

No. 667,980.

E. W. G. C. HOFFMANN.

Patented Feb. 12, 1901.

TERMINAL SOCKET.

(Application filed Oct. 11, 1899.)

(No Model.)

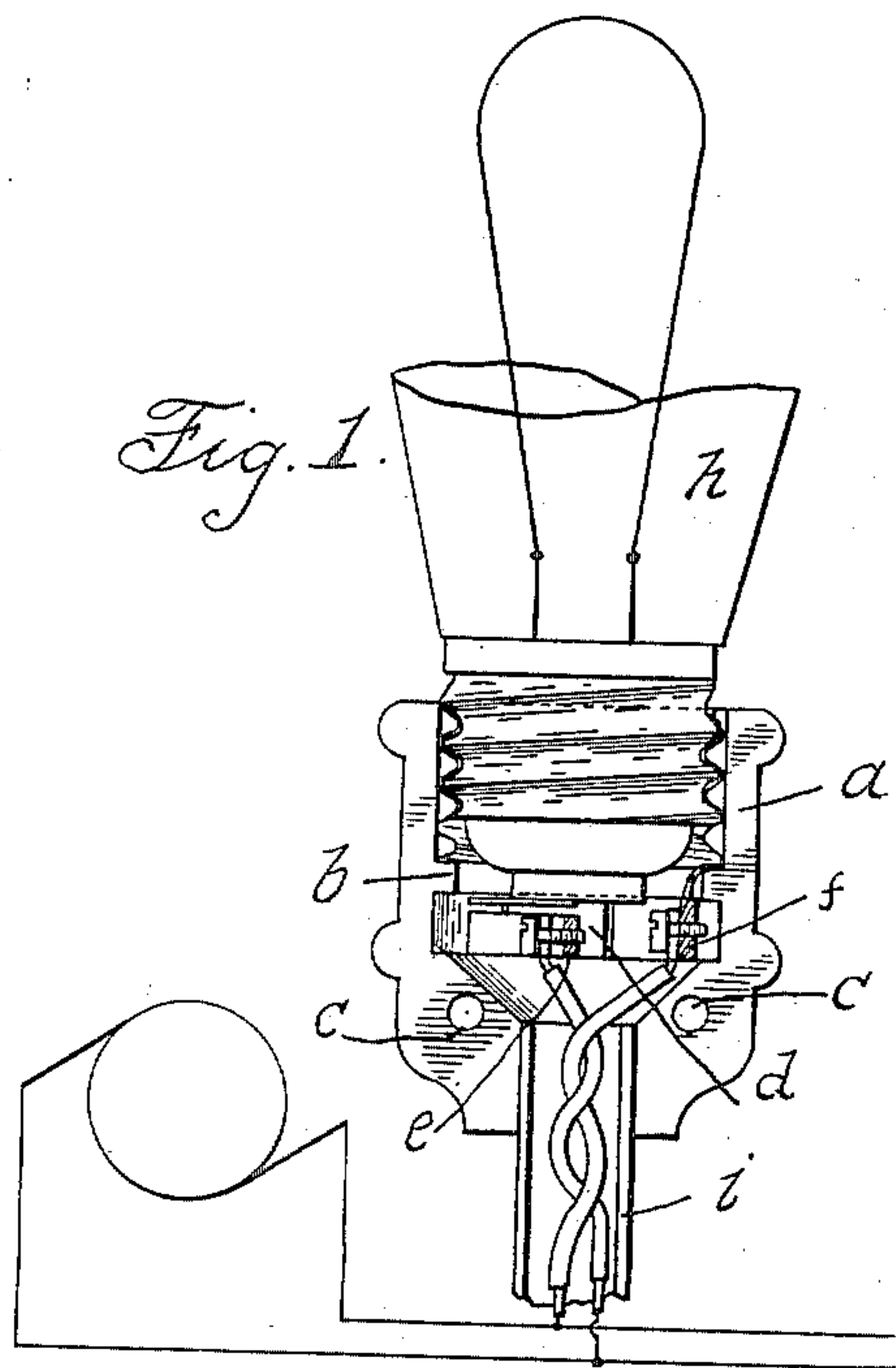


Fig. 2.

