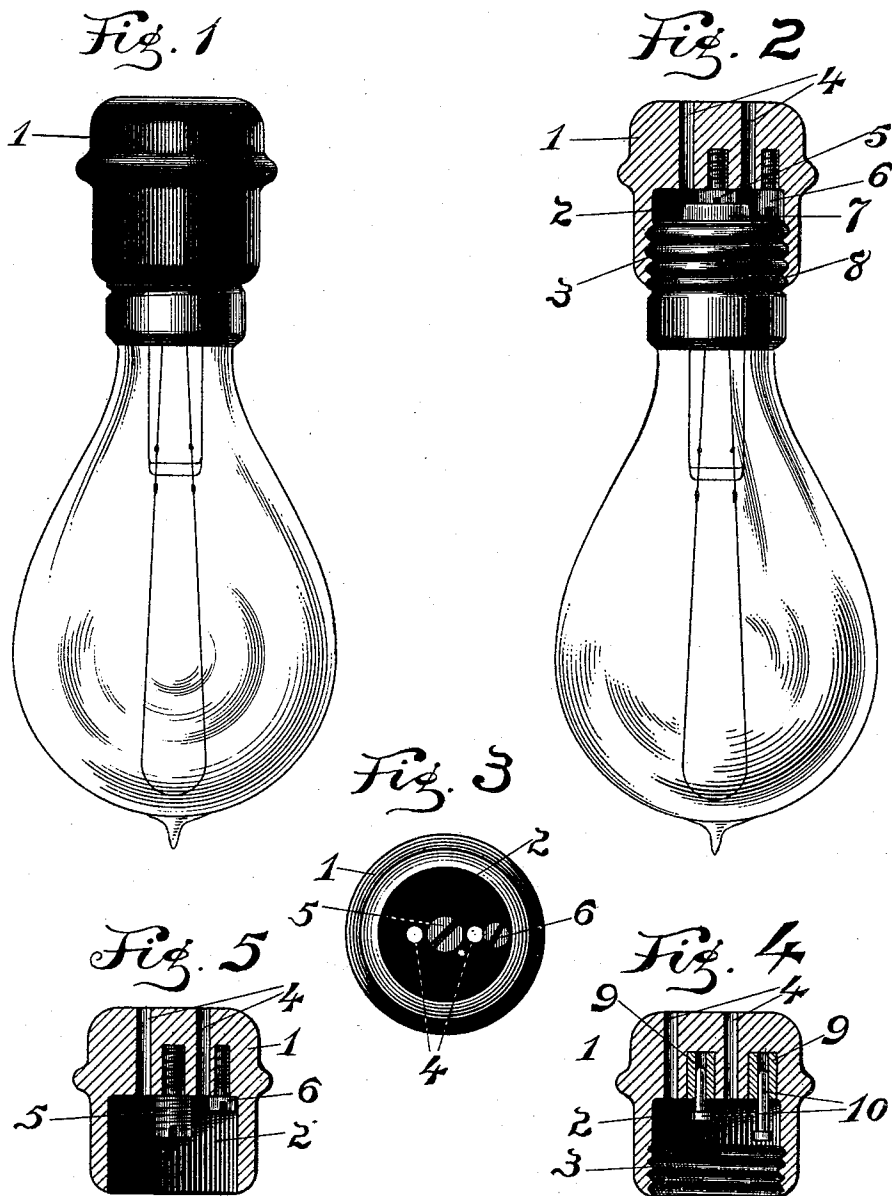


(No Model.)

F. C. ROCKWELL.
INCANDESCENT LAMP SOCKET.

No. 475,345.

Patented May 24, 1892.



Witnesses:
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UNITED STATES PATENT OFFICE.

FREDERICK C. ROCKWELL, OF HARTFORD, CONNECTICUT.

INCANDESCENT-LAMP SOCKET.

SPECIFICATION forming part of Letters Patent No. 475,345, dated May 24, 1892.

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To all whom it may concern:

Be it known that I, FREDERICK C. ROCKWELL, a citizen of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Lamp-Sockets, of which the following is a full, clear, and exact specification.

This invention relates to the class of keyless sockets for incandescent electric lamps, the object being to provide a simple, small, safe, and very cheap socket of this class that can be attached directly to the globe of a lamp or to a base thereon.

To this end the invention resides in a shell of insulating material, having openings for the passage of the circuit-wires and binding-posts for their attachment in the interior so located that they make contact and complete the circuit with parts connected with the filament-leads when the socket is placed on the lamp, as more particularly hereinafter described, and pointed out in the claims.

