

May 15, 1934.

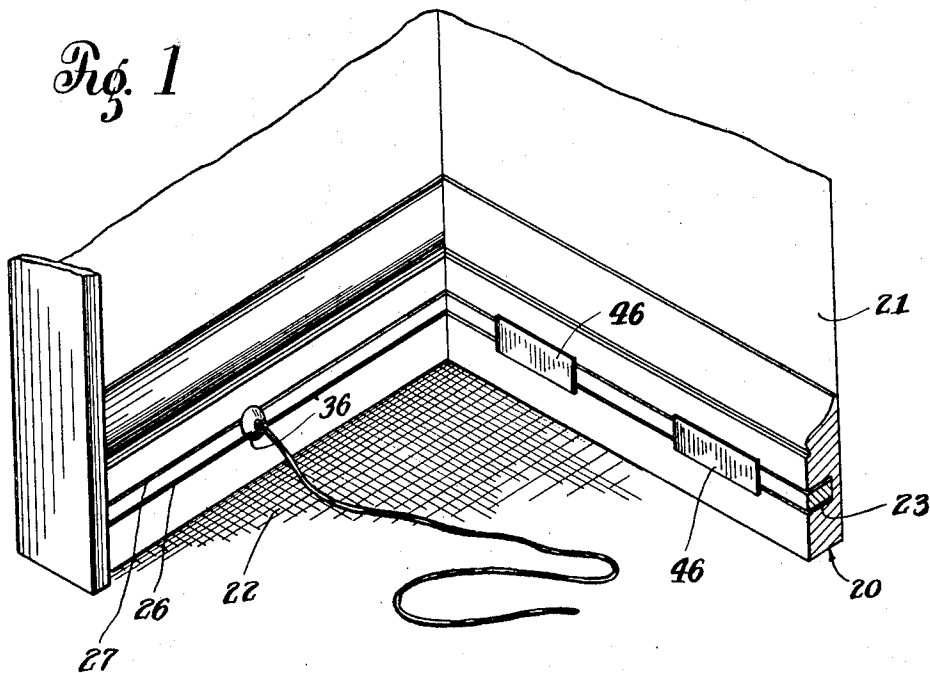
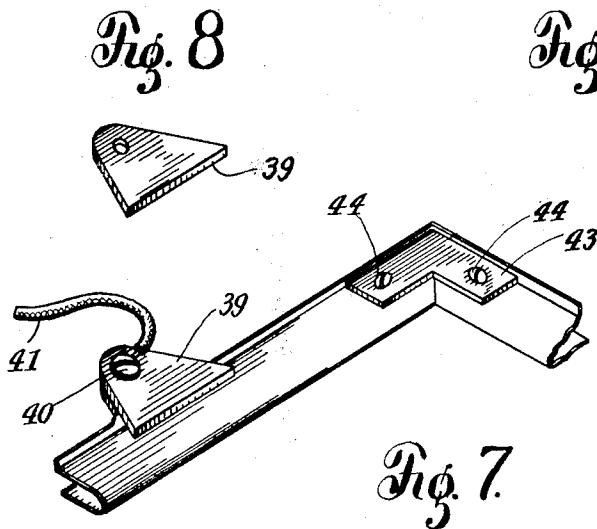
H. FRIEND

1,958,993

CONTINUOUS ELECTRIC OUTLET FOR BUILDINGS

Filed June 7, 1932

2 Sheets-Sheet 1



HERMAN FRIEND
INVENTOR.

BY *Julian J. Wittal*
ATTORNEY

May 15, 1934.

