

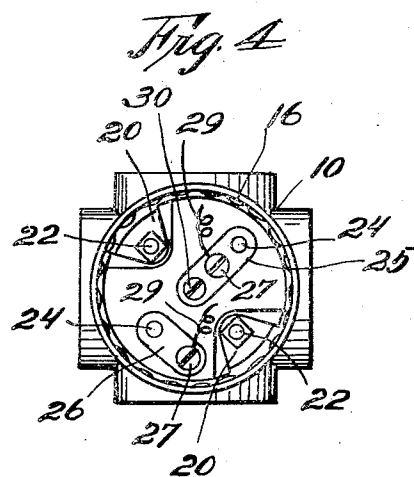
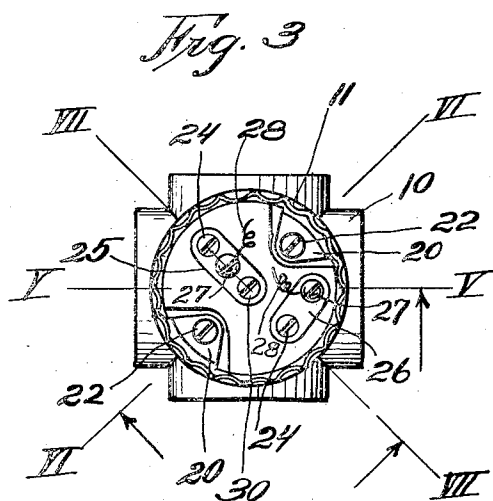
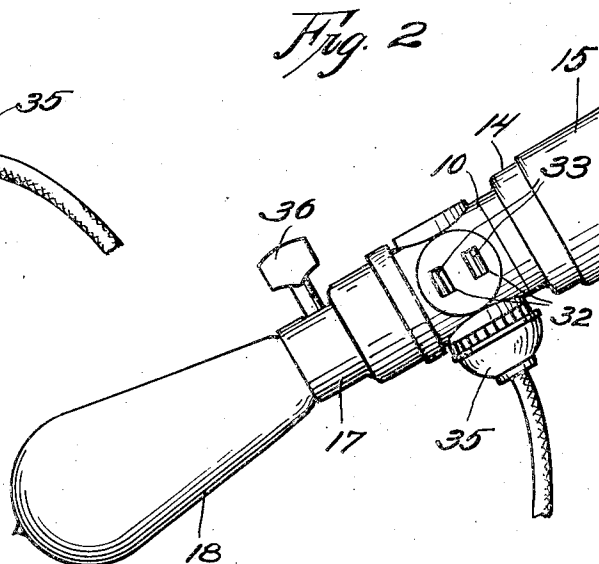
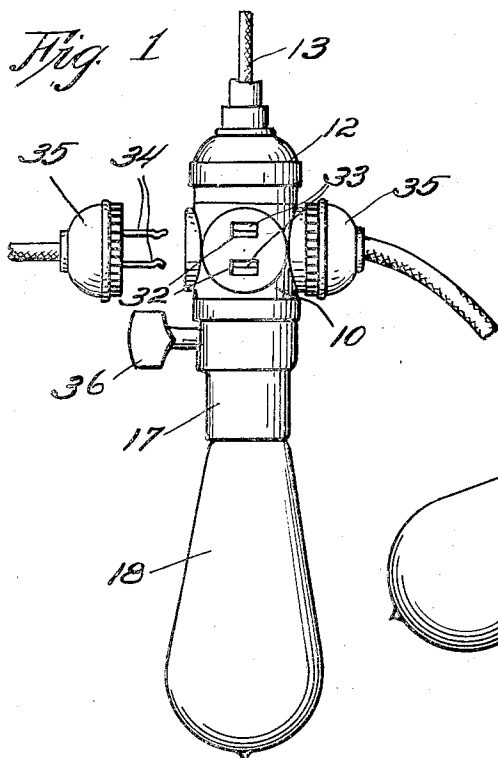
July 14, 1925.

