

No. 728,442.

PATENTED MAY 19, 1903.

E. J. BURKE.
ELECTRIC INSULATOR.

APPLICATION FILED MAY 22, 1902.

NO MODEL.

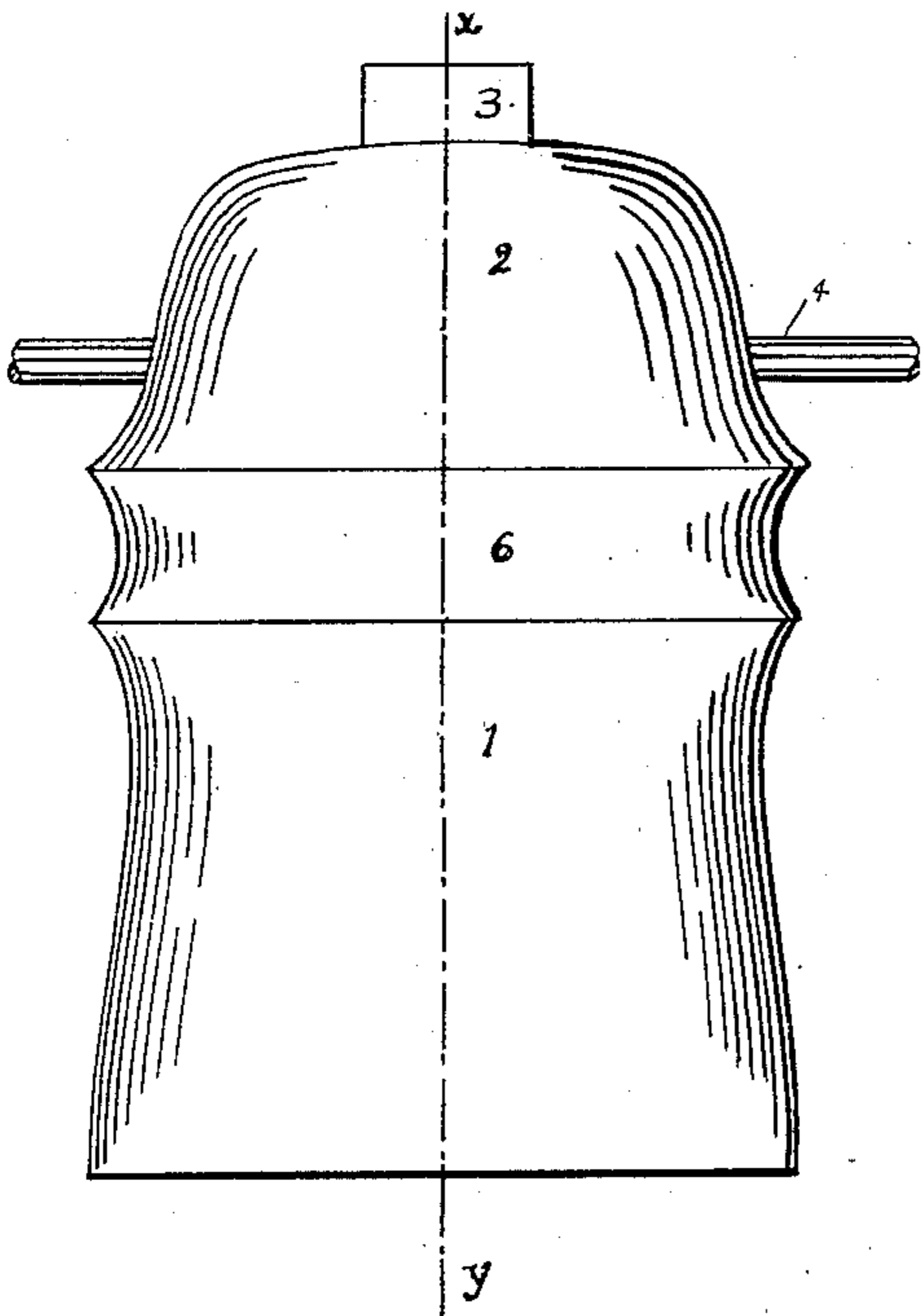


FIG. 1.