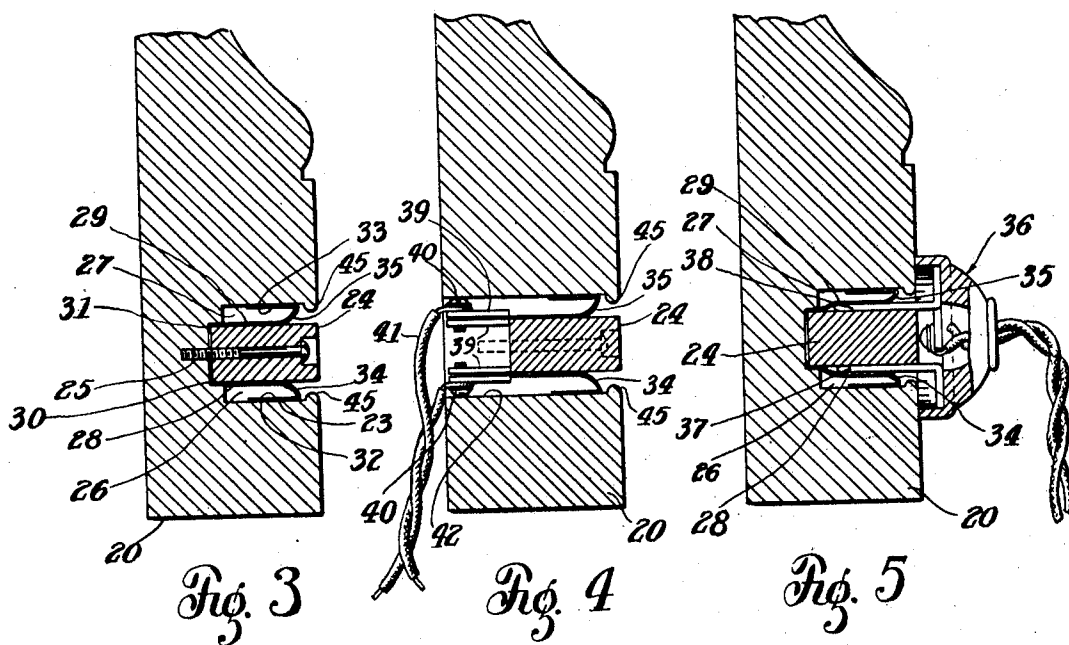
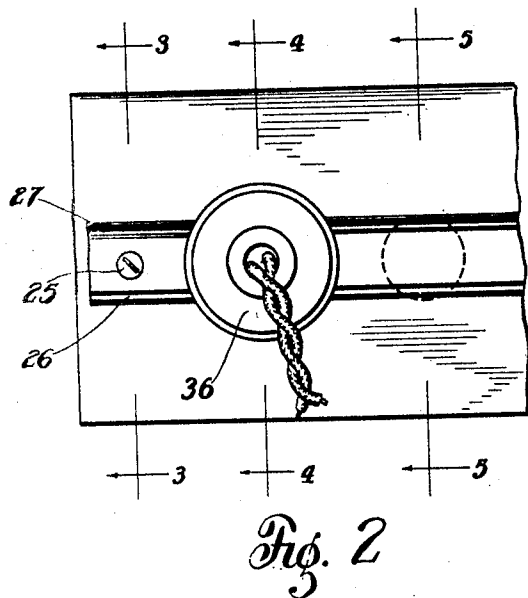
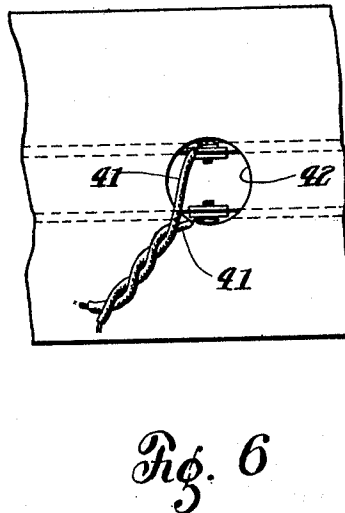
H. FRIEND

1,958,993

CONTINUOUS ELECTRIC OUTLET FOR BUILDINGS

Filed June 7, 1932

2 Sheets-Sheet 2



HERMAN FRIEND
INVENTOR.

BY *Julius Wittal*
ATTORNEY

UNITED STATES PATENT OFFICE

1,958,993

CONTINUOUS ELECTRIC OUTLET FOR BUILDINGS

Herman Friend, New York, N. Y., assignor of one-fourth to Maurice B. Jacobsohn and one-twentieth to Joseph H. San, both of New York, N. Y.

