

March 2, 1937.

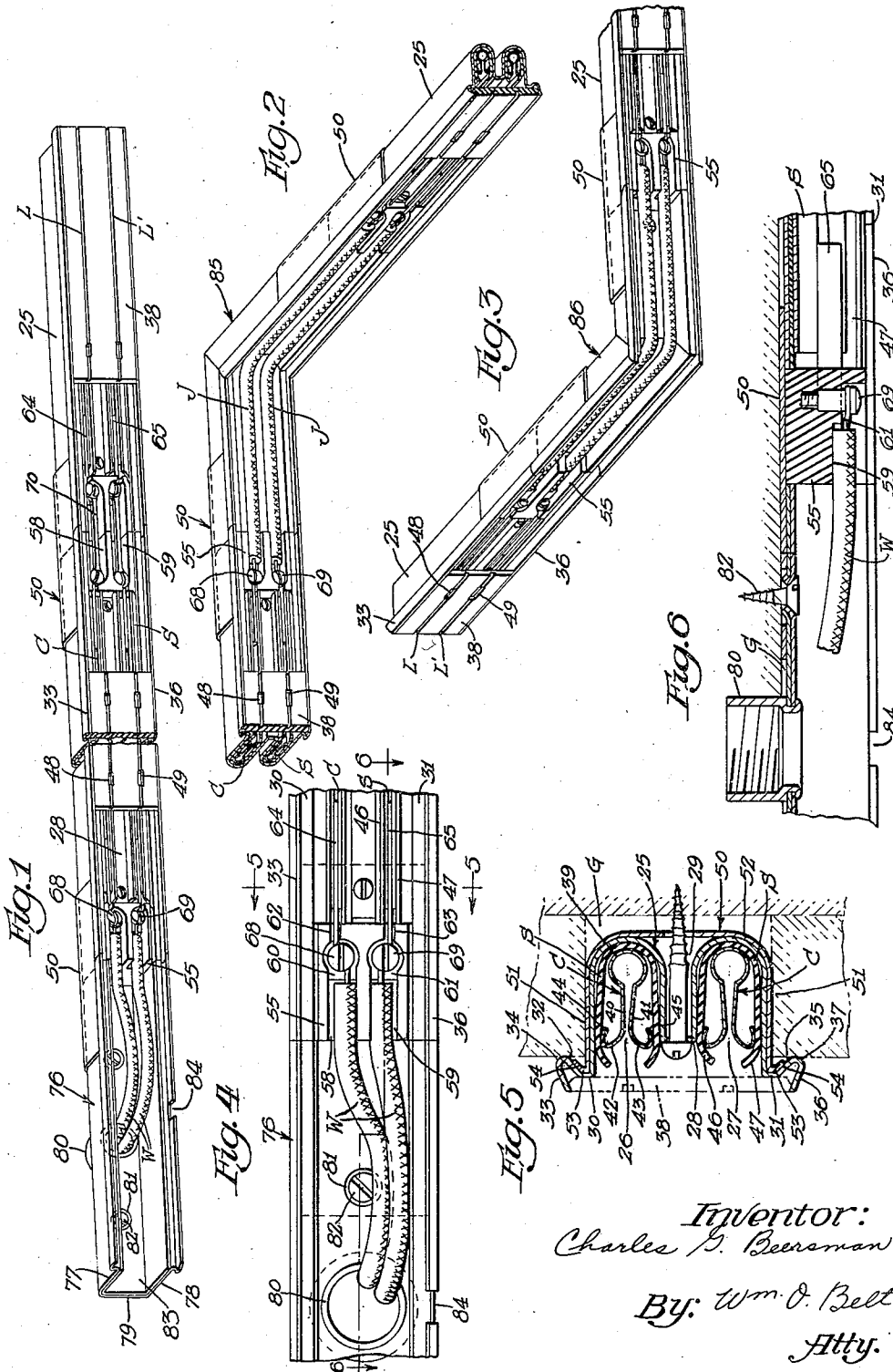
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2,072,703

