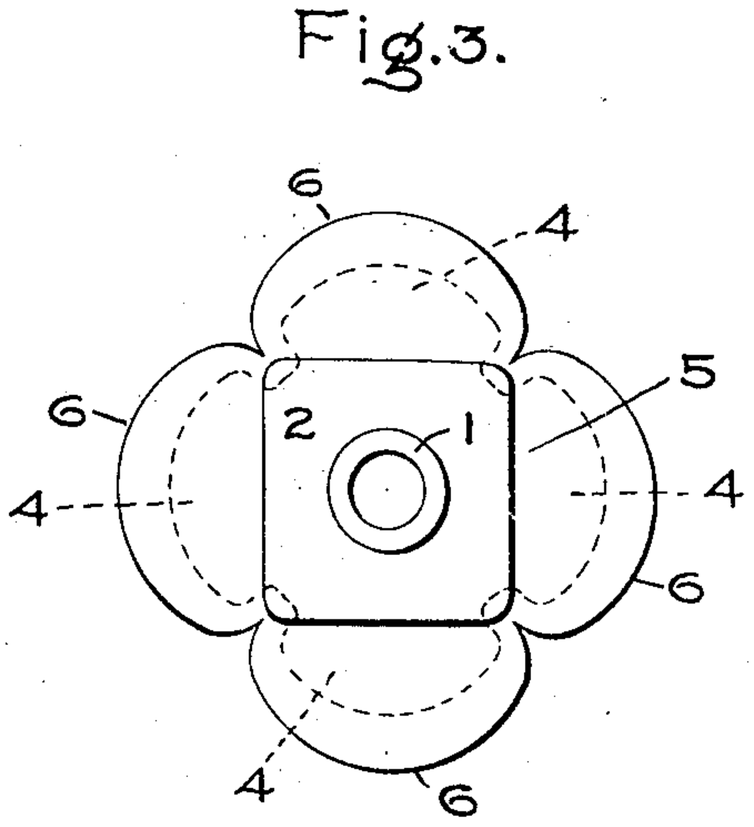


Fig. 6.

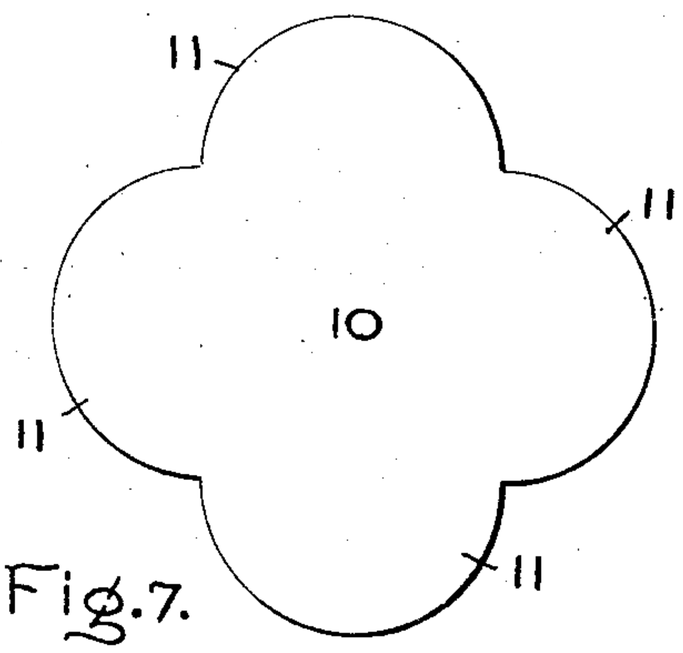


Fig. 4.

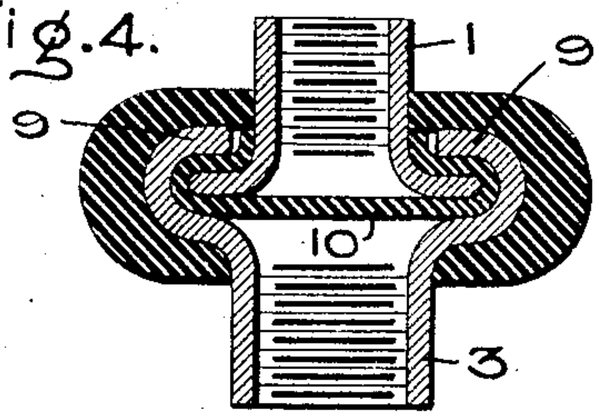


Fig. 5.