Application June 7, 1932, Serial No. 615,819

3 Claims. (Cl. 247—3)

This invention relates to outlets for electric currents in buildings and has for its main object to provide such outlets which will not be restricted to certain isolated rare and distant points in the interior of the building or of a room thereof but which will provide means for electric current outlets at frequent places or even the full length of any desired wall in the building.

Other objects of this invention will be apparent as the specification of the same proceeds and among others may be mentioned: to provide a device as characterized hereinbefore which will be simple in construction, inexpensive to manufacture and to install, efficient and safe in use and easily and attractively applicable on the walls of the building.

With the above and other objects in view, my invention mainly consists in providing two resilient electro conductive strips of material or bars along with and sunk into the wall of the building or a molding thereof chosen for said purpose, said bars or strip constituting the two poles of an electric circuit, and also providing two narrow slits in the material of the wall opposite and along said resilient strips so that the prongs of an ordinary stick plug may be pushed through said slits at any desired point thereof and brought in contact with the two respective bars. Preferably said strips of material and said slits are applied in an appropriate molding or ornament on the wall so that they may be easily applied and at the same time may be made less observable and more attractive in appearance.

In the drawings forming a part of this specification and accompanying the same;

Fig. 1 is a perspective view of a portion of the corner of a room in the building showing the application of my invention thereto;

Fig. 2 is a fragmentary plan of a part of the wall equipped with my device showing a stick plug attached thereto, while;

Figs. 3, 4, and 5 are sectional elevations of a molding in which my device is embedded, the sections being taken on the respective lines, 3—3, 4—4, and 5—5 of Fig. 2;

Fig. 6 is a rear view of a part of a molding showing the method by which the electric current is led into the two respective resilient bars.

Fig. 7 is a perspective view of a resilient bar showing the method by which the electric current may be connected thereto and also one method for connecting the resilient bars at the corners of a room, while

Figs. 8 and 9 are perspective views of two

forms of devices used for the purposes mentioned in connection with Fig. 7.

Referring now to the drawings more closely by characters of reference, the numeral 20 indicates a molding applied to the wall 21 of a building, the one shown in Fig. 1 being the bottom molding which runs around the foot of the wall at the floor 22. In the preferred embodiment of my invention, a portion is removed from the molding 20, all along its length leaving a longitudinal recess or slot 23 of rectangular cross section. Turning now to Fig. 3, a central longitudinal piece or bar 24 is employed within said recess or slot 23 being secured therein by any appropriate means as by the screws 25 going through its material and engaging the material of the molding 20. Two spaces 26 and 27 are left at the two sides of the central longitudinal rod 24 and two resilient sheet metal strips 28 and 29 are secured closely adhering to the two sides of the rod 24 in said spaces 26 and 27. Said strips 28 and 29 preferably are made of a highly electro conductive copper alloy, like brass, having resilient qualities and they are bent in the manner indicated in the drawings so that their lower ends 30 and 31 are turned inwardly and secured in their places by the central longitudinal rod 24 while their reversely bent outer branches 32 and 33 may press against the outer walls of the recess or slot 23, the main branches 28 and 29 and the outer branches 32 and 33 of said electro conductive strips being connected by rounded portions 34 and 35 thereof. This construction obviously provides efficient and extremely simple means for securing said resilient strips of material in the spaces 26 and 27, for increasing their resiliency and for making it safe and secure that the prongs of a stick plug inserted in my device will surely be guided to their places and will be assured of reliable electrical contacts.

The material of the molding 20 and of the central rod or piece 24 will, of course, be made of any suitable insulating material, preferably of bakelite or the like, so that when the resilient strips 28 and 29 are charged with the electricity, the same cannot be conducted from the molding except through contacts with said resilient strips.