ELECTRICAL OUTLET DEVICE

Filed Nov. 24, 1934

3 Sheets-Sheet 1



Inventor:
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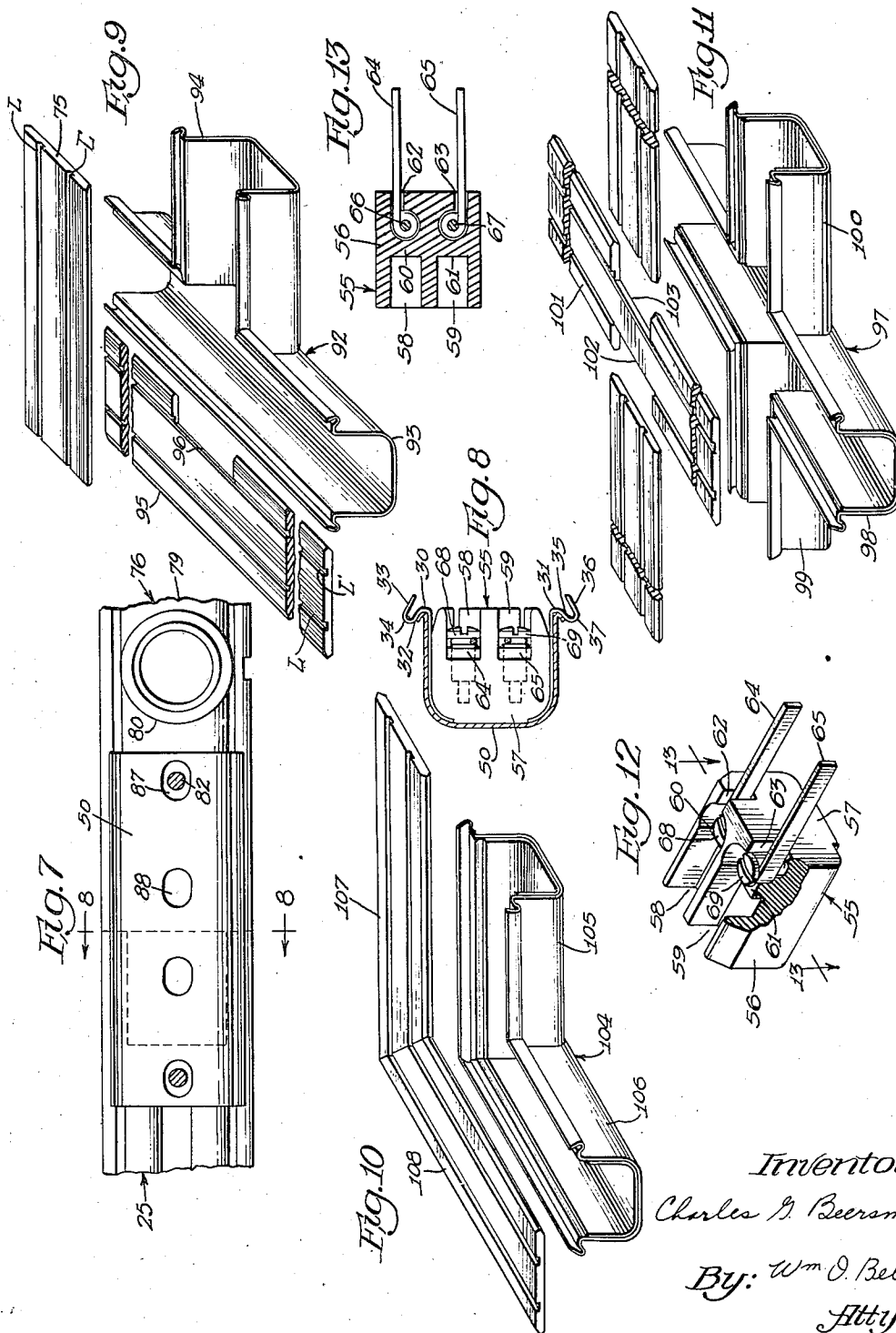
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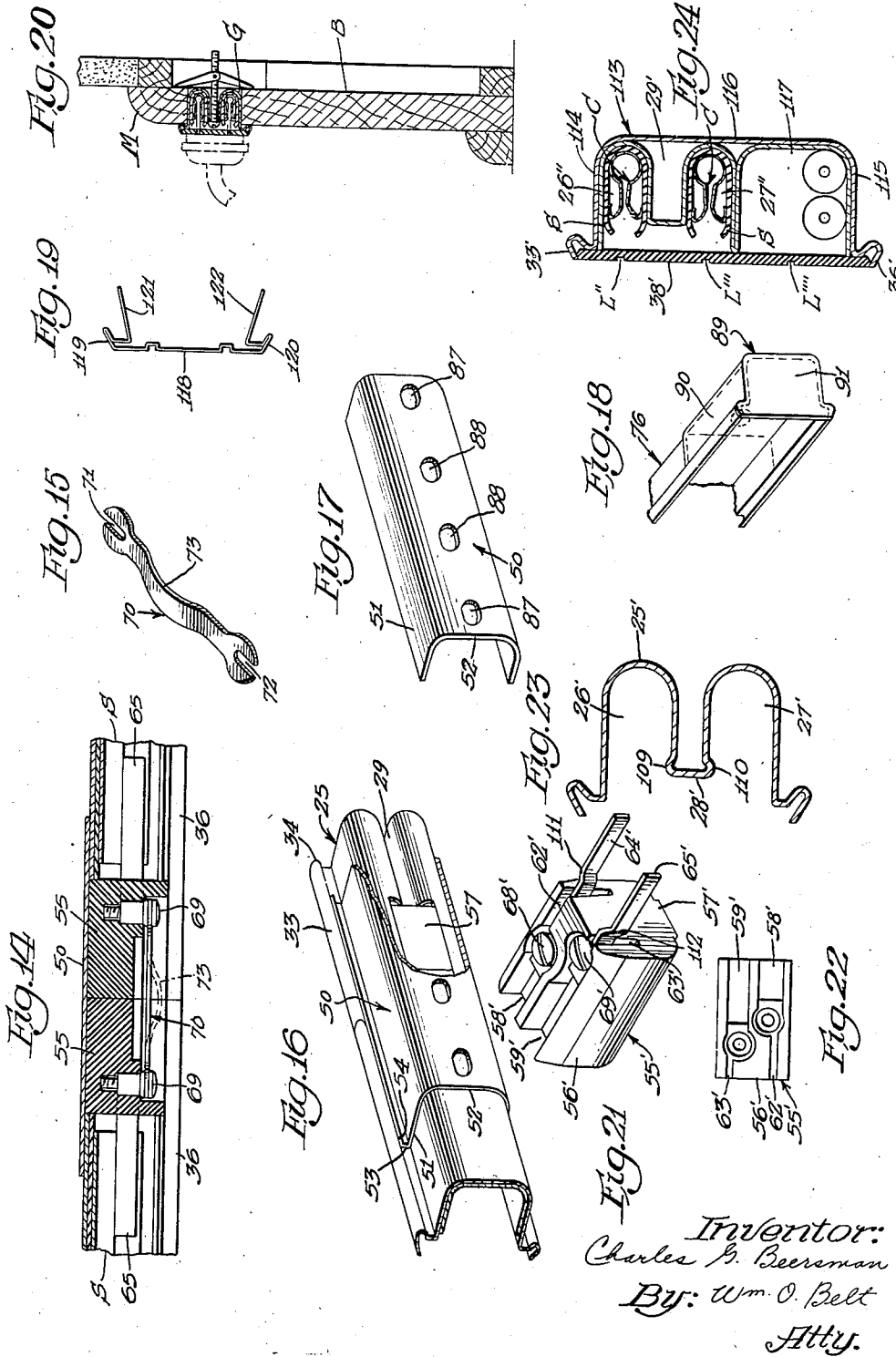
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UNITED STATES PATENT OFFICE

2,072,703

ELECTRICAL OUTLET DEVICE

Charles G. Beersman, Evanston, Ill.

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13 Claims. (Cl. 247—3)

This invention relates to electrical outlet devices and particularly to the kind affording a multiplicity of places whereat electrical appliances, lamps, tools or the like may be connected in an electric circuit.

The preferred form of electrical outlet devices of the kind to which this invention appertains comprises an elongated metallic housing having an open side closed by a face plate of non-conductive material and the conductors of the device are positioned in the metallic housing below the face plate and are insulated from the housing. Such electrical outlet devices are commonly mounted in grooves in walls or the like and extend continuously along the walls and this makes it necessary to provide for variations in the length of the devices because of variations in the wall lengths, and the primary object of my invention is to provide a novel electrical outlet device which may be expeditiously assembled to afford a continuous outlet of any desired length, and an ancillary object is to provide the device in standard sections of varied lengths so that selected lengths may be arranged in endwise alignment to afford an outlet device of the required length.

Another object is to assemble the outlet device in standard sections of varied lengths at the time of manufacture to thereby minimize the task of installation, and an ancillary object is to include the face plate in the standard sections but to so space the ends of the face plate from the ends of the sections that the conductors in adjoining sections may be interconnected without removing the face plate, and a further object is to provide face plate sections of standard lengths that may be installed to bridge the gap between the ends of the face plates of adjoining sections.

Further objects of the invention are to uniformly space the places whereat electrical appliances, lamps, tools or the like may be connected in the outlet device and to so size the devices affording interconnection between adjoining sections that the uniformity of the place spacing may be maintained when two or more sections are arranged in alignment to afford an outlet device of a predetermined length.

Still further objects are to interconnect standard sections to provide an electrical outlet device of a predetermined length and to provide a part which may be used with the standard sections to afford an outlet device of a length not attainable by the joining together of a plurality of standard sections as, for example, where the shortest of the standard sections is one foot in length, to

provide a part which may be used to compensate for those lengths wherein a dimension of less than one foot is involved.

Still further objects are to provide terminal blocks at each end of the standard sections and to so interconnect the terminal blocks with the conductors in the standard sections that the terminal blocks and conductors cooperate to prevent displacement of these parts from the sections, and an ancillary object is to provide a standard member for interconnecting the conductive members in the adjacent terminal blocks of sections arranged in endwise relation; to simplify passage of the outlet device around corners and the like; to so arrange the parts of the device that they may be interfitted together to afford a neat and attractive appearance; to mechanically unite and electrically bond the metallic housings of sections arranged in endwise alignment to provide an outlet device of predetermined length; to provide an outlet device wherein the fittings, such as terminal boxes and corner members, may be mounted in a groove of the same size as that receiving the standard sections of the outlet device; and to provide an electrical outlet device of simple and economical construction and expeditious installation.