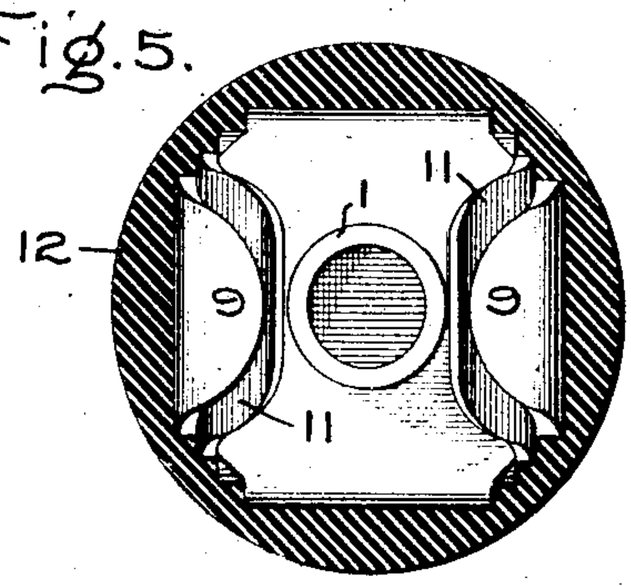


Fig. 7.

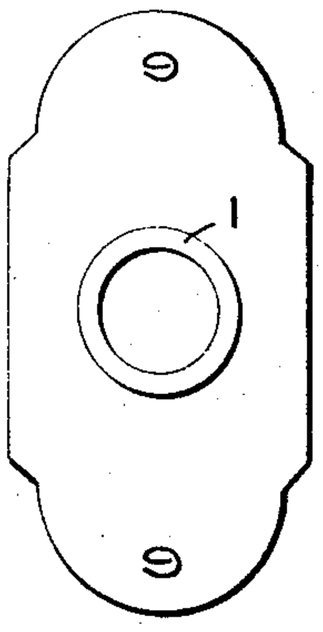
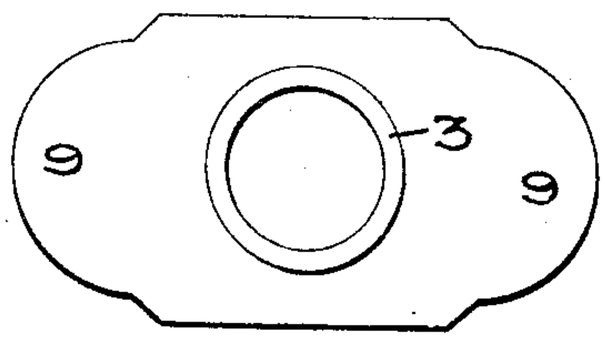


Fig. 8.



Witnesses:

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His Attorney.

UNITED STATES PATENT OFFICE.

GILBERT WRIGHT, OF SCHENECTADY, NEW YORK, ASSIGNOR TO GENERAL ELECTRIC COMPANY, A CORPORATION OF NEW YORK.

INSULATED JOINT.

963,846. Specification of Letters Patent. Patented July 12, 1910.

Application filed February 2, 1910. Serial No. 541,483.

To all whom it may concern:

Be it known that I, GILBERT WRIGHT, a citizen of the United States, residing at Schenectady, county of Schenectady, State of New York, have invented certain new and useful Improvements in Insulated Joints, of which the following is a specification.

This invention relates to joints for insulating gas pipes and electric fixtures. Such joints usually comprise two threaded nipples each adapted to be screwed upon the end of a section of the gas pipe or other conduit in which the joint is located. The nipples are suitably secured together, but are separated by interposed insulating material to prevent the flow of an electric current from one pipe section to the other.