In Figs. 2 and 5 an ordinary standard stick plug 36 is illustrated in the position of contact with my continuous electrical outlet. The two prongs 37 and 38 of the plug 36 will be inserted into the slots or spaces 26 or 27 and will be guided by the rounded surfaces 34 and 35 so that finally they will lay against the two sides of the central piece

24 and will be securely engaged by the spring strips 28 and 29 through the resilient action thereof. The strips 28 and 29 are constantly charged with the electricity, the two poles of an appropriate current being led into the respective strips 28 and 29 at any appropriate points thereof. One method of introducing the electrical current into my continuous spring contacts or outlets is illustrated in Figs. 7, 8, 4, and 5. Two triangular pieces 39 of an electro conductive metal are provided for each resilient strip at the point where the introduction of the current is desired, said pieces engaging the two sides of the strips in any suitable manner. The two pieces are securely screwed together by a screw 40, and the respective wire 41 coming from the source of the electric current may be secured to said screw 40. A circular hole 42 may be cut into the molding at the place where the electricity is desired to be introduced into my conductive bars and the wires 41 leading to the source of the electric current may be arranged in the wall back of the molding.

When the resilient strips are carried around the corner of a wall of a room, similar clamps 39 may be employed at the corners for the continuity of the conductor strips, an appropriate space or recess being provided in the wall back of the molding, or in the molding itself, or an angle piece 43 may be provided for such corners being secured to the two adjoining metal strips as by the screws 44.

To better secure the two continuous electrical conductors 28 and 29 against accidents or inadvertence, the openings of the spaces 26 and 27 may be restricted to the smallest widths possible for which purpose the outer edges of the spaces 26 and 27 may be provided with inwardly projecting beads 45 (Fig. 3). The conductor strips or bars as well as their connections of the source of current may be built and protected in the usual manner and according to the rules and prescriptions of the various localities for installing electrical conductors in the building. Slots 26 and 27 may be formed in such a manner as to be part of the ornaments or designs of the molding 20 and instead of being continuous slots along the full length of the molding they may be used only intermittently the spaces between such open portions of said slots being covered as at 46 (Fig. 1), or said slots and said conductor strips being provided at certain intervals and for certain desired lengths only in the walls or in their moldings, the open portions for such conductor strips being connected to one another in continuous lines within the wall or molding in an electro conductive manner. The open portion of said slots and the covered parts of the wall or molding therebetween may be employed as parts of the design of the wall or molding to make my device less conspicuous and more attractive in appearance.

The same remarks hold good for cases where I employ continuous slots all along the length of a wall or for the greater part thereof.

It is obvious from the herein specification and from the inspection of the drawings that I provide extremely simple and novel means whereby electric current may be easily, conveniently and by standard devices tapped at any part of the room of a building.

It will be understood that changes and variations may be made in the parts and combinations of my device and I hereby reserve all my rights to any and all such changes as are within the spirit of the invention and the scope of the appended claims.

What I claim as new, is:

1. In a continuous electric outlet for walls, having an elongated space surrounded by electro insulating material, provided in said wall, and a central axial bar of insulating material secured in said space, leaving two side spaces at the two sides thereof; a resilient electro conductive strip of material in each of said side spaces each strip being bent doubled over itself, to form a channel, the lower end of the inner branch, adjacent to said axial bar, being bent inwardly and being secured underneath said axial bar, said bar being a separate independent piece, the outer branch of said electro conductive channel leaning against the outer wall of the respective side space and the two branches being connected with a rounded portion, each outer edge of said axial bar and of the side wall of the respective space being brought into close proximity to one another so as to provide a narrow slit in parallelism with and opposite to said rounded portion of said resilient conductor, whereby continuous communication is established between the respective side space and the outside, and means to secure said axial bar to the bottom of said space and thereby secure said two resilient conductors.

2. In a continuous electrical outlet for walls, as set forth in claim 1, said branches being substantially plane strips of sheet material in parallelism with one another, and with the sides of their spaces, respectively, and said connection between said two branches of each conductor being of a large outward curvature from the inner branch to the outer one, forming a somewhat sharper folded edge with said outer branch.

3. In a continuous electrical outlet for walls, as set forth in claim 1, the inwardly turned end of each of said inner branches being extended at a portion thereof and straightened out substantially into the plane of said inner branch to form a plate; a plate extension on the termination of an electric conductor leading to a source of electricity, and means to removably secure said two plates together.

HERMAN FRIEND.