Other and further objects will appear in the following description wherein reference is made to the accompanying drawings in which

Fig. 1 is a perspective elevational view showing a typical arrangement of my device for use along a wall and wherein the device is shown as leading away from the terminal box forming a part of my novel outlet strip;

Fig. 2 is a continuation of Fig. 1 and showing the manner in which the device is passed around an inside corner;

Fig. 3 is a continuation of Fig. 2 showing the manner in which the device is passed around an outside corner;

Fig. 4 is a front elevational view, drawn to an enlarged scale, of the portion of the device shown at the left hand end of Fig. 1;

Fig. 5 is a transverse sectional view taken substantially on the line 5—5 on Fig. 4;

Fig. 6 is a longitudinal sectional view taken substantially on the line 6—6 on Fig. 4;

Fig. 7 is a fragmentary rear elevation of the parts shown in Fig. 4;

Fig. 8 is a transverse sectional detail view taken substantially on the line 8—8 on Fig. 7;

Fig. 9 is an exploded perspective view illustrating a T-connection which may be used in the device;

Fig. 10 is an exploded perspective view of a corner arrangement which may be used in the device;

Fig. 11 is an exploded perspective view of a cross connection which may be used in the device;

Fig. 12 is a perspective detail view in which a part is broken away and showing a terminal block employed in the device;

Fig. 13 is a sectional detail view taken substantially on the line 13-13 on Fig. 12;

Fig. 14 is a longitudinal sectional view through the interconnection of two standard sections of my outlet device;

Fig. 15 is a perspective detail view of a conductor interconnector employed in the arrangement shown in Fig. 14;

Fig. 16 is a rear perspective detail view illustrating the manner in which adjoining sections of the metallic housing of my device are interconnected;

Fig. 17 is a perspective view showing a modified form of connector adaptable for use in the arrangement shown in Fig. 16;

Fig. 18 is a perspective detail view of a closure member for the metallic housing and showing this closure member in closing position;

Fig. 19 is an end view of a section of the device which may be arranged in the outlet device receiving groove whereat it is not desired to provide my continuous electrical outlet device or where my electrical outlet device is to be installed at some subsequent time;

Fig. 20 is a vertical sectional view illustrating a typical installation of my outlet device;

Fig. 21 is a view of a modified form of the terminal block shown in Fig. 12;

Fig. 22 is a plan view of the block shown in Fig. 21;

Fig. 23 is a cross sectional view illustrating a modified form of the metallic housing; and

Fig. 24 is a transverse sectional detail view illustrating a further modification of my outlet device.

My improved outlet device as illustrated in the accompanying drawings includes a metallic housing, generally indicated by 25, adapted to be mounted in a groove G formed in a suitable manner in a baseboard, molding, wall or the like and preferably the groove is formed by spacing the lower surface of the molding, usually provided at the top of a baseboard, from the top surface of the baseboard. The groove G is slightly wider than the width of the metallic housing for a purpose to be explained hereinafter and the groove need only be deep enough to receive my outlet device. However, if the groove is deeper my outlet device may nevertheless be properly mounted for it is located by the engagement of parts thereof with the face of the member in which the groove G is provided.

In the preferred form of the invention the metallic housing 25 includes two parallel substantially U-shaped channels 26 and 27 which open through the front face of the housing and the juxtaposed limbs of these channels are interconnected by a web 28 that is spaced below the front face of the housing. A separating channel 29 is thus formed below the web and between the juxtaposed limbs of the U-shaped channels and this separating channel opens through the rear face of the housing.

Outwardly extending flanges 30 and 31 are provided at the free edges of the outer limbs of the

substantially U-shaped channels. The flange 30 extends outwardly substantially at a right angle to the outer limb of the channel 26 for but a short distance and is then bent to provide a substantially U-shaped portion, the limb 32 of which extends at an acute angle to the outer wall of the channel 26 and the limb 33 of which is inclined outwardly from parallel relation with the limb 32, and the rounded bight 34 between the limbs 32 and 33 is positioned below the face of the housing 25. The flange 31 extends outwardly substantially at a right angle to the outer limb of the channel 27 for but a short distance and is then bent to provide a substantially U-shaped portion, the limb 35 of which extends at an acute angle to the outer wall of the channel 27 and the limb 36 of which is inclined outwardly from parallel relation with the limb 35 and the rounded bight 37 between the limbs 35 and 36 is positioned below the face of the housing 25 and in alignment with the bight 34. The perpendicular distance between the innermost parts of the bights 34 and 37 and the outer surfaces of the bights of the channels 26 and 27 is slightly less than the thickness of the thinnest of baseboards in use so that a clamp, to be described hereinafter, may be fitted over the bights of the channels 26 and 27 to be accommodated in the groove G. Thus, when the groove G is formed by spacing the molding from the top of the baseboard and if the baseboard is thicker than the thinnest of baseboards in use, the outer surfaces of the bights of the channels 26 and 27 will be spaced from the bottom of the groove for the bottom of the groove is only engaged when it is afforded by a baseboard of a thickness equal to the thickness of the thinnest of baseboards in use and then only by the outer surface of the clamp interconnecting aligned sections of my housing. But the housing 25 will always be properly positioned in the groove G for the reason that the bights 34 and 37 engage the face of the member in which the groove is provided to thereby orient the face of the housing 25 relative to the face of said member.

The limbs 33 and 36 are resilient and are inclined toward each other and these limbs are utilized to retain the face plate 38 for the housing 25 in position. The face plate is made of a phenolic condensate or other non-conductive material and the side edges thereof are substantially V-shaped, the inclinations away from the apices being complementary to the inclination of the limbs 33 and 36. When the face plate is arranged over the housing, the inclinations of the V-shaped edges nearest to the limbs 33 and 36 afford relief and avoid the necessity of excessively springing the limbs 33 and 36 to permit the edges of the face plate to engage therewith, for after the apices along the side edges of the face plate have been forced past the free edges of the limbs 33 and 36, these limbs spring into engagement with the outwardly disposed of the inclined side edges of the face plate, and since the inclinations are complementary, the face plate is tightly but releasably secured in position. It is only necessary to spring either or both of the limbs 33 and 36 away from an edge or both the edges of the face plate to permit removal of the face plate when desired.

It has been explained that the web 28 is positioned inwardly of the face of the housing 25 and therefore the web is spaced from the face plate 38. The spacing between the face plate 38 and the web 28 is sufficient to accommodate the

head of the screw passed through the web 28 and the separating channel 29 to secure the housing 25 in the groove G.

The conductors of my outlet device are mounted in the channels 26 and 27 and these conductors are generally indicated by C. Each of the conductors is similar in cross section and they are interchangeable from one channel to the other. Each conductor C includes a substantially circular base portion 39 which terminates in spaced webs 40 and 41 that extend substantially diametrically away from the circular portion and which are inclined toward each other. The inclination of the webs 40 and 41 is such that the webs do not meet, but at the point where they are in closest proximity they are flared outwardly, as indicated at 42 and 43, respectively, and these flared portions respectively terminate in reversely bent and rounded or rolled parts 44 and 45.

The conductors C are mounted in substantially U-shaped insulating strips S which are complementary to and which line the channels 26 and 27. The upper ends of the limbs of the strips S are curved inwardly toward each other, as indicated at 46 and 47, and the free ends of the parts 46 and 47 terminate in spaced relation with each other but overlie the outwardly flared portions 42 and 43 of the conductor strips C.

The spacing between the free edges of the parts 46 and 47 is sufficient to permit the prong of an attachment plug to be passed therebetween so that this prong may be fitted between the webs 40 and 41. A firm non-arcng contact is effected between the prong and the webs 40 and 41 due to the inclination of these webs for the prong passes between the webs at their point of closest proximity, and during the insertion of the prong and as it passes between the webs the webs are forced outwardly, compressing the rolled portions afforded by the outwardly flared portions 42 and 43 and the reversely bent parts 44 and 45, and since the conductor strip C is made of resilient material these rolled portions are placed under tension and they firmly hold the webs 41 and 42 in contact with the prong of the plug. As the prong passes between the webs they move into substantially parallel relation with each other and into flat surface engagement with the faces of the prong and in this way an efficient path for electric current is provided between the conductor strip C and the prong. When the prong is extracted from between the webs, the rolled portions provided as above described spring the webs 40 and 41 back into their initial positions. Furthermore, these rolled portions do not dig into or otherwise damage the insulating strip in which they are mounted and which therefore effectively insulates the conductor strip from the metallic housing 25.

The parts 46 and 47 of the insulating strips S prevent the prong of an attachment plug passed therebetween from grounding on the metallic housing 25. Furthermore, if the conductor strips C are overloaded or become overheated for any other reason, the parts 46 and 47 merely expand toward the adjacent parts of the metallic housing 25 and in this way prevent the conductor strips C from grounding on the metallic housing.