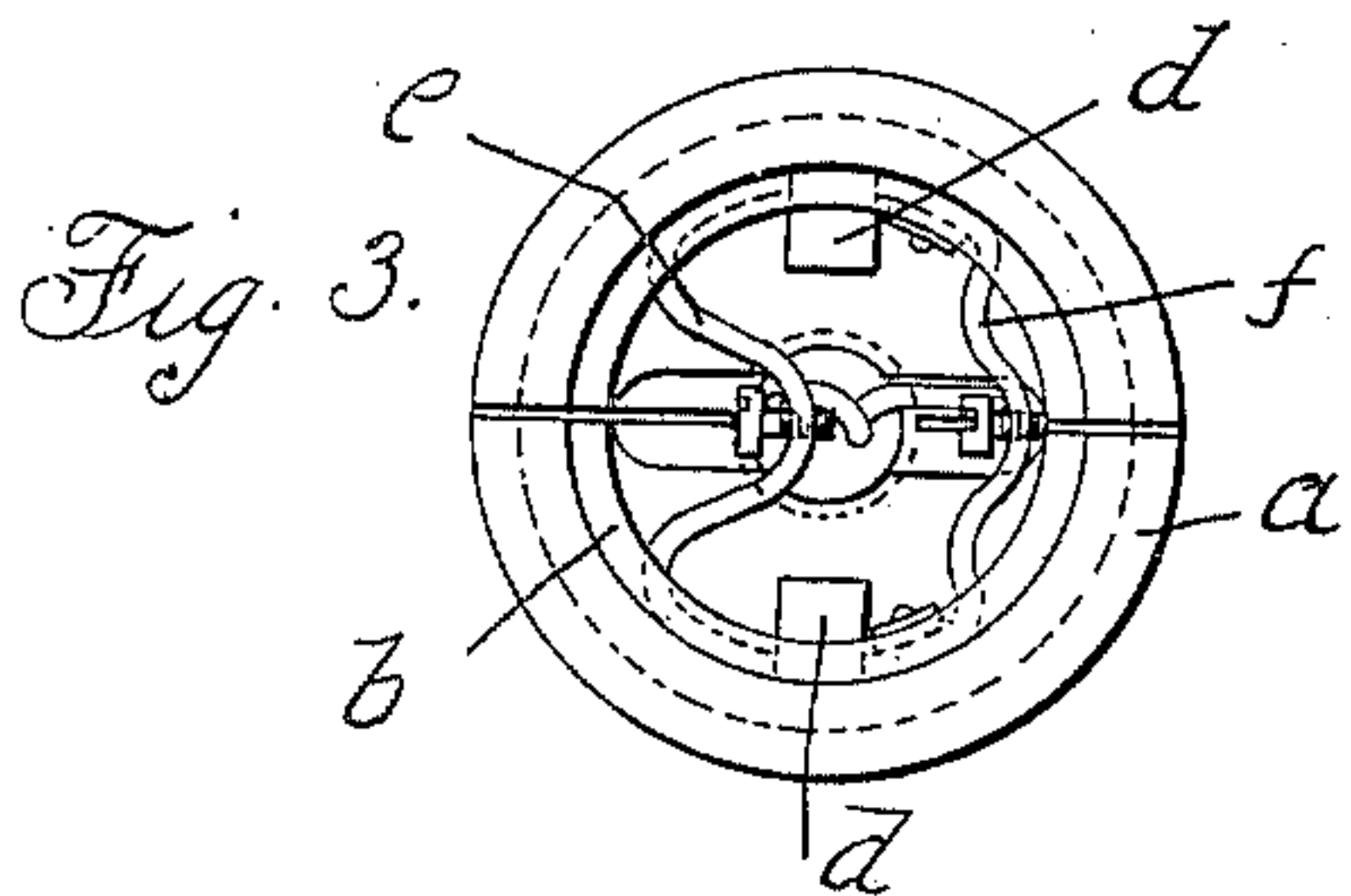
