May 22, 1934. F. N. BAYLISS 1,959,895

ELECTRICAL CONNECTION PLUG

Filed Nov. 6, 1930

Fig. 1

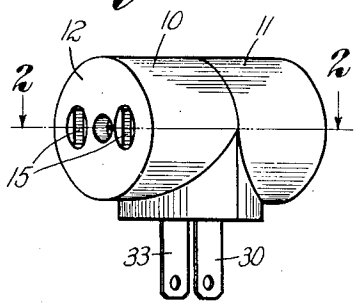


Fig. 2

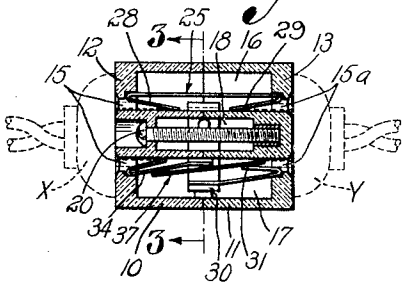


Fig. 3

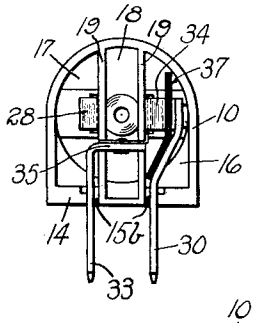


Fig. 4

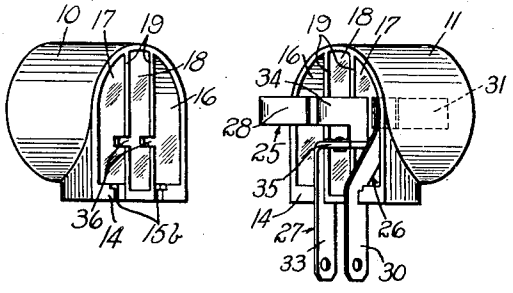
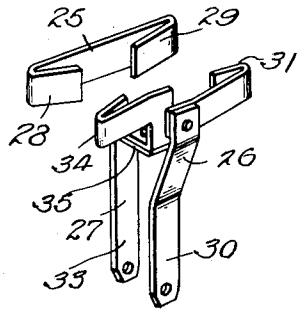


Fig. 5



Inventor
Frederick N. Bayliss

By H. Clay Lindsey.

Attorney

Patented May 22, 1934 1,959,895

UNITED STATES PATENT OFFICE

1,959,895

ELECTRICAL CONNECTION PLUG

Frederick N. Bayliss, New Britain, Conn., assignor to Landers, Frary & Clark, New Britain, Conn., a corporation of Connecticut

Application November 6, 1930, Serial No. 493,800

2 Claims. (Cl. 173—334)

This invention relates to a connection plug of the type adapted to be detachably connected to an outlet device, such as a wall receptacle, and to detachably receive attachment plugs of current using devices.

The aim of the present invention is to provide an improved and simplified construction and arrangement by means of which a plurality of separate current using devices may be readily connected in series.

As an instance of a use to which the connection plug of the present invention may be applied, reference may be had to the connecting up of an electric cooking utensil and a time-operated switch in such manner that the latter controls the former. With my improved connection plug, this may be very quickly and easily accomplished, it being merely necessary to slip the connection plug into position with respect to an outlet device and slip into the connection plug the attachment plugs with which such utensils and controlling devices are provided.

Other objects will be in part obvious, and in part pointed out more in detail hereinafter.

The invention accordingly consists in the features of construction, combination of elements and arrangement of parts which will be exemplified in the construction hereinafter set forth and the scope of the application of which will be indicated in the appended claims.

In the accompanying drawing, wherein is shown one embodiment which the present invention may take,

Fig. 1 is a perspective view of the improved plug;

Fig. 2 is a longitudinal sectional view taken substantially on line 2—2 of Fig. 1 and showing the attachment plugs of the current using devices in broken lines;

Fig. 3 is a transverse sectional view taken substantially on line 3—3 of Fig. 2;

Fig. 4 is a perspective view of the two parts of the body portion and certain of the connectors; and

Fig. 5 is a detail view of the conductors and contact members.

