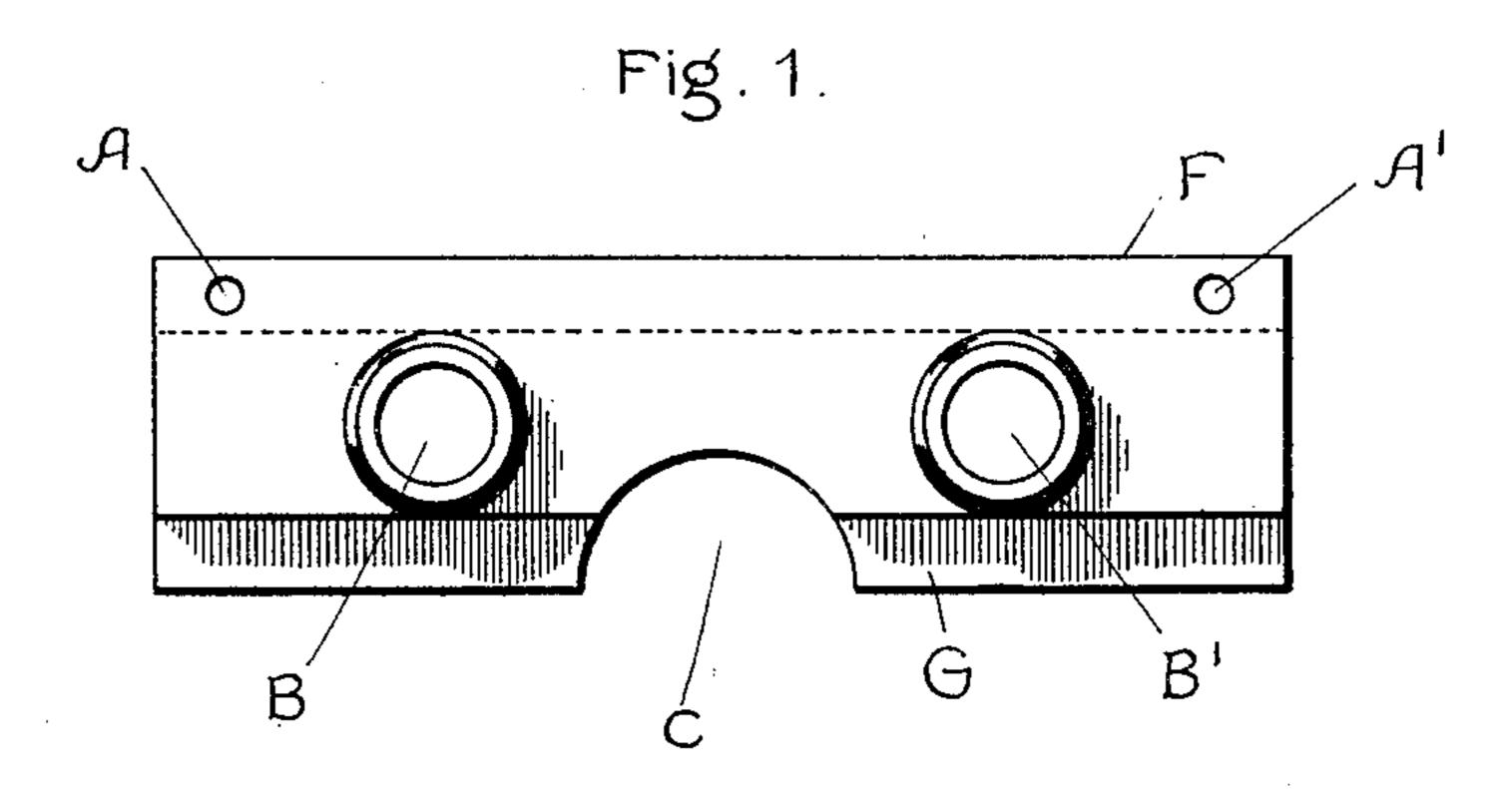
No. 638,350.

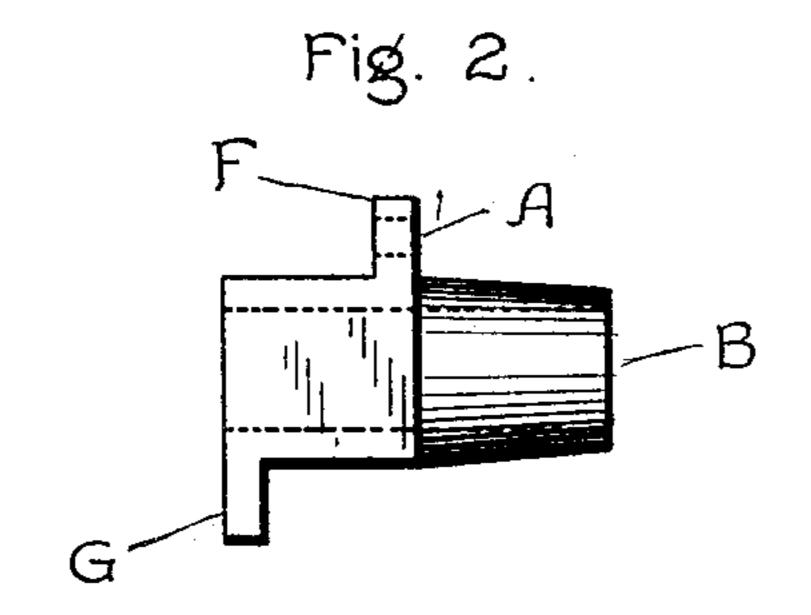
Patented Dec. 5, 1899.