In my improved joint I provide each nipple with a polygonal flange, and one or both of them have projecting lobes which can be folded around the edge of the other nipple to fasten them together. The sheet of insulating material projects beyond the edges of the flanges and lobes so that it will be folded in with the lobes when they are turned down.

In the accompanying drawing, Figure 1 is a longitudinal section of an insulating joint embodying my invention; Fig. 2 is a top plan view, with the inclosing insulating compound in section; Fig. 3 is a plan of the joint before the lobes are folded down; Fig. 4 is a longitudinal section of a modified form of my joint; Fig. 5 is a plan view, with the inclosing insulating compound in section; Fig. 6 is a plan of the insulating diaphragm; Fig. 7 is an end view of the upper nipple; and Fig. 8 an end view of the lower nipple.

Referring first to Figs. 1, 2 and 3, it will be noted that the upper nipple 1 has a square flange 2. This is the preferred shape, though any polygonal form may be used. The flange of the lower nipple 3 corresponds in shape with that of the upper nipple, and from each of its sides projects a lobe 4, having preferably a semicircular outline. The interposed sheet 5 of insulating material, such as mica, is similar in shape to the flange and lobes of the lower nipple, but somewhat larger, so that its lobes 6 extend beyond the lobes 4. When the square form of flange is used, the insulating sheet becomes a quarterfoil, as shown. If the conduit is to carry gas or electric conductors, then sheet 5 is provided with a perforation 7 in line with the nipples. To secure the two nipples together, the lobes 4 are turned up, inwardly and down upon the flange 2 of the upper nipple, carrying with them the lobes 6 of the mica sheet 5. This operation is effected by suitable dies, which press the lobes 4 firmly upon the flange 2 and the interposed mica, as shown in Figs. 1 and 2; the edges of the lobes 6 extending up between the tips of the lobes 4 and the nipple 1, so as to effectually insulate them. The parts are then enveloped in a mass of insulating compound 8, which is molded in place. This forms a strong, compact and serviceable joint, the polygonal form of the flanges preventing one nipple from turning on the other when the joint is being screwed into place.

In the modification shown in Figs. 4 to 8, each nipple has an approximately square flange with two lobes 9 projecting from opposite sides thereof, and the insulating sheet 10 is a quarterfoil. The two nipples are assembled with the lobes of one standing at right angles to those of the other, so that when those on the lower nipple are turned up, those on the upper nipple can be similarly turned down, and thus the parts are doubly interlocked. Two of the lobes 11 of the insulating sheet 10 are folded up and the other two are turned down with their corresponding lobes 9, as indicated in Fig. 5. Molded insulation 12 is applied to the joint after the lobes are interlocked. This form of joint is especially strong to resist torsional strains. If the pipes are not to serve as a conduit, the insulating sheet may be simply an unperforated diaphragm, as shown in Fig. 4.

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

1. An insulating joint comprising two nipples each having a polygonal flange, an interposed sheet of insulating material having projecting lobes corresponding with the sides of said flanges, and lobes on a flange adapted to be turned over upon the other flange and upon the corresponding lobes of said insulating sheet.

2. An insulating joint comprising two nipples each having a polygonal flange provided with projecting lobes, and an inter-

posed lobed sheet of insulating material held between the flange of one nipple and the folded-over lobes of the other.

3. An insulating joint comprising two nipples having square flanges, an interposed quarterfoil sheet of insulating material, and lobes on a flange folded over upon the other flange and upon the corresponding lobes of the insulating sheet.

4. An insulating joint comprising two nipples having square flanges provided with lobes on opposite sides, the lobes on each flange being folded down upon the other flange, and insulating material interposed between said flanges and under said lobes.

5. An insulating joint comprising two nipples each having a square flange provided with lobes on opposite sides, said flanges being assembled with their lobes arranged at right angles, those on each flange being folded down upon the other flange, and an interposed quarterfoil sheet of insulating material whose lobes underlie those on the flanges.

In witness whereof, I have hereunto set my hand this 25th day of January, 1910.

GILBERT WRIGHT.

Witnesses:

BENJAMIN B. HULL,

HELEN ORFORD.