Referring to the drawing in detail, the body portion of the plug may be of any suitable construction or shape, but, by way of illustration, it is here shown as being formed in two complementary parts 10 and 11. These parts may be made of any suitable insulating material, such as "Bakelite". The body portion is somewhat of T-shape in side elevation and has end walls 12 and 13 and a bottom wall or face 14. The walls or faces 12, 13, and 14 are provided respectively with pairs of slots or openings 15, 15*a*, and 15*b*. The slots 15*b* are formed by registering notches in the meeting faces of the bottom wall. The plug may be divided by parallel partitions 19 into two side chambers 16 and 17 and a central chamber 18. Extending longitudinally through the central chamber is a screw 20 for holding the parts of the plug together, as will be seen most clearly from Fig. 2.

Carried by the body portion are three conductors 25, 26, and 27, each having two contacts. These conductors are so arranged and associated that the contacts of each conductor are paired respectively with contacts of the other two. More specifically, the conductor 25 is located within the chamber 16 and comprises a strip of metal having its ends turned backwardly so as to provide spring contacts 28 and 29. These contacts 28 and 29 are positioned in registry with the aligned openings 15 and 15*a* at the respective ends of the chamber 16. The conductor 26 has a contact in the form of a blade 30 projecting downwardly through a slot 15*b* in the lower wall 14 of the plug. The conductor 26 also has a spring contact 31 secured to the upper end of the blade and extending generally at right angles thereto. This contact 31 is adjacent to, and in registry with, the other opening 15*a* in the right-hand end of the plug body. The conductor 27 includes a blade 33 and a spring contact 34. The blade 33 extends through the opening 15*b* in the bottom wall of the chamber 16, and its upper end is bent laterally so that it extends through the central chamber and into the side chamber 17. The contact 34 is connected to the blade by rivets, or other means, and it is disposed generally at right angles to the blade. This contact is similar to the contact 31, but extends in the direction opposite thereto and is in registry with an opening 15 in the left-hand wall 12 of the plug. The meeting edges of the partitions 19 at the center of the plug are notched, as at 36, so as to accommodate the horizontal or turned-over portion 35 of the blade 33. Those portions of the conductors 26 and 27 which are within the chamber 17 are insulated from one another by a plate or sheet 37 of insulating material, such as fiber, or the like.

From the foregoing description, taken in connection with the accompanying drawing, it will be observed that the contacts 28 and 34 of the conductors 25 and 27 are paired so as to be electrically connected to the terminals or blades of an attachment plug, such a plug being diagrammatically shown in Fig. 2 and designated by the letter

X. This plug may be located on the end of a cord which leads to a heating unit of a cooking utensil. Similarly, the contacts 29 and 31 are paired at the other end of the plug so as to receive the terminals or blades of an attachment plug Y which may be connected to the cord which leads to a time-operated switch device or other controlling mechanism. The blades or prongs 30 and 33 are paired so that these blades may be inserted into a wall receptacle or into a socket plug with which electric ranges are frequently provided. The cooking utensil and the controlling device are now connected in series.

It will be observed that my improved plug is of a very simple nature in that it comprises but a relatively few number of parts which may be cheaply made and easily assembled.

As many changes could be made in the above construction and many apparently widely different embodiments of this invention could be made without departing from the scope thereof, it is intended that all matter contained in the above description or shown in the accompanying drawing shall be interpreted as illustrative and not in a limiting sense.

It is also to be understood that the language used in the following claims is intended to cover all of the generic and specific features of the invention herein described and all statements of the scope of the invention which, as a matter of language, might be said to fall therebetween.

What is claimed is:

1. A connection plug comprising a two part body of insulating material having two side chambers, each chamber having three openings, the openings of one chamber being respectively paired with the openings of the other chamber, a conductor in one of said chambers having spring contacts at its opposite ends respectively alined with two openings of one chamber, a second conductor having a blade passing through the other opening of said first chamber, said second conductor having a contact in the second chamber alined with one of the openings thereof, and a third conductor having a blade paired with said first blade and extending through an opening in the second chamber, said third conductor also having a contact alined with the third opening of said second chamber.

2. A connection plug comprising a two-part body of insulating material having two chambers, each chamber having a pair of alined openings and a third opening, the openings of one chamber being respectively paired with the openings of the other chamber, a conductor in one of said chambers having contacts respectively alined with the alined openings in said first chamber, a second conductor having a blade passing through the third opening in the first chamber and having a contact alined with one of the alined openings in the second chamber, and a third conductor having a blade passing through the third opening in the second chamber and having a contact alined with the other of the alined openings in the second chamber.

FREDERICK N. BAYLISS.