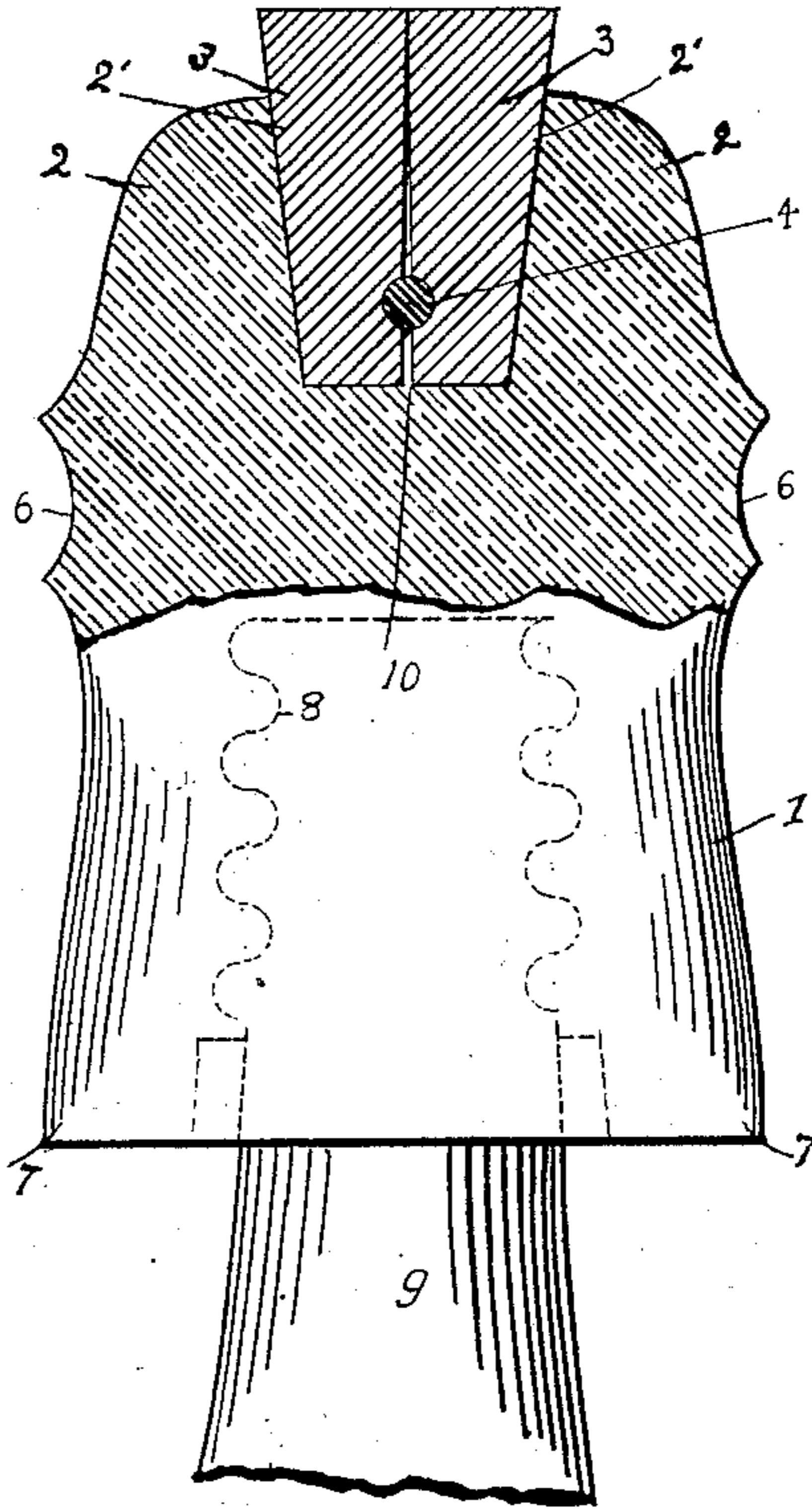


FIG. 2.