Parallel prong locating grooves L and L' are provided in the face plate 38. These grooves are spaced inwardly from the sides of the face plate and they are spaced from each other an amount corresponding to the spacing of the prongs of electrical attachment plugs. Openings

48 are provided in the groove L and extend through the face plate and similar openings 49 are provided in the groove L' in alignment with the openings 48. When the face plate is fast on the housing 25 the grooves L and L' are aligned with the spaces between the webs 40 and 41 of the conductors C in the channels 26 and 27, respectively. The aligned openings 48 and 49 constitute pairs of openings through which the prongs of attachment plugs may be passed to be engaged with the conductors in the housing. The insertion of the prongs into the openings is facilitated by seating the prongs in the grooves L and L' and sliding the prongs along the grooves until they reach a pair of openings in the grooves whereupon the prongs pass through the openings.

The face plate 38 is firmly held in position in the manner previously described, and this face plate serves to hold the insulating strips S and the conductors C in the channels 26 and 27, and even if the webs 40 and 41 adhere to the prong of an attachment plug fitted therebetween and cling thereto during the extraction of the prong, the outward movement of the prong during extraction thereof will first cause the parts 46 and 47 to engage the face plate, and since these parts overlie the flared portions 42 and 43 on the conductor strip, movement of the insulating strip and conductor strip with the prong will be arrested whereupon the prong may be retracted from the device.

The housing 25 is preferably provided in sections of standard lengths. For example, the housing 25 may be provided in lengths of one, two and five feet and if, for example, it is desired to install my continuous outlet device in a wall thirteen feet long, two housing sections five feet in length will be selected as well as a housing section two feet in length and one section one foot in length, and these sections will be arranged in endwise alignment to provide a continuous outlet device thirteen feet in length. When sections of the housing are so arranged to provide a continuous device of predetermined length it is desirable to firmly interconnect the sections mechanically as well as to electrically bond the sections so as to afford a continuous ground and to this end I provide an interconnecting clamp 50.

The interconnecting clamp 50 is formed of sheet metal bent into substantially U-shape formation to include spaced substantially parallel limbs 51 and an interconnecting web 52. When the clamp is installed in position one of the webs 51 overlies the outer limbs of the channels 26 of abutting sections and the other of the limbs overlies the outer limbs of the channels 27 of the abutting sections with the web 52 extending across the bights of the aligned channels 26 and 27. The clamp is made of resilient material and it tightly clamps onto the limbs of the channels. The clamp extends on opposite sides of the abutment of the sections for a distance sufficient to resist rocking of the sections. An interconnecting clamp of the kind thus far described is illustrated in Fig. 17 but in order to lock the clamp in position it may be formed, for example, in the manner illustrated in Figs. 5 and 16, that is to say, short outwardly extending flanges 53 are provided at the upper ends of the limbs 51, and these flanges terminate in reversely inclined sections 54. The inclination of the sections 54 is similar to the inclination of the limbs 32 and 35. Furthermore, the extent of the flanges

53 is such that when the clamp is installed in position these flanges 53 will underlie the flanges 30 and 31 with the reversely bent portions 54 underlying the limbs 32 and 35. It is preferable that the reversely bent portions 54 forcibly engage the limbs 32 and 35 so that the pressure incident to the engagement of these reversely bent portions with these limbs will force the limbs 51 into tight engagement with the outwardly disposed limbs of the channels 26 and 27.

I prefer to equip the standard sections of the housing 25 with insulating and conductor strips and face plates at the time of manufacture to insure against incorrect or faulty installation. Moreover, when two sections of the housing 25 are arranged in endwise alignment it is necessary to interconnect the conductor strips in the aligned housings. I have found that these objects can best be attained by providing interconnecting means at each end of each standard length of the housing 25 and as the interconnecting means I employ terminal blocks having a phenolic condensate or other non-conductive material body. Prongs fast in this body extend therefrom to be clamped between the webs 40 and 41 of the conductor strips.

A block of this kind is illustrated in detail in Figs. 12 and 13 and is generally indicated by 55. The block 55 includes a body 56, the side walls of which are spaced apart to fit between the outwardly disposed limbs of the channels 26 and 27. I cut away the web 28 and the juxtaposed limbs of the channels 26 and 27 as well as the inner halves of the bights of these channels at the end portions of the standard length sections of the housing 25 whereat the blocks 55 are to be mounted. A rib 57 is provided on the bottom of the block 55 and this rib fits between the remaining portions of the bights of the channels 26 and 27 and serves to anchor the block 55. Spaced grooves 58 and 59 are provided in the top surfaces of the block 55 and have bosses 60 and 61 at the inner ends and at the bottoms thereof and the grooves are enlarged above these bosses. The bosses 60 and 61 are located near one end of the body 56 and slots 62 and 63 extend from the enlarged parts of the grooves above these bosses to the other end of the body 56. Prongs 64 and 65 are provided which are rolled upon themselves at corresponding ends to provide openings 66 and 67. The openings 66 and 67 are tapped to receive the screws 68 and 69 and the prongs are rolled in the direction of the lead of the thread in the openings. Therefore, when the screws 68 and 69 are run into the tapped openings 67 and 68 and are tightened therein this tightening tends to further roll the strips with the result that the screws are firmly secured in the tapped openings. The bosses 60 and 61 are recessed in their upper surfaces, as best shown in Fig. 12. When the prongs 64 and 65 are respectively passed through the slots 62 and 63, the rolled portions of these prongs seat in the recesses in the bosses and preferably the center portions of the recesses of the bosses are drilled out to receive the lower ends of the screws 68 and 69.

An assembled terminal block of this kind is provided at each end of the standard length sections of the housing 25 and the insulating strips S extend continuously between the blocks at opposite ends of the section as do the conductor strips C mounted in the insulating strips. The prongs 64 and 65 of the terminal blocks 55 at opposite ends of the section are fitted between the adjacent parts of the webs 40 and 41 of the con-

ductor strips C abutting the respective connector blocks and these prongs 64 and 65 are then soldered to the webs. This soldered connection prevents outward movement of the connector blocks and therefore the insulating strips S and the conductor strips C are held in the channels 26 and 27 against endwise movement and, when the face plate is secured on the section, the insulating strips, conductor strips and the terminal blocks are held against outward movement in the channels and therefore the entire assembly is firmly united.

When two standard lengths of the device are arranged in endwise alignment, the grooves 58 and 59 of the terminal blocks at abutting ends of the aligned sections open into each other and therefore a connector, such as that generally illustrated by 70 and shown in Fig. 15, may be installed in these aligned slots. Each connector 70 has slots 71 and 72 at opposite ends thereof and is bowed medially as indicated at 73. Thus after sections of the housing 25 have been aligned and abutted and an interconnecting clamp 50 has been installed in position, the screws 68 and 69 may be loosened and connectors 70 may be arranged in the aligned grooves 58 and 59 in the abutted terminal blocks with the slots 71 and 72 aligned with the screws at opposite ends of the grooves. Then pressure is applied to the bow 73 in each connector and the connectors are flattened whereupon the slots 71 and 72 move into embracing relation with the screws which are then run in to tightly clamp the connector 70 in position and a firm mechanical and electrical connection is then afforded.