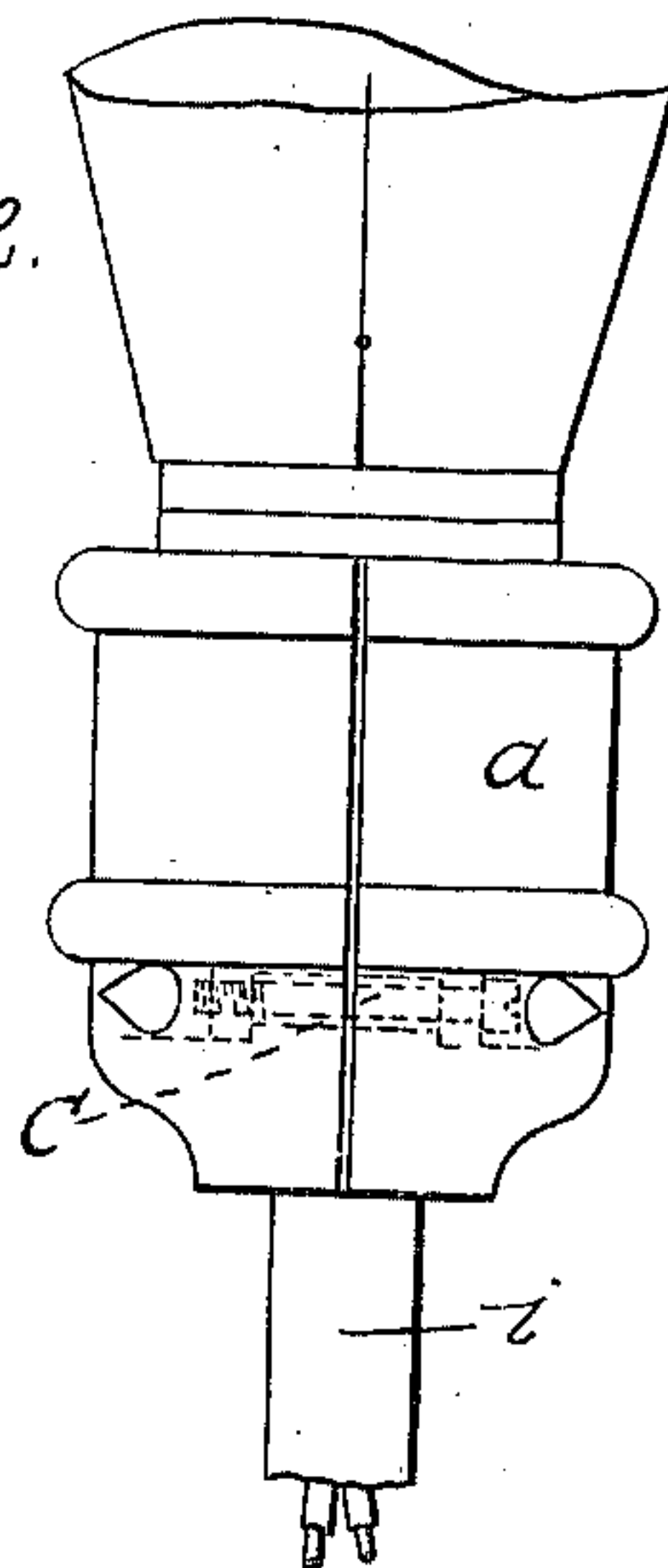
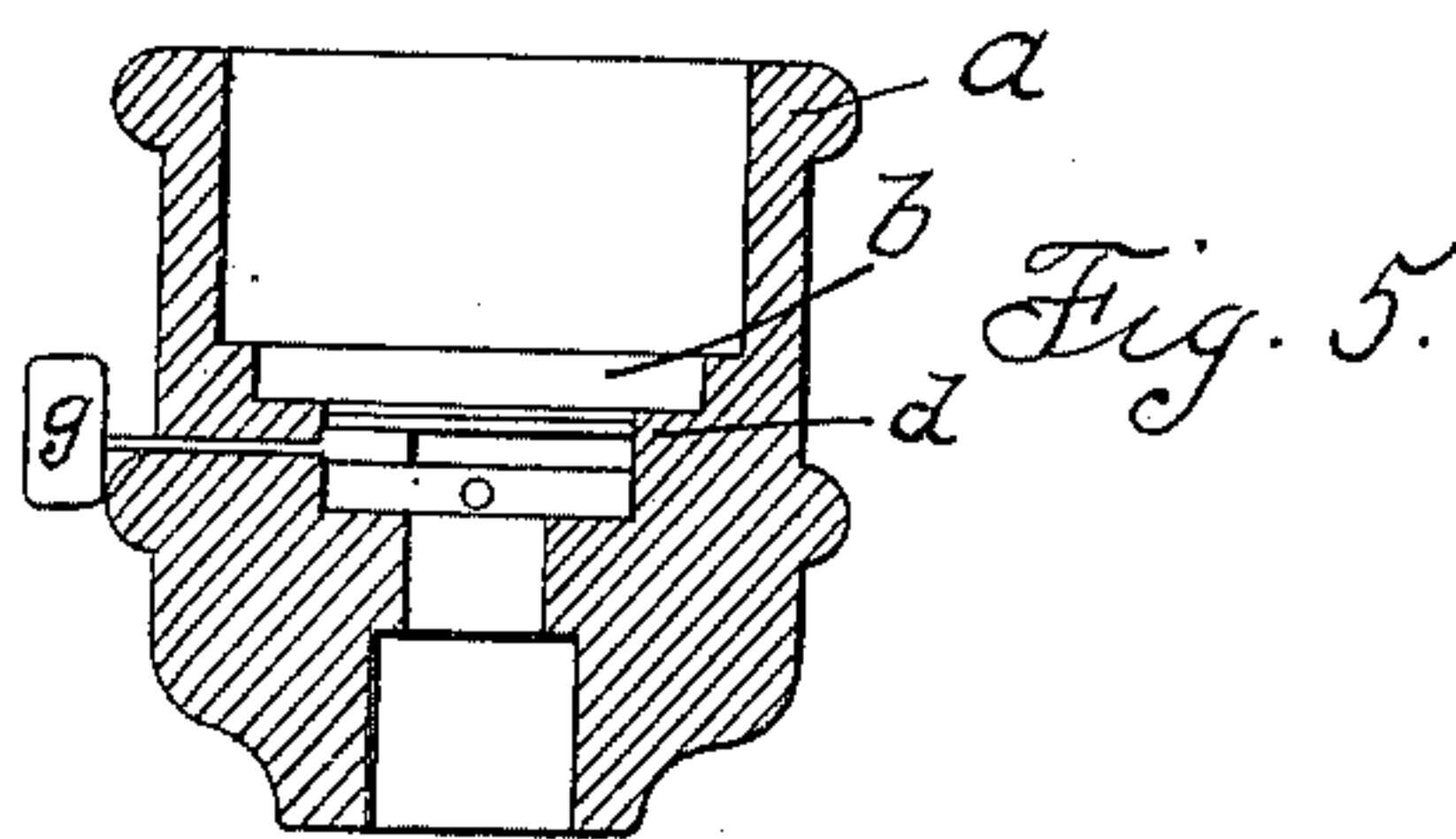