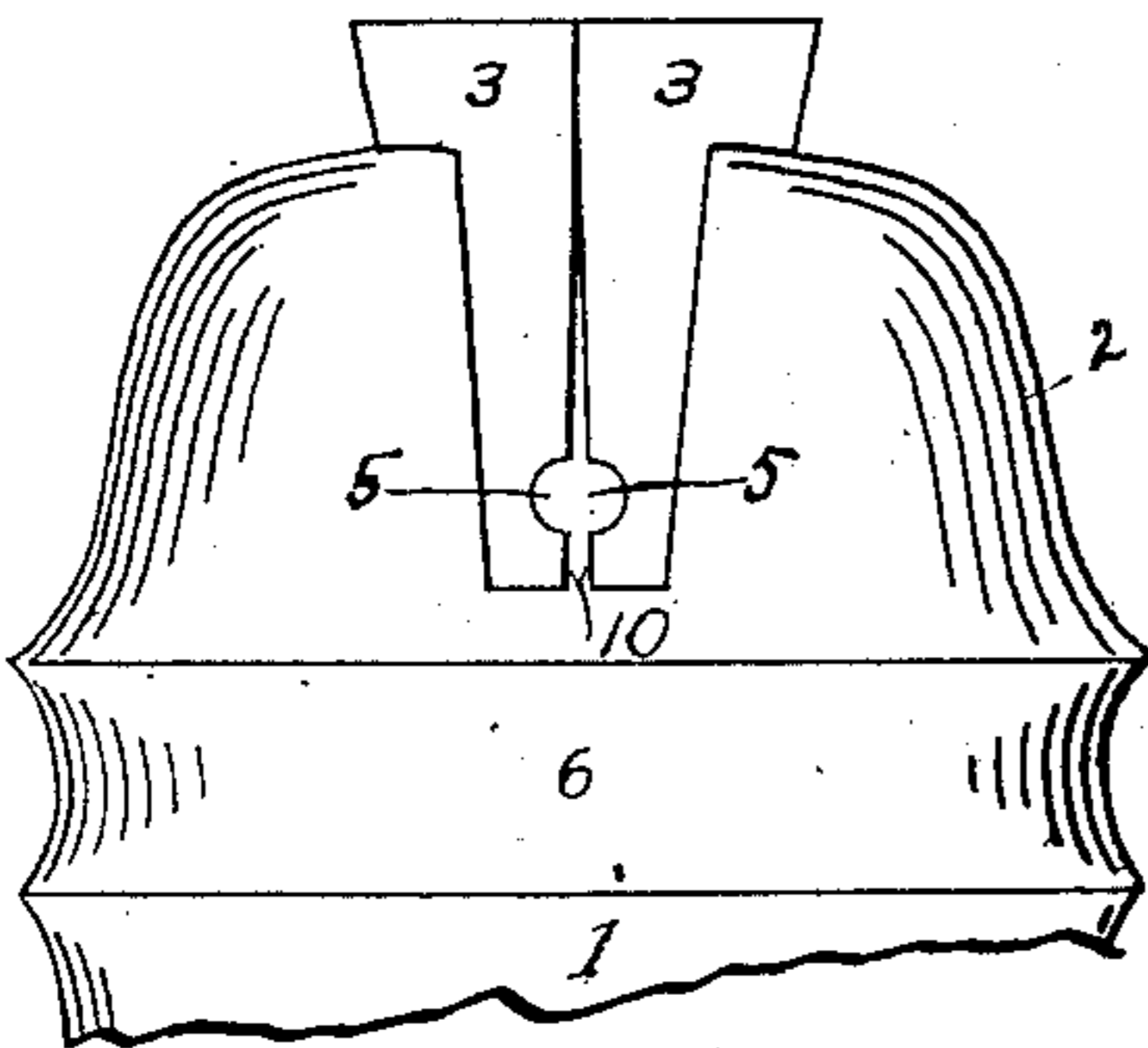


FIG. 3.