The pairs of openings 48 and 49 are preferably arranged at regularly spaced intervals and it is desirable that this interval be the same when the pairs of openings are arranged in the same section of the housing 25 or when adjacent pairs are respectively located in abutted sections of the device. Furthermore, those portions of the device whereat the terminal blocks 55 are mounted and those portions of the webs 40 and 41 into which the prongs 64 and 65 project do not afford places whereat openings 48 and 49 may be provided for the prongs of attachment plugs cannot be connected to the conductor strips at these places. I therefore size the terminal blocks 55 including the extent of the prongs 64 and 65 so that the overall length of abutted terminal blocks including the prongs 64 and 65 will be less than the spacing between the pairs of openings 48 and 49. For example, if the pairs of openings 48 and 49 are arranged at six-inch intervals in the standard sections then the distance from the ends of the prongs 64 and 65 of one terminal block to the ends of the prongs 64 and 65 of a terminal block abutted with the first terminal block should not be more than five inches. Then if openings 48 and 49 are provided at a point three inches in from the end of the housing section it is apparent that when two housing sections are abutted the first pairs of openings away from the abutment of the two housing sections will be spaced six inches, and since the total overall length of the terminal blocks and prongs is not more than five inches they may be conveniently accommodated in the space between the pairs of openings so spaced. It is, of course, to be understood that if the spacing of the pairs of openings 48 and 49 were greater or less than six inches variations could be made in the overall lengths of the terminal blocks 55 and the prongs 64 and 65.

The connectors 70 are installed from the front

of the device and after installation it is desirable to cover these connectors with a face plate like the face plate 38. Furthermore, it has been explained that the first pair of openings away from the end of a standard length section is located in a standard position inwardly of the end of the section and the terminal block therein. Therefore, instead of running the face plate 38 in the standard sections all the way to the end of the sections I end the face plate substantially in alignment with the inner ends of the prongs 64 and 65 and such termination of the face plate will be standard in each section. I may therefore provide short face plate sections of standard length so that when two sections of the device are aligned and interconnected and the conductors therein are interconnected in the manner described this short section of face plate may be fitted in position to cover the open faces at the ends of the abutted sections. In the example heretofore given these short sections of face plate will be five inches in length. One such standard short section of the face plate is indicated by 75 in Fig. 9.

The groove G is slightly wider than the distance between the outer faces of the outer limbs of the channels 26 and 27 so that when an interconnecting clamp 50 is secured in position this clamp will fit in the groove G. The flanges 30 and 31 overlie the edges of the groove G when my continuous outlet device is mounted therein and therefore even if the groove is slightly wider than my device there is no unsightly appearance along the edges, and this is true even if the edges of the groove G be ragged as might be occasioned if the groove G is routed in a baseboard, molding or the like. Moreover, by making the grooves slightly wider, as stated, I am enabled to install junction boxes in the grooves so that conductors may be connected to my outlet device and also so that corner members or other fittings may be installed, as will be explained in detail.

In order to connect my outlet device in an electric circuit I provide a junction box into which the circuit wires may be led so that these wires may be connected to the conductors of my outlet device. Such a junction box, indicated by 76, is shown at the left hand end of Fig. 1 and is adapted to fit in the groove G in endwise alignment with standard sections of my device. The junction box is made of sheet metal bent to provide a channel including limbs 77 and 78, spaced from each other similar to the spacing of the outer limbs of the channels 26 and 27, and a web 79 which interconnects the limbs 77 and 78. The upper free edges of the limbs 77 and 78 have flanges like the flanges 30 and 31 and substantially U-shaped portions including limbs like the limbs 32 and 33 and 35 and 36 as well as bights like the bights 34 and 37. The junction box is open at its ends and is aligned with one end of a standard section of my device, after which an interconnecting clamp 50 is installed to secure the junction box and the standard section together. Then since the outer edges of the limbs 77 and 78 correspond to the outer edges of the housing 25 the face plate may be extended directly across the junction box.

When the outlet device is to be used with a conduit system of wiring, a coupling 80 is fast in the web 79 midway between the ends of the junction box and in the present form of the invention a neck on the coupling 80 is passed through an opening in the web 79 and the free end of the neck is rolled over to thereby clamp the coupling

80 to the junction box. When the outlet device is to be used in connection with some other system of wiring I then substitute for the coupling 80 a coupling compatible with such other system. Openings 81 are provided in the web 79 through which wood screws 82 or the like may be passed to secure the junction box 76 in the groove G.

I have explained that it is desirable to use short standard sections of face plate to afford continuity of the face plate at those places whereat the face plate is omitted as from the ends of the standard sections and the parts abutting the ends of the standard sections as, for example, the junction box. Usually the junction box is so positioned that standard sections of my outlet device extend in both directions therefrom. Therefore, the junction box is of such a length that when two short standard face plate sections 75 are abutted medially of the junction box these sections cover the exposed face of the junction box and the exposed faces of the standard sections at the ends thereof whereat the face plate is omitted in the manufacture of the device. However, if it is desired to avoid the abutment of two sections 75 on the face of the junction box, a special face plate section twice the length of the face plate section 75 may be provided and such a section like two sections 75 will cover the junction box and the exposed ends of the standard sections or the like abutting opposite ends of the junction box. When standard sections of my outlet device lead from but one end of the junction box and the other end is closed in a manner to be explained, then a face plate section 75 and a special short face plate section afford the face plate for the box and the exposed end of the standard section abutted therewith, and such a special short section may be obtained by cutting a face plate section 75 or the like.

As best illustrated in Fig. 4, the circuit wires W are led into the junction box through the coupling 80 and these wires are respectively connected to screws 68 and 69 in the terminal block 55 at the end of the standard section abutting the junction box and thus wires extend through the junction box for a short distance. The regulations of fire underwriting agencies and the like require that metal through which wires are to be passed be of a certain thickness. However, I am enabled to form my housing 25 of a material thinner than that usually specified and if I made the junction box, through which wires are to be passed, of a thickness equal to that required for metal through which wires are to be passed, the limbs 33 and 36 on the junction box would be thicker than the corresponding flanges on the housing 25. Thus in order to provide the required thickness of metal I provide a liner 83 in the junction box and this liner is positioned on the inside of the limbs 77 and 78 and the web 79 and is retained in position by being spotwelded to the box 76 or portions may be provided on the box to lock this liner in position. However, since the junction box is rather short it is permissible to make the junction box of metal equal to the thickness of the metal used for the housing 25 and no liner need be provided therein, and hence unless the regulations are quite rigid the liner 83 may be omitted from the junction box 76.

The face plate 38 is firmly held in position by the limbs 33 and 36 and while these limbs are resilient the face plate may be damaged when being disengaged from the limbs, particularly if the operation is performed carelessly. This may be obviated by cutting away a part of one of the

limbs and the U-shaped portion thereon to provide a notch, such as 84, into which a suitable implement may be inserted to be located below the face plate 38 and thereby facilitate removal of the face plate. Preferably such a notch is provided in a limb on the junction box 76 whereat no insulating and conductor strip are present for so to do avoids the likelihood of grounding a conductor through the inserted implement.

When my outlet device is installed in a room or the like it is usual to extend the device along all walls of the room and this entails passing the device around the corners of the room. Furthermore, there may be projections or recesses in the wall of a room and the passage of my outlet device across such projections or recesses entails passing the device around corners, and it will be necessary to pass my device around both interior and exterior corners. I therefore provide corner members suitable for use at both interior and exterior corners. In Fig. 2, 85 designates a corner member for an interior corner and in Fig. 3, 86 designates a corner member for an exterior corner.

Corner members are made of sheet metal of a thickness corresponding to the thickness of the metal of the housing 25 and the metal may be bent to provide a cross section for corner members like the cross section of the junction box 76 or like the cross section of the housing 25. The illustrated corner members 85 and 86 have a cross section like the junction box 76 and, like the junction box, may have liners provided therein for I interconnect standard sections abutting the corner members by passing wires J through the corner members and opposite ends of the wires are connected to the screws in the terminal blocks at the ends of the standard sections of my device abutting opposite ends of the corner members. The standard sections are connected to the ends of the corner members by interconnecting clamps 50 just as the junction box 76 is connected to the standard sections.

The corner members are not furnished with face plates when made but when installed the corner members are closed by standard short length face plate sections such as 75 and therefore the extent of the corner members along the faces thereof in each direction away from the angle therein is equal to the distance between the end of the face plate 38 on a standard section and the end of such section. Thus, when face plate sections 75 are applied over the corner members, the ends of the face plate sections abut at the angle of the corner member, and since this abutment is on the face of the corner members the face plate sections afford a continuous cover for my outlet device even when passed around corners.

