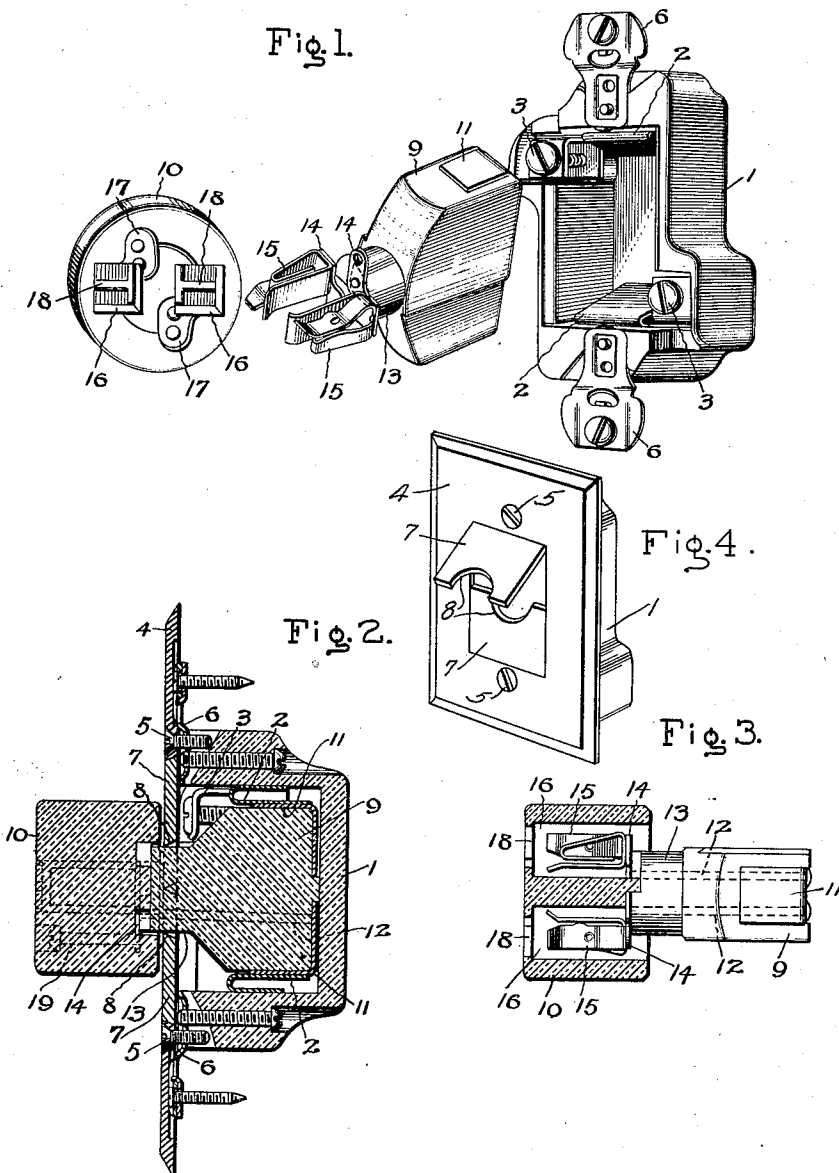


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H. R. SARGENT
ATTACHMENT PLUG ADAPTER

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Inventor:
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by His attorney.

UNITED STATES PATENT OFFICE.

HOWARD R. SARGENT, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO GENERAL ELECTRIC COMPANY, A CORPORATION OF NEW YORK.

ATTACHMENT-PLUG ADAPTER.

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The present invention relates to the distribution of electric current in houses, and more especially to connecting or attachment devices whereby a branch circuit, as that of an electric flat iron, may be connected to and disconnected from the main house circuit.

These connecting or attachment devices ordinarily comprise a stationary member permanently secured to the wall of a room or set in a recess therein and provided with terminal contacts connected to the house circuit wires, and a detachable or cap member carried by the ends of the branch circuit wires and having contact fingers or blades adapted to frictionally and electrically engage the terminal contacts of the stationary member.

On account of the difference in types of stationary or receptacle members installed, much inconvenience has been experienced by purchasers of portable electrical devices for the reason that the cap member at the ends of its branch wires were usually found not to fit the particular receptacles installed in the purchaser's residence, and before the purchased device could be enjoyed it was necessary to get an electrician to replace either the receptacle member or the cap member by one of the matching type.