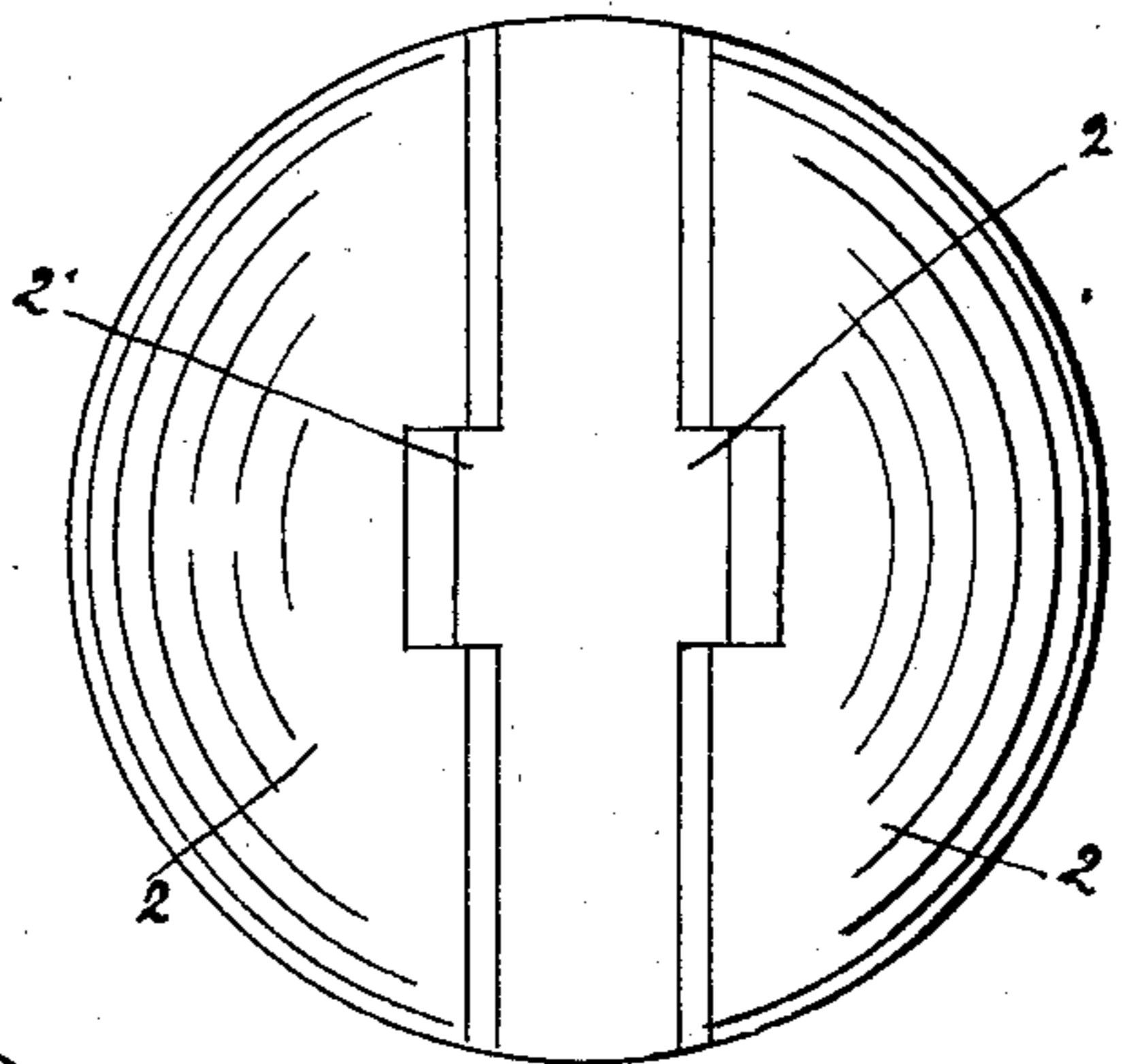


FIG. 4.