It has been explained that the junction box 76 is fastened in the groove G by wood screws 82 and the standard sections and corner members are also secured in the groove by wood screws or the like, and I prefer to provide the screw openings at the ends of the sections so that it will not be necessary to remove the face plate in order to secure the outlet device in the groove, that is to say, I provide the screw openings at those places whereat the face plate is omitted until installation. Thus in the standard sections the attachment screw openings are provided in the web 28 at positions slightly spaced from the inner ends of the terminal blocks 55 and this positioning of the screw openings is uniform in the standard sections. The screw openings in the interior corner members 85 and junction boxes 76 are spaced from the ends of the corner mem-

bers and junction boxes the same distance as that in which the screw openings in the standard sections are spaced from the ends of these sections. Such location of the screw openings is within the area embraced by the interconnecting clamps 50. Thus, screw openings 87 are provided near each end of the clamps 50 and these openings are elongated longitudinally to facilitate alignment thereof with the screw openings in the standard sections and boxes, corner members and the like. However, if the screw openings are correspondingly located in the exterior corner members 86 screws passed therethrough will meet in the wall or the like in which the groove G is provided. Hence, in the exterior corner members I provide the screw openings near the ends of the corner members and because of this it is necessary to provide a pair of openings 88 in the interconnecting clamps 50, and these openings 88 are equidistantly spaced on opposite sides of the centers of the clamps. Then when an interconnecting clamp 50 is used with an exterior corner member, as shown at the right hand end of Fig. 3, one fastening screw is passed through the screw opening at the end of the standard section abutting the corner member, and this screw passes through the opening 87 at this end of the interconnecting clamp. However, the other screw passes through the opening 88 nearest the opening 87 at the opposite end of the interconnecting clamp and the other opening 88 is not utilized nor is the opening 87 at said opposite end of the interconnecting clamp. The reason that two openings 88 are provided is to make the interconnecting clamp 50 reversible end for end when used with exterior corner members for by providing two openings 88 one will always be properly located. The openings 88, like the openings 87, are elongated longitudinally to facilitate alignment with the openings in the parts of the device embraced by the clamps.

When my device is installed in the walls of a room interruptions occur therein as where my device runs up to a doorway. Furthermore, in shop installations, my outlet device may merely be mounted on a wall. In such instances and others it is advantageous to close the ends of my outlet device. To this end I provide an end closure cap such as that illustrated in Fig. 18 wherein I show an end closure cap 89 mounted on a junction box 76. The end closure cap 89 includes a part 90 of a cross sectional configuration like that of the interconnecting clamp 50 and a length equal to about one-half of the length of a clamp 50. A plate 91 is provided at one end of the part 90 and the outline of the plate 91 corresponds to the outline of the junction box and the housing 25 and other similar parts of my device. Thus the part 90 may be clamped over the limbs 77 and 78 of a junction box or the outwardly disposed limbs of the channels 26 and 27 or over any other part of my outlet device and the plate 91 effectively closes the end of my outlet device. When the end closure member 89 is mounted at the end of a standard section, the plate 91 abuts the outer end of the terminal block 55 and the live conductors are therefore spaced from the metallic end closure cap. The end closure cap has a screw opening therein similar to and located similar to the screw openings 87 in the interconnecting clamps 50.

Heretofore I have described my outlet device as being mounted in a groove in a baseboard or the like and I have explained how my outlet device may be passed around the corners of a room or

the like. However, it may be desirable to extend my outlet device along a wall and to branch out from the outlet device in parallel relation with the wall thus forming what I call face angles, and I have provided suitable fittings to afford such face angles. Thus in Fig. 9 there is shown a fitting, generally indicated by 92, which will afford a face T-connection and this fitting comprises a part 93 which may be arranged in the extent of my outlet device in a manner similar to the junction box 76, and this part 93 preferably has a cross sectional configuration like the junction box 76 although a cross sectional configuration like that of the housing 25 may be provided. One wall of the part 93 is cut away intermediate the ends thereof and a part 94 of a cross section like that of the part 93 is connected to the part 93 at the cut-out and the parts 93 and 94 may be joined in any suitable manner as by soldering, welding or the like. The ends of the part 93 will usually abut the ends of standard sections and likewise the free end of the part 94 will abut a standard section and wires will interconnect the terminal blocks of the standard sections abutting the opposite ends of the part 93 and the free end of the part 94. A special short face plate section 95 is provided for the part 93. This section 95 is of a length sufficient to cover the part 93 and also the open ends of standard sections abutting opposite ends of the part 93, and a recess 96 is provided in the section 95 to be aligned with the part 94 when the section 95 is in position. The length of the part 94 is such that when a standard section of my device is abutted with the free end thereof a standard short face plate section 75 may be arranged in position to close the exposed end of the standard section and the part 94 and to extend into and fit against the inner edge of the recess 96. This inner edge of the recess 96 is positioned in the prong locating groove L' and therefore the joint between the standard face plate section 75 and the face plate section 95 is concealed in the groove L'. Inasmuch as wires are to be passed through the fitting 92 it may be desirable or necessary to provide a liner therein for the purpose explained in connection with the junction box 76 although, like the junction box 76, the fitting 92 may be made with or without a liner. Openings are provided near the ends of the part 93 and the free end of the part 94 and, when interconnecting clamps 50 are installed to connect these ends of the fitting 92 to the adjacent standard sections or the like, screws may be passed through these openings and selected of the openings 88 in the interconnecting clamps to thereby secure the fitting 92 in position.

The fitting 92 provides for a face angle extending in but one direction from the normal extent of my outlet device and in those instances where it is desired to branch off in both directions a fitting like that indicated by 97 in Fig. 11 may be used. This fitting includes a part 98 similar to the part 93 of the fitting 92 and instead of one wall of this part being cut away as the part 93 is cut away to permit attachment of the part 94 the walls of the part 98 are cut away on opposite sides so that the parts 99 and 100 may be connected thereto, the parts 99 and 100 corresponding to the part 94 of the fitting 92. A short face plate section 101 similar to the face plate section 95 is provided and this face plate section is recessed at 102 and 103 similar to the manner in which the face plate section 95 is recessed at 96 and for the same purpose. The fitting 97 has openings near the

ends of the parts 98 and 99 and 100 for the same purpose and located similarly to the openings near the ends of the parts 93 and 94.

When it is desired to go around a corner in a face arrangement, a fitting like that indicated by 104 in Fig. 10 is employed, this fitting having parts 105 and 106 extending at right angles to each other. The parts 105 and 106 as well as the parts 98, 99 and 100 may, like the parts 93 and 94, have a cross sectional configuration like that of the junction box 76 or these parts may have a cross sectional configuration like that of the housing 25. Furthermore, since wires are passed through both the fittings 97 and 104 these fittings, like the fitting 92, may have liners provided therein although, like the junction box 76, the liners may be omitted therefrom. Special face plate sections 107 and 108 are provided for the parts 105 and 106, respectively, and these sections are mitered at the ends thereof which meet at the angle of the fitting 104, and these face plate sections are long enough to not only cover the parts 105 and 106 but also to cover the exposed ends of standard sections of my device abutting the parts 105 and 106. The parts 105 and 106 have openings therein located inwardly of the ends of these parts in an amount similar to the location of the screw openings at the ends of the standard sections, junction boxes and interior corner members so that when it is desired to secure the fitting 104 in position screws may be passed through these openings, and openings 87 in the interconnecting clamps 50 joining the parts 105 and 106 to standard sections and the like abut it with the free ends thereof.