At the present time practically all portable domestic electrical devices are sold equipped with detachable cap members having either parallel flat blades or tandem flat blades, and the standard receptacle members are constructed so as to properly cooperate with both types of cap members. It is well known that the majority of houses erected, prior to the time the connecting devices were standardized, have installed therein plug receptacle members of the Chapman type consisting of an insulating wall box adapted to receive a rather massive plug member therein and a flush plate with two trap doors adapted to shut in the plug except a contracted neck portion thereof through which the flexible wires are led.

The object of my invention is to provide an intermediate part or plug adapter whereby it will be practicable to connect a standard connector cap with a non-standard receptacle.

One embodiment of the invention is shown in the accompanying drawing in which Fig. 1 is an exploded view of the intermediate

part and a wall receptacle with which it is adapted to cooperate; Fig. 2 is a vertical section of the receptacle flush plate and intermediate part assembled; Fig. 3 is a part elevation and part section of the intermediate part; and Fig. 4 is a perspective view showing an ordinary Chapman face plate with one of the trap doors partially open.

The wall box 1 is usually made of porcelain with a relatively large oblong chamber, at the opposite ends of which are mounted reversely bent contact springs 2 and binding posts 3, and over the front of the box a flush plate 4 is secured by screws 5 engaging ears 6 on the box. The flush plate has a rectangular opening at its center corresponding to the size of the chamber, and hinged to opposite end edges of the opening are trap doors 7 having arcuate notches 8 in their free edges whereby they are enabled to close about the neck of the old form of plug when in operative position within the box.

The base of the adapter is composed of two moulded insulation portions 9 and 10. The plug portion 9 is shaped externally substantially like the ordinary Chapman plug and has on its opposite edges contact plates 11 to engage with contact springs 2 and these plates are connected by screws 12, extending up through the neck 13, to L-shaped brackets 14 at the end thereof. Each of the brackets 14 has rigidly connected thereto a double contact clip 15 of phosphor bronze and consisting of three arms bent upwardly so that standard detachable caps with either parallel or tandem fingers may enter between them and make good contact therewith. The insulation portion 10 is in the form of a cylindrical block with two longitudinal cavities 16 for the reception of the contact clips 15 with side recesses 17 leading therefrom and adapted for the reception of the outer ends of the brackets 14, and extending from the ends of the cavities to the outer end of the block are two T-shaped passages 18 for the contact fingers of the separable cap. The portion 10 is rigidly fastened to the brackets 14 by means of longitudinal screws 19.

During the insertion of the adapter in the receptacle, the trap doors 7 will be partially closed with their outer ends positioned inside the inner end of the cylindrical block. 10 and upon forcing the adapter home they will automatically close about the neck 13 as

indicated in Fig. 2 and operate as a support for the adapter against transverse movement as well as affording a neat and finished appearance to the assembly.

5 While I have shown and described the best embodiment of the invention, I do not desire to be restricted thereto.

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

10 1. An attachment plug adapter comprising an inner base portion of rectangular shape and a contracted neck at one end thereof, an outer base portion having recesses and pas-
 15 sages therein, brackets mounted upon the outer end of said neck, contact clips carried by said brackets, contact plates mounted on opposite edges of said inner base portion and connected to said brackets, and means
 20 connecting said outer base portion therewith.

2. An attachment plug adapter for wall receptacles, comprising an insulating base

having enlarged inner and outer portions rigidly connected through a contracted central portion, contact plates mounted upon
 25 said inner base portion, and contact clips disposed in said outer base portion and electrically connected to said contact plates on the inner base portion.

3. An attachment plug adapter for wall
 30 receptacles, comprising an insulating base having two enlarged end portions rigidly connected together and one of which has a reduced neck adjacent the other base portion, said inner base portion being rectan-
 35 gular and provided with contact plates on the opposite edges thereof and the outer base portion being cylindrical and having contact clips mounted therein and respectively electrically connected to said contact
 40 plates on the inner base portion.

In witness whereof, I have hereunto set my hand this 23rd day of February, 1923.

HOWARD R. SARGENT.