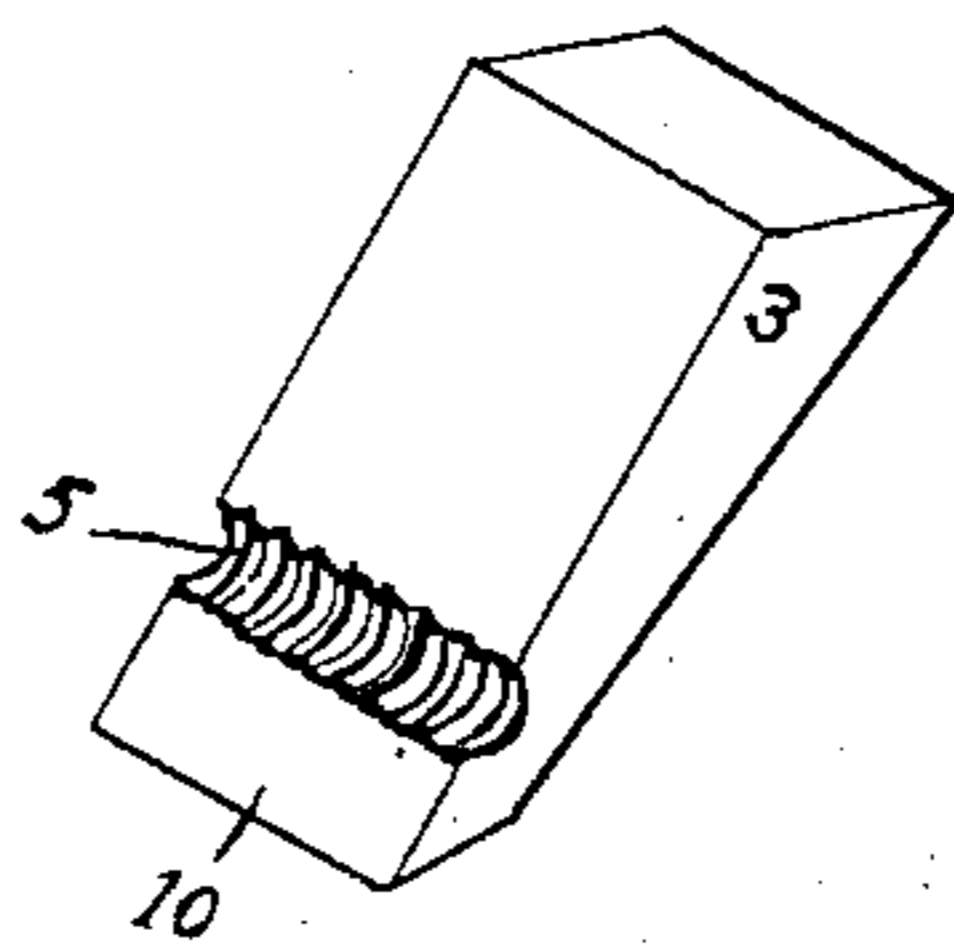


FIG. 5.

Witnesses

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By

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UNITED STATES PATENT OFFICE.

EDWARD J. BURKE, OF OLYPHANT, PENNSYLVANIA, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, OF ONE-HALF TO JOHN F. CUMMINGS AND PETER W. ANDERSON, OF OLYPHANT, PENNSYLVANIA.

ELECTRIC INSULATOR.

SPECIFICATION forming part of Letters Patent No. 728,442, dated May 19, 1903.

Application filed May 22, 1902. Serial No. 108,556. (No model.)

To all whom it may concern:

Be it known that I, EDWARD J. BURKE, a citizen of the United States, residing at Olyphant, in the county of Lackawanna and State of Pennsylvania, have invented certain new and useful Improvements in Electrical Insulators, of which the following is a specification.