I have explained that the face plate 38 retains the insulating strips S and conductor strips C in the channels 26 and 27 but, if desired, the insulating strips may be retained in position by providing flanges along the upper edges of the outer limbs of the channels 26 and 27, as shown and described in my co-pending application, Serial No. 720,751, filed April 16, 1934, or other suitable means may be provided on the outer limbs of the channels 26 and 27 to retain the insulating and conductor strips in position, as shown and described in my Patent No. 1,955,168, patented April 17, 1934. Still another way of retaining the insulating strips S and conductor strips C against vertical movement, as during the extraction of the prongs of an attachment plug from engagement with the webs 40 and 41 of the conductors C, is shown in Fig. 23 wherein the cross section of a housing 25' is shown, and this housing includes channels 26' and 27' which have at the upper ends of the outer limbs thereof flanges and substantially U-shaped portions like those provided on the outer limbs of the channels 26 and 27. The web 28' of the housing 25' is arranged below the face of the housing just as the web 28 is arranged below the face of the housing 25. However, ribs 109 and 110 are formed at the juncture of the web 28' with the inner limbs of the channels 26' and 27', the rib 109 overlying the channel 26' and the rib 110 overlying the channel 27'. Thus, when insulating strips S and conductor strips C are mounted in the channels 26' and 27', the flared part 47 of the insulating strip in the channel 26' will underlie the rib 109 and the flared part 46 on the insulating strip S in the channel 27' will underlie the rib 110, and the engagement of these flared parts with the ribs effectively prevents outward movement of the insulating and conductor strips in the channels 26' and 27'.

In the form of the invention shown in Fig. 1, the centers of the channels 26 and 27 are spaced apart sufficiently to permit the screws 68 and 69 in the terminal block 55 to be mounted in side by side relation. However, the center lines of these channels can be brought into closer proximity and still permit the prongs of attachment plugs to be passed between the webs 40 and 41 of conductor strips C in channels so spaced. However, when the center lines of the channels 26 and 27 are moved closer together it is necessary to reduce the width of the terminal blocks 55 and such reduction in width does not afford sufficient space to permit the attaching screws in the terminal block to be mounted in side by side relation. I therefore provide a terminal block, such as that generally indicated by 55' in Fig. 21, which includes a body 56' having a rib 57' at the lower end thereof similar to the rib 57 on the body 56 of the block 55. Grooves 58' and 59' are provided in the upper surface of the body 56' but the groove 58' is shorter than the groove 59'. Bosses are provided in these grooves like the bosses 60 and 61 in the grooves 58 and 59 and the bosses in the grooves 58' and 59' are arranged to receive screws 68' and 69' and rolled portions at the inner ends of the prongs 64' and 65', these prongs extending through slots 62' and 63' similar to the slots 62 and 63, and in this instance the slot 62' is longer than the slot 63'. Likewise the prong 64' is longer than the prong 65'. An arrangement such as the foregoing enables the grooves 58' and 59' to be arranged in close proximity and these grooves need not be aligned with the centers of the channels 26 and 27, and when the grooves 58' and 59' are not aligned with the centers of the channels 26 and 27 offsets, such as the offsets 111 and 112 in the prongs 64' and 65', respectively, are provided so that the free ends of the prongs 64' and 65' will be aligned with the center lines of the channels 26 and 27 so that the free ends of the prongs will fit between the webs 40 and 41 of conductor strips C mounted in these channels in the manner described.

The regulations of fire underwriters and the like permit only a limited number of outlets for a given area of floor space. Moreover, my outlet device may extend away from a junction box for an appreciable distance and may afford so many places at which electrical appliances, lamps, tools or the like may be connected that the conductor strips C of the device might be overloaded. It may not be convenient to provide a number of junction boxes in the extent of my outlet device to avoid such an overloaded condition but if a number of junction boxes were to be provided along the extent of the outlet device it would be necessary to extend another wiring system parallel with my outlet device. Thus to take care of the foregoing conditions and to avoid the necessity of providing another wiring system I may form my outlet device in the manner illustrated in Fig. 24 so that the outlet device will not only afford channels like the channels 26 and 27, wherein conductor strips C may be mounted to afford a plurality of places whereat electrical appliances, lamps, tools or the like may be connected, but also to include a part through which wires may be extended.

Thus the outlet device illustrated in Fig. 24 includes a sheet metal housing, generally indicated by 113, which includes spaced limbs 114 and 115 having an interconnecting web 116 therebetween and these limbs and the web pro-

vide a channel. The free edges of the limbs 114 and 115 are equipped with flanges and substantially U-shaped portions corresponding to those at the free edges of the outer limbs of the channels 26 and 27 of the housing 25. The limbs 114 and 115 of the housing 113 are spaced apart sufficiently to receive a member which may be conveniently made from a single piece of sheet metal by bending it to provide channels 26'' and 27'' with a separating channel 29' therebetween and also to provide a relatively wide channel 117. The outer limb of the channel 26'' lines the limb 114 of the housing 113 and ends in alignment with the outer face of the flange at the free edge of the limb 114. The outer limb of the channel 27'' ends in alignment with the outer limb of the channel 26'' and lies in engagement with the inner limb of the channel 117, and the outer limb of the channel 117 lines the limb 115 and terminates like the outer limb of the channel 26''. Conductor strips C and insulating strips S like those previously described are mounted in channels 26'' and 27''.

A face plate 38' is provided which is materially wider than the face plate 38 but which is retained in position by the limbs 33' and 36' on the limbs 114 and 115. This face plate has prong locating grooves L'' and L''' near the upper edge thereof which correspond to the prong locating grooves L and L', and the grooves L'' and L''' are respectively aligned with the webs of the conductor strips C mounted in the channels 26'' and 27'' so that when openings like the openings 48 and 49 are provided in the prong locating grooves L'' and L''' the prongs of attachment plugs may be passed through these openings to be engaged with the webs of the conductor strips. Then because of the relatively wide width of the face plate 38 and since the grooves L'' and L''' are located along one edge of the face plate 38', I find that the appearance of the face plate 38' may be enhanced by providing still another shallow groove L'''' therein and the three grooves in the face of the plate 38 are uniformly spaced one from the other.

The housing 113 provides a continuous outlet device similar to that which I have described heretofore and it also provides a channel, indicated by 117, through which wires may be led and the wires led through the channel 117 may be used for any desired purpose as to provide a number of circuits in my continuous outlet device or these wires can be led out of the channel 117 through suitable wiring devices to be used for any desired purpose.

A typical installation of my outlet device is illustrated in cross section in Fig. 20 wherein the molding M usually provided at the top of a baseboard B is spaced from the top of the baseboard in an amount sufficient to provide a groove G and the length of the groove G will, of course, correspond to the length of the wall along which the baseboard extends. Thus in order to make up an outlet device corresponding in length to the length of the groove, a combination of standard length sections is arranged in alignment. In computing the length to be provided by the standard sections the length of the junction box must be taken into consideration. Furthermore, due to the characteristics of the room or other exigencies of the installation there may be places whereat it is not desirable to provide for the connection of electrical appliances, lamps, tools or the like and moreover in making up the required length for the outlet device there may be a dimension

shorter than the dimension of the shortest of the standard sections. To take care of these short dimensions, places whereat it is not desired to afford electrical connection and similar circumstances, I provide what I call a raceway.

The raceway merely consists of a section of a cross section like that of the housing 25 and has a face plate thereon extending through the length thereof. The face plate provided on the raceway does not have openings like the openings 48 and 49 but is provided with grooves like the grooves L and L' so as to correspond in appearance with the face plate on the standard sections. This raceway and the face plate thereon may be cut into any desired lengths and the raceway will be furnished in standard lengths as, for example, five foot lengths. I have stated that the raceway may have a cross sectional configuration like that of the housing 25 and the two channels thus provided will accommodate wires which will be passed therethrough to interconnect the portions of my outlet device at opposite ends of the section of the raceway used but since the raceway is merely a channel through which wires are passed it may have a cross sectional configuration like that of the junction box 76 and may be furnished with or without a liner.