## J. L. MORGAN. OUTLET BUSHING.

(Application filed Oct. 11, 1899.)

(No Model.)





Witnesses.

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## United States Patent Office.

JACQUE L. MORGAN, OF KANSAS CITY, MISSOURI, ASSIGNOR TO THE GENERAL ELECTRIC COMPANY, OF NEW YORK.

## OUTLET-BUSHING.

SPECIFICATION forming part of Letters Patent No. 638,350, dated December 5, 1899.

Application filed October 11, 1899. Serial No. 733,255. (No model.)

To all whom it may concern:

Be it known that I, JACQUE L. MORGAN, a citizen of the United States, residing at Kansas City, county of Jackson, State of Mis-5 souri, have invented certain new and useful Improvements in Outlet-Bushings, (Case No. 1,438,) of which the following is a specification.

This invention relates to an improved in-10 sulator for electric wires, the particular object being to provide a safe outlet-bushing for electric-light or other wires carried behind the walls of buildings installed with electrical apparatus, to prevent possible dam-15 age by fire from chafing of the conductors and abrasion of their insulation. The terminals only of the conductors being brought out into the room and the main portion being concealed behind the walls, manipula-20 tion of the terminals for making the necessary fittings in the installation or making repairs or rough handling by the plasterers or pipe-fitters very often starts a fire by abrasion of the insulation and resulting con-25 tact of the conductors with one another or with pipes near which they are trained. The bushing provided by my invention avoids damage from such causes.

In carrying out my invention I provide a 30 block formed of insulating refractory material, provided with one or more openings through which the conductors may be led, with shoulders which permit its being seated between two adjacent laths, and nail-holes 35 by which it may be secured in position to the laths or the timbers which support them. I preferably provide shoulders on opposite faces of the insulator, so that one of them may bear against the front face of one lath 40 and the other against the rear face of the adjoining lath, thus locking it firmly in position and preventing dislodgment from jars or blows.

The features of novelty will be more spe-45 cifically pointed out hereinafter, and will be definitely indicated in the claims.

In the drawings which illustrate a form of my invention, Figure 1 is a face view, and

Fig. 2 an end view.

I preferably form the outlet-bushing of 50 porcelain, which admits of cheap manufacture, by molding. It comprises a stout central portion or body in which openings are made, preferably two or more, as indicated at BB', with extension bushing to give a greater length 55 to the cylindrical support afforded the conductors, as will be seen from Fig. 2. The central portion of the insulator is provided with a recess, as indicated at C, which may be made circular in contour, so as to afford a seat 60 against one of the pipes which is to constitute a support for the plug, bracket, or other terminal leading to the translating devices. On the two sides of the insulator are shoulders F and G, permitting the insulator to be 65 firmly braced between two adjacent laths. Holes A A' may be provided for screws or nails to fasten the insulator to the laths or timbers. The wire or wires being led through the bushings BB' are secure from damage 70 by abrasion, and it is almost impossible, except by malicious intention, for a workman to injure the conductor so as to make a short circuit.

What I claim as new, and desire to secure 75 by Letters Patent of the United States, is—

1. An outlet-bushing for electric conductors, provided with projections or shoulders to lock it in position between adjoining laths.

2. An outlet-bushing for electric conduc- 80 tors, provided with projections or shoulders to lock it in position between adjoining laths, and an opening or openings transverse to its length to permit transit of the conductors.

3. An outlet-bushing for electric conduc- 85 tors, comprising a body portion perforated transversely to admit the conductors, and provided with alternately-disposed shoulders to engage adjacent laths on opposite faces.

4. An outlet-bushing for electric conduc- 90 tors, comprising an insulating-block having transverse openings for transit of the con-

ductors, shoulders to permit firm seating between adjacent laths, and openings to permit

fastening the bushing to a support.

5. An outlet-bushing for electric conductors, comprising a block of refractory material perforated transversely for transit of the conductors and the accommodation of securing devices, shoulders to permit seating the bushing on adjacent laths, and a recess

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to brace the bushing against a pipe at the routlet.

In witness whereof I have hereunto set my hand this 5th day of October, 1899.

JACQUE L. MORGAN.

Witnesses:
JOHN T. SEDDON,
SEAMAN RUSSELL.