Referring to the accompanying drawings, Figure 1 is a side view of a socket on a lamp. Fig. 2 is a side view of a lamp with the socket in central section. Fig. 3 is a view looking into the socket. Fig. 4 is a sectional view of a modified form of the socket, and Fig. 5 is a sectional view of a socket fitted for another style of lamp.

In the views, 1 indicates the shell, which is preferably formed of insulating material of high non-conductivity molded and pressed to shape under high heat and great pressure, with a chamber 2 for the reception of the end of the lamp. This chamber 2, which is cylindrical, may be formed with smooth walls, so that the end of the lamp will easily slip into it, or it may in the process of formation be provided with a thread 3, so that the end of a lamp may be screwed into it. Through the closed end of the socket, which is made comparatively thick, are perforations 4 to provide a passage for the entrance to the interior of the circuit-wires. Adjacent to the inner ends of these perforations, turning in threaded sockets, are screws, one of which 5 is located near the center, so that its head may come in contact with the central contact-piece 7 on the end of a lamp, while the other screw 6 is lo-

cated near one side, so as to make contact with the conducting-base 8 on the end of the lamp when the socket is placed thereon.

The sockets shown in Figs. 2 and 4 are adapted to be screwed upon the base of a common style of lamp, in which one of the leads of the filament is connected with the central contact-piece 7, while the other lead is connected with the threaded base 8.

In Fig. 5 the head of the central binding-screw is threaded, adapting the socket for a common class of lamps which are attached to the globe by a central screw that passes into a threaded socket in the base of the lamp for holding as well as furnishing one of the contacts.

In the forms shown in Figs. 2 and 5 the circuit-wires are passed through the perforations into the interior and the ends bound around the screws, which are then screwed home to hold the wires and make a good contact, and when the lamps are screwed into the sockets the central screw or binding-post is brought into contact with one of the terminals of the filament-leads and the other screw or binding-post is brought into contact with the other terminal. In the form shown in Fig. 5, in place of using screws to hold the wires and make a contact, small tubes 9 of conducting material are inserted into the ends of the perforations or molded in the material adjacent to the interior ends of the perforations, and when the wires are passed through the perforations the ends are held by small pins or wedges 10 of conducting material that fit into the tubes. These wedges preferably have heads projecting so as to make contact with the filament-leads terminals on the base of the lamp. When the lamp end is screwed into the chamber of this socket, the ends of the wedges as they come in contact are driven firmly into the tubes, so as to make a sure contact with the ends of the circuit-wires, and the harder they go inward the more firmly will they press upon and make contact with the contact-pieces on the end of the lamp. Of course, if desired, lamps may be secured in the sockets by any cementing material, as plaster-of-paris, instead of by the threads and screws.

A socket thus formed is simple, small, easily

connected with or disconnected from the circuit-wires, and can be readily made for the various styles of lamps, to which it can be quickly attached or removed. It can be molded to shape from cheap insulating material of high non-conductivity in a single piece, so that it is very safe, there being no connections or conducting parts exposed.

I claim as my invention—

1. As a new article of manufacture, a socket for an incandescent electric lamp, consisting of a shell having a recess for the reception of a lamp end with perforations through the shell, and binding-contacts on the interior adjacent to the perforations adapted to make contact between the circuit-wires and the terminals of the filament on the lamp, substantially as specified.

2. As a new article of manufacture, a socket for an incandescent electric lamp, consisting of a shell formed of a single piece of insulating material having a recess for the reception of a lamp end with perforations through the shell, and binding-contacts on the interior adjacent to the perforations adapted to make contact between the circuit-wires and the terminals of the filament on the lamp, substantially as specified.

minals of the filament on the lamp, substantially as specified.

3. As a new article of manufacture, a socket for an incandescent electric lamp, consisting of a shell having a recess for the reception of a lamp end with perforations through the shell, and binding-screws on the interior adjacent to the perforations, one of which is adapted to make contact between one circuit-wire and the center of the lamp-base and the other between the other circuit-wire and the edge of the lamp-base, substantially as specified.

4. As a new article of manufacture, a socket for an incandescent electric lamp, consisting of a shell having a recess for the reception of a lamp end with perforations through the shell, tubes molded into the shell, with pins fitting said tubes and adapted to make contact between the circuit-wires and the terminals of the filament on the lamp, substantially as specified.

FREDERICK C. ROCKWELL.

Witnesses:

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