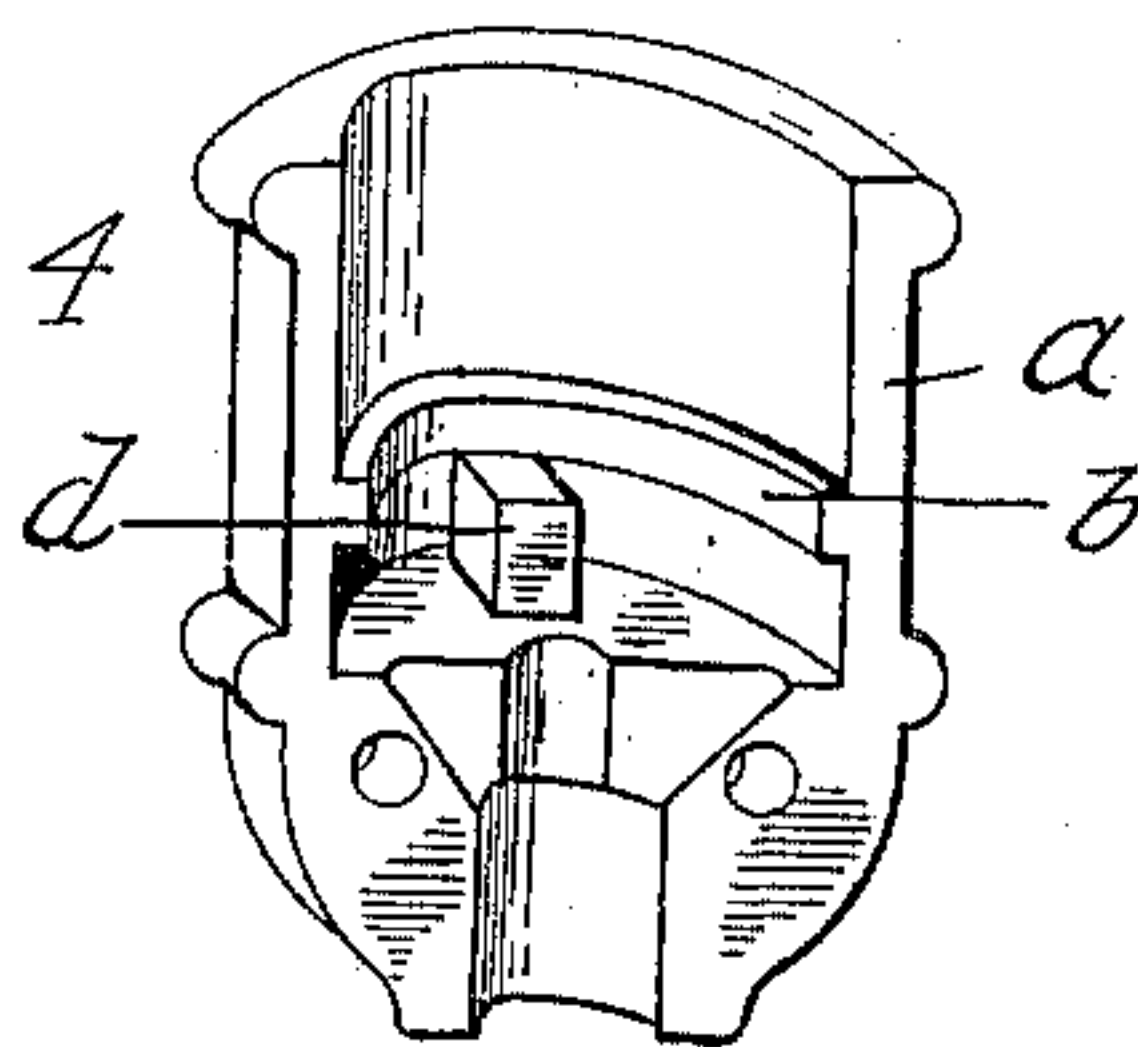