1,546,148

G. F. SMALLWOOD
MULTIPLE OUTLET SOCKET

Filed Dec. 26, 1922

2 Sheets-Sheet 1



Witness:

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MULTIPLE OUTLET SOCKET

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2 Sheets-Sheet 2

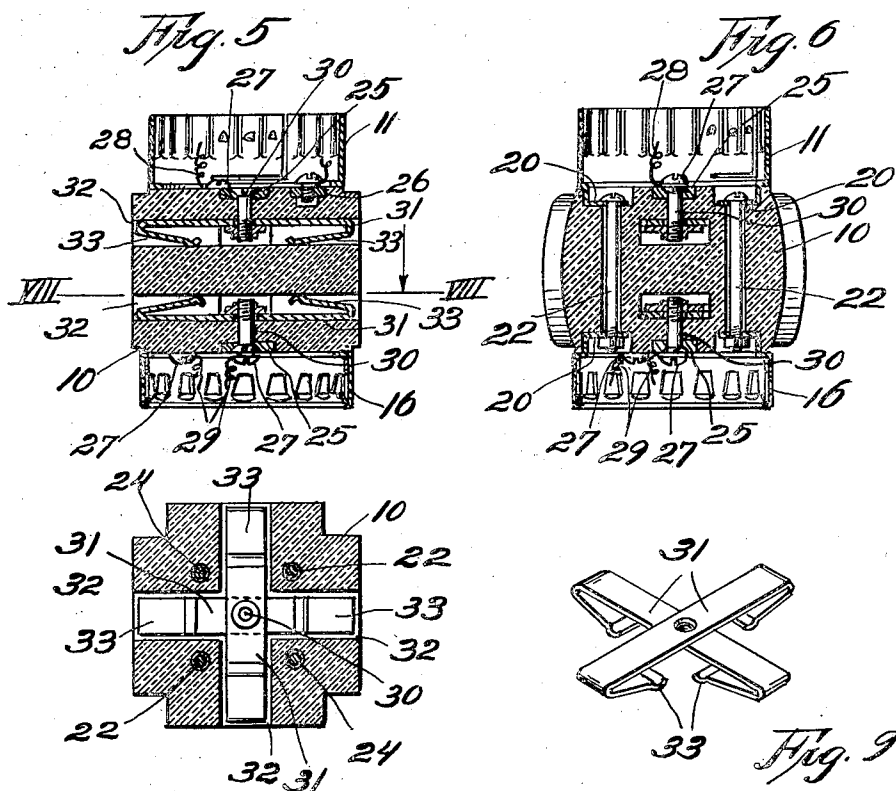


Fig. 8

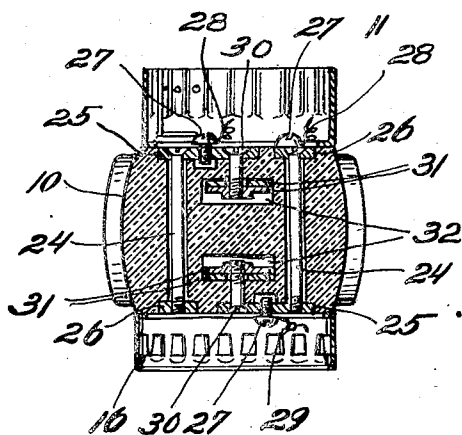


Fig. 7

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UNITED STATES PATENT OFFICE.

GROVER F. SMALLWOOD, OF KANSAS CITY, KANSAS.

MULTIPLE-OUTLET SOCKET.

Application filed December 26, 1922. Serial No. 308,955.

To all whom it may concern:

Be it known that I, GROVER F. SMALLWOOD, a citizen of the United States, and resident of Kansas City, county of Wyandotte, State of Kansas, have invented a certain new and useful Improvement in Multiple-Outlet Sockets, of which the following is a complete specification.

The present invention relates to electrical connections, and particularly to socket fittings providing terminal connections between a source of current and electrical devices to be energized therefrom, the primary object of the invention being to devise an improved socket connection adapted to provide multiple outlet terminals so arranged as to afford independent circuit connections for tapping the current and thereby feeding one or more electrical appliances designed to be actuated from the same source of power.

To this end I have devised a socket structure having the usual terminals for connection with the main or line wires and also with a lamp or other current translating device, and intermediate such terminals are arranged a plurality of sets of outlet terminals all connected in parallel with the circuit conductors through the socket, so that a corresponding number of current-consuming devices may be conveniently attached to such outlet terminals for independently tapping the current without interference between the branch circuits thus established.

With this general object in view, the invention will now be described by reference to the accompanying drawings illustrating one form of construction which I have devised for embodying the proposed improvements, after which those features deemed to be novel will be particularly set forth and claimed.