This invention relates to insulators for electrical wires, and has for its objects to provide an insulator in which no tying-wire is required, to provide an attachment of wires to the insulator more secure than those heretofore in use, to provide a construction wherein the weight of the wire assists in holding it taut in the fastenings, and other objects, as are herein set forth, and more particularly pointed out in the claims.

To these ends the invention consists of the construction, combination, and arrangement of parts as specified, and illustrated in the drawings, in which—

Figure 1 is a side elevation of an exterior view of one of my insulators with a wire attached. Fig. 2 is a partial view in cross-section, taken on the line *xy* of Fig. 1. Fig. 3 is an upper end view of one of my insulators, taken at right angles to that shown in Fig. 1, the wire being removed. Fig. 4 is a top plan view of one of my insulators with the wire-holding wedges removed. Fig. 5 is a detail view in perspective of one of the fastening-wedges used in my device.

Similar characters of reference denote like and corresponding parts throughout the several views.

In the drawings, 1 denotes the body or principal member of one of my insulators. It may be constructed from glass, porcelain, or other non-conducting material. The upper end of the body portion is bifurcated or separated into two lips 2 2, each of which is recessed at 2' 2' to accommodate the similar wedges 3 3 in attaching the wire 4 to be insulated. The wedges 3 are provided with a ribbed or serrated groove 5, constructed for the purpose of grasping the wire 4 when placed in position. The insulator in general is also furnished with a neck 6, to which a wire may be

attached in the usual way, if desired, and will be found useful where branch lines are to be connected with the main line. My device is also provided with the usual petticoat 7 and with an interior screw-thread 8, by means of which it is fastened to a peg 9, similar to the insulators in common use. Two wedges are to be used like that shown in Fig. 5 in attaching a wire to one insulator, and the wedges may be constructed from insulating material or not, as preferred. It will generally be preferred to make them from iron galvanized, so as to prevent corrosion. When galvanized with a coat corresponding to that of the wires to be insulated, they will resist the effects of atmosphere and water as long as the wire of the insulator itself, and when a new wire is to be inserted new wedges of course should be supplied. The wedges should be cut sufficiently thin at their lower ends 10 so that the wire to be held by them receives the entire lateral pressure when they are inserted in the top of the insulator.

The operation of the device is as follows: The wires to be insulated are stretched taut in the usual way, lying in the vicinity of the points to which they are to be attached to the insulators. The wire is then grasped between two of the wedges, with their grooves 5 coinciding as near as may be, and the wire being held between the wedges in that position is inserted with the wedges into the insulator, the wedges resting in the recesses 2' 2' and being pressed therein until the wire is grasped tightly between them. The force of gravity acting on the wires tends to hold them down in this position, and the fastening to the insulator is complete.

I do not wish to be confined to the exact structure and description set forth, as it is evident that the form of the wedges and of the body of the insulator, as well as the fastenings to poles or pegs, may be greatly varied without departing from the general spirit of my invention.

What I claim, and desire to secure by Letters Patent, is—

1. An insulator constructed from a body portion of insulating material having an up-

wardly-projecting and outwardly-flaring pair of lugs, a screw-threaded socket, and a petticoat extending around said socket together with a pair of wire-holding wedges having 5 opposed serrations for holding the wire, the said wedges adapted to be inserted with their thin edges downward between the upwardly-projecting lugs aforesaid, whereby the weight of the wire and wedges assists in clamping 10 the wire, substantially as specified.

2. In an insulator, the combination of a body portion petticoated, and having screw-

threads for attachment to a peg, of a recessed groove in the upper end of said body portion, and wire-holding members insertible within 15 the recess of said body portion and arranged to be held in position by gravity, substantially as and for the purpose specified.

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

EDWARD J. BURKE.

Witnesses:

F. J. DE LACEY,
D. G. MORAN.