Fig. 4.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

ERNST WILHELM GUSTAV CARL HOFFMANN, OF CHARLOTTENBURG, GERMANY, ASSIGNOR TO THE SIEMENS & HALSKE ELECTRIC COMPANY OF AMERICA, OF CHICAGO, ILLINOIS.

## TERMINAL SOCKET.

SPECIFICATION forming part of Letters Patent No. 667,980, dated February 12, 1901.

Application filed October 11, 1899. Serial No. 733,305. (No model.)

*To all whom it may concern:*

Be it known that I, ERNST WILHELM GUSTAV CARL HOFFMANN, a subject of the Emperor of Germany, residing at Charlottenburg, Germany, have invented a certain new and useful Improvement in Terminal Sockets, (Case No. 252,) of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to terminal sockets, and more particularly to that class of terminal sockets employed in incandescent electric lighting, although the particular socket of my invention is not to be limited to any of them.

As is well known to those familiar with such sockets as are employed in incandescent electric lighting a large number of screws and smaller parts are employed which are readily put out of adjustment, frequently causing short-circuiting of the conducting-wires and the consequent rupture of the supply-circuit. Moreover, the parts frequently become disunited and, although in many instances not sufficiently so to destroy the required electrical continuity of the supply-circuit, become very unsightly.

It is the object of my invention to construct a socket wherein the number of parts will be few and in which the screws employed for securing the metallic parts in place will be greatly reduced in number.

My invention, moreover, comprises an improved socket that may readily be clamped in place about a pipe or other suitable support which does not have to be threaded for the purpose.

In the preferred embodiment of the invention I preferably longitudinally split the socket, so that the contact parts can readily be inserted, and then clamp the split sections together by means of screws. In this manner the threaded shell may be firmly grasped between the sections of the socket without the employment of screws passing therethrough.

I will explain my invention more particularly by reference to the accompanying draw-

ings, illustrating the preferred embodiment thereof, in which—

Figure 1 is a longitudinal sectional view of a socket constructed in accordance with my invention, an incandescent lamp being shown in elevation with its plug portion inserted within the socket. Fig. 2 is an elevation of a complete socket with the incandescent lamp in place. Fig. 3 is a top view of a complete socket. Fig. 4 is a perspective view of one of the sections of the lamp-socket with contact parts removed therefrom. Fig. 5 shows the relative disposition of the contact parts and the switch for controlling the continuity of the lamp-circuit.