In the drawings—

Figures 1 and 2 are elevations showing a socket device constructed in accordance with the present invention, the former illustrating its use with an electric drop cord, and the latter showing it attached to a wall bracket;

Figure 3 is a plan view of the socket member;

Figure 4 is an inverted plan view of the same;

Figures 5, 6 and 7 are sections taken on the lines V—V, VI—VI and VII—VII, respectively, of Figure 3;

Figure 8 is a section on the line VIII—VIII of Figure 5; and

Figure 9 is a perspective view of one set of terminal elements used for forming the lateral outlet terminals.

Referring now to the drawings in detail, these illustrate the improved device as comprising a body or socket member 10 constructed of suitable insulating material such as porcelain, at one end of which is provided an annular socket fitting 11 for making detachable connection in the usual manner with the cap fitting 12 of a drop cord 13, as illustrated in Figure 1, or with the collar 14 of a wall bracket 15, as illustrated in Figure 2. At its other end, the socket member 10 is provided with a similar annular socket fitting 16 for making detachable connection with the corresponding fitting of a current-consuming device, such as the socket 17 of an electric lamp 18. Both of the fittings 11 and 16 are formed with inwardly projecting attaching ears or lugs 20 received within suitable recesses at the opposite ends of the socket member 10 and connected by tie bolts 22 extending through said member (see Figure 6).

Extending through the socket member 10 parallel to the bolts 22 are two other bolts 24 forming conducting elements or circuit connections between the opposite ends of said member, as illustrated in Figure 7. One end of each bolt 24 connects with a plate 25 arranged radially of one end face of the member 10, while the other end of each bolt 24 connects with a plate 26 at the opposite end of said member 10, the plate 25 corresponding to one bolt 24 being at the same end of the member 10 as the plate 26 corresponding to the other bolt 24, and said plates 25 and 26 being approximately at right angles to each other (see Figures 3 and 4). Both of the plates 25 and 26 are provided with binding screws 27 for attachment of the respective wire terminals, Figure 3 showing the terminals 28 within the socket fitting 11 for connection with the source of current, and Figure 4 showing the terminals 29 for completing the circuit through the electric device (as the lamp 18) to be connected with the socket fitting 16.

To the inner end of each plate 25 is attached a screw 30 connecting each plate 25 with a pair of terminal elements 31 arranged in the form of a cross in similarly

shaped passages 32 provided in said socket member 10, as clearly shown in the sectional views of the drawings. The two sets of passages 32 and terminal elements 31 are arranged parallel and spaced apart a suitable distance to provide a plurality of pairs of outlets or jack openings at the side faces of the member 10, each of the elements 31 terminating in spring contact fingers 33 at the mouths of the passages 32, and hence accessible for engagement with the jacks or terminals 34 of the plug 35 corresponding to the electric device to be connected in the circuit.

By means of this construction it is apparent that not only the wire terminals 29, but also the terminals 33 of each pair of outlet terminals at any one of the lateral faces of the socket member 10 are connected in parallel with the feed circuit connections 28 which supply the current. It is therefore obvious that an operative feed connection may be made between an electrical appliance and any one of the pairs of outlet terminals 33, or a set of such appliances may be connected with all of said terminals at one time, without any interference with each other or any interruption of the current through the lamp or other device connected with the terminals 29, inasmuch as an independent branch circuit is provided for each of the devices fed by the main or supply current, by means of the described multiple outlet arrangement. An example of one of the advantages

of this structure is the fact that where a lamp is used, as illustrated, an electric iron or other household appliance may be attached to one of the sets of terminals 33 without affecting the circuit through the lamp, and the latter may be turned on or off as desired, by means of its switch 36. The construction is extremely simple, and the arrangement of the circuit connections is such that the device may be very economically manufactured.

What I claim is:

A multiple outlet socket structure comprising a socket member having a socket at each of its ends and a pair of terminal connections in each of said sockets, conductor elements providing separate circuit paths through said member between said terminals, said member being provided with parallel cross-shaped transverse passages open to the lateral faces of said member, a pair of crossed terminal elements in each of said passages and retained therein by bolts connecting said terminal elements in parallel with said conductor elements, said terminal elements providing a series of lateral terminals accessible at the openings to said passages, and a pair of diagonally arranged tie bolts extending through said socket member and securing the oppositely arranged sockets thereto.

In witness whereof I hereunto affix my signature.

GROVER F. SMALLWOOD.