Like parts are indicated by similar letters of reference throughout the different figures.

The socket proper, *a*, is preferably entirely formed of some insulating material, as porcelain, the socket being preferably split lengthwise into equal parts to enable the metallic parts of the socket to be readily inserted. While I prefer to split the socket into two equal parts, I do not wish to be limited to the relative sizes of the parts nor to the number of parts into which the socket is split.

I provide an annular rib *b*, extending circumferentially about the interior of the socket, which serves to separate certain contact parts, as will be more fully set forth. Where threaded terminal contact portions are employed, I preferably dispose the same between the annular rib *b* and the mouth of the socket, the threaded terminal being of a slightly-larger diameter than the interior of the socket. To secure the threaded terminal portion in place, clamping-screws *c c* are passed through the sections of the socket upon opposite sides thereof, which serve to draw the portions of the socket together to clamp the threaded terminal in position. The space between the annular rib *b* and the base of the socket is preferably divided by means of radially-projecting lugs *d*, which extend toward the center of the socket. These lugs serve to secure the terminal portions *e f* in position and, in conjunction with the annular rib *b* and the base of the socket, to maintain the same out of contact. The



conducting-wires are connected to the terminals *e f*, and the switch *g* controls the circuit, including the terminals and the translating device *h*, which in this instance is in the form of an incandescent lamp. The switch *g* is rotatable and has a projecting portion, (shown in Fig. 5,) which, when the switch is rotated at right angles to the position in which it is shown in said Fig. 5, strikes against the bottom of the lamp, and thus connects the same with the terminal *e*. The binding-screws *c*, that unite the sections of the socket, are preferably disposed transversely of the socket near the base. The base of the socket is suitably recessed and is provided with an axial bore through which the conducting-wires may be led.

It is apparent that the number of screws employed in the socket of my invention is reduced to a minimum and that the structure is not liable to become disunited. The bore in the base portion of the socket is made smooth and the socket may readily be clamped in position upon the end of a pipe *i* or other suitable support, which does not for the purpose have to be threaded, the clamping action of the screws *c c* being sufficient to secure the socket in place.

While I have shown and particularly described the preferred embodiment of my invention, I do not wish to be limited to the precise construction shown, as modifications may readily be made without departing from the spirit of my invention; but,

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a lamp-socket, the combination with the inclosing socket member and the inclosed terminal or contact member, one of said members being capable of variation or adjustment in size so as to permit it to bind against the other member, and means for varying the size of such adjustable member, substantially as described.

2. In a lamp-socket, the combination of the inclosing socket member having a contractible bore, of a terminal or contact capable of arrangement within said socket member, and means for contracting the bore of the socket so as to cause it to bind against the inclosed terminal or contact member, substantially as described.

3. The combination with a socket divided longitudinally into sections, of a terminal portion disposed within the bore of the socket, and clamping means for uniting sections of the socket and securing the said terminal portion in position between the sections of the socket, substantially as described.

4. The combination with a terminal socket divided longitudinally into sections, of a threaded terminal portion lining the bore of the socket, and clamping means for uniting the sections of the socket and securing the terminal portion in position within the socket, substantially as described.

5. The combination with a socket divided longitudinally into sections provided with an annular recess, of conducting portions located in said recess, and means for preventing the conducting portions from coming in contact, substantially as described.

6. A socket for the reception of electrical contact parts comprising a cylindrical receptive body divided longitudinally into sections and provided with an annular rib *b*, a base portion, and inwardly-projecting lugs *d* between the annular rib *b* and the base of the socket, substantially as described.

7. A socket for the reception of electrical contact parts, comprising the socket portion for receiving the contact parts, the said socket portion being longitudinally split, and clamping means for uniting the separated portions of the socket, substantially as described.

8. The combination with a longitudinally-split socket provided with a bore, of a support *i* for the socket adapted for insertion within the bore, and clamping means for uniting the separated portions of the socket and securing the contact element in place, substantially as described.

9. The combination with a longitudinally-split socket provided with a bore, of a support *i* for the socket adapted for insertion within the bore, and clamping means for uniting the separated portions of the socket and thereby securing the same to the support, substantially as described.

In witness whereof I hereunto subscribe my name this 19th day of September, A. D. 1899.

ERNST WILHELM GUSTAV CARL HOFFMANN.

Witnesses:

WOLDEMAR HAUPT,  
HENRY HASPER.