Heretofore I have referred to providing a liner in the portions of my outlet device through which wires are to be passed to afford sufficient thickness to comply with regulations covering the thickness of wires in metal conduits. However, it is to be understood that instead of providing a liner in the parts a shell might be provided thereabout but I prefer to use a liner since a shell about the parts might interfere with the installation of the interconnecting clamp 50 although, of course, the shell could be cut away at places whereat it was desired to install the interconnecting clamp since the interconnecting clamp sufficiently increases the thickness of the metal to comply with the requirements.

I have explained that a raceway may be used at the places whereat it is not desired to connect electrical appliances, lamps, tools and the like in a circuit. However, if my outlet device is provided along one wall of a room it is desirable that it be continued along all walls of the room to impart uniformity in appearance. But, there may be alcoves or other places where there will be no need for my outlet device and it may be desirable to install my outlet device only on a single wall. Therefore, in order to preserve uniformity in appearance I provide a member having an appearance like that of my outlet device but this member in reality merely provides a face plate. Thus I may take a sheet of metal and shape it in the manner illustrated in Fig. 19 so that it will include a face portion 118. This face portion 118 has grooves formed therein like the prong locating grooves L and L' and at the side edges of the face plate rearwardly extending flanges 119 and 120 are provided which incline similarly to the limbs 33 and 36, and unitary with the flanges 119 and 120 and inwardly thereof I provide spring legs 121 and 122. The legs 121 and 122 are inserted into the groove G and are sufficiently resilient to effectively clamp in the groove and in this way the device illustrated in Fig. 19 is retained in position. This device may be used conveniently at places whereat it is not at the present time desired to install my outlet device but where it may be desirable to do so later and it may also be used for those circum-

stances which I have described heretofore and for others of a kindred nature.

I have described the face plate and the sections thereof as including grooves, such as the prong locating grooves L and L', but it is to be understood that while these grooves tend to enhance the appearance of the device and facilitate insertion of the prongs of attachment plugs into the pairs of openings provided in the grooves, these grooves may nevertheless be omitted from the face plate and only the pairs of openings need be provided.

In the foregoing description I have set forth preferred embodiments of my invention and also I have described what I have found to be desirable ways of carrying my invention into effect. For example, I have described wood screws as being used to fasten the outlet device in the groove but it is to be understood that toggle bolts, such as illustrated in Fig. 20, may be used in place of wood screws. Likewise lengths of wire may be used in place of the connectors 70 and other changes may be made such as in size and shape and in the materials used. Hence, it is to be understood that I have described selected embodiments and that these are capable of variation and modification and I therefore do not wish to be limited to the precise details set forth but desire to avail myself of such changes and alterations as fall within the scope of the following claims:

I claim:

1. An assembled electrical outlet unit comprising a housing, a conductor in said housing, said housing including means providing for electrical connection with said conductor, a block of insulating material disposed at one end of said housing, said block and housing being constructed and arranged to lock said block against longitudinal movement in one direction, a terminal carried by said block and adapted to receive and make electrical connection between the conductor in said housing and the conductor of an adjacent unit.

2. An assembled electrical outlet unit comprising a housing having a notch therein at opposite ends thereof, a conductor in said housing, said housing including means providing for electrical connection with said conductor, a block of insulating material at each end of said housing, each of said blocks having a rib thereon seated in the notch at the adjacent end of said housing, and a terminal in each of said blocks, each of terminals being adapted to receive and make electrical connection between the conductor in said housing and the conductor of an adjacent unit, the connection of the conductor in said housing with said terminals in said blocks and the seating of the ribs in the notches preventing endwise movement of said blocks and the conductor in said housing.

3. An assembled electrical outlet unit comprising a housing, a conductor in said housing, said housing including means providing for electrical connections with said conductor, a block of insulating material secured at one end of said housing, and a terminal in said block including a prong connected to said conductor affording electrical connection between the terminal and the conductor and mechanical connection between the block and the conductor.

4. An assembled electrical outlet unit comprising a housing, a conductor in said housing, said housing including means providing for electrical

connection with said conductor, a block of insulating material secured at each end of said housing, and a terminal in each of said blocks including a prong connected to the adjacent end of said conductor, the connections of the prongs with said conductor retaining said conductor and blocks in assembled relation in said housing.

5. An assembled electrical outlet unit comprising a housing having a notch therein at opposite ends thereof, a conductor in said housing, said housing including means providing for electrical connection with said conductor, a block of insulating material at each end of said housing, each of said blocks having a rib thereon seated in the notch at the adjacent end of said housing, and a terminal in each of said blocks including a prong connected to the adjacent end of said conductor, the connections of the prongs with said conductor and the seating of the ribs in the notches preventing endwise movement of said blocks and the conductor in said housing.

6. A continuous electrical outlet device comprising a plurality of preassembled units arranged in endwise alignment and in abutting relation, each of said units comprising a housing, a conductor in each of said housings, each of said housings including means providing for electrical connection with the conductor therein, a block of insulating material secured at each end of each of said housings, a terminal in each of said blocks and connected with the adjacent end of the conductor in the housing in which the block is mounted, and means interconnecting the terminals in the blocks at adjacent ends of abutted units to electrically interconnect the conductors in said abutted units.

7. A continuous electrical outlet device comprising a plurality of preassembled units arranged in endwise alignment and in abutting relation, each of said units comprising a housing, a conductor in each of said housings, each of said housings including means providing for electrical connection with the conductor therein, a block of insulating material secured at each end of each of said housings, a terminal in each of said blocks and connected with the adjacent end of the conductor in the housing in which the block is mounted, means interconnecting the terminals in the blocks at adjacent ends of abutted units to electrically interconnect the conductors in said abutted units, and means embracing the housings of abutted units and overlapping the abutment of said units to mechanically interconnect said units.

8. A continuous electrical outlet device comprising a plurality of preassembled units arranged in endwise alignment and in abutting relation, each of said units comprising a housing, a conductor in each of said housings, each of said housings including means providing for electrical connection with the conductor therein, a block of insulating material secured at each end of each of said housings, a terminal on corresponding faces of each of said blocks and connected to the adjacent end of the conductor in the housing in which the block is mounted, said housings having an opening at each end and on corresponding sides thereof disclosing said terminals, each of said openings extending inwardly from the adjacent end of the housing for a uniform distance whereby openings of uniform extent are provided on one side of said device at each abutment of the units, means insertable through the openings of uniform extent and connected to the terminals in blocks at the adjacent ends of abutted units to

electrically interconnect the conductors of adjacent units, and pre-formed means of an extent equal to the extent of the openings of uniform extent and detachably secured to the housings to close said openings of uniform extent.

9. An assembled electrical outlet unit comprising a housing having a channel therein, a block of insulating material secured in said housing at each end of said channel, an insulating member in said channel extending between said blocks, a conductor mounted in said insulating member, a face plate of insulating material secured to said housing to close the open side of the channel and having an opening therein through which electrical connection may be made with said conductor, and a terminal in each of said blocks connected to the adjacent end of said conductor, the connection of the terminals with said conductor cooperating with said blocks to prevent endwise displacement of said blocks, insulating member and conductor from said housing, said face plate preventing displacement of the just named parts through the open side of the channel whereby the parts of the unit are retained in assembled relation.

10. A continuous electrical outlet device comprising at least one preassembled unit including a housing, a conductor in said housing, said housing including means providing for electrical connection with said conductor, a block of insulating material at each end of said housing, and a terminal in each of said blocks connected to the adjacent end of said conductor, said device also comprising a fitting arranged in endwise alignment and in abutting relation with the preassembled unit and adapted to have a wire passed therethrough whereby the wire may be connected to the terminal in the block at the end of the unit abutted with said fitting, and means embracing the housing and the fitting on opposite sides of the abutment of the unit and the fitting and mechanically interconnecting said unit and fitting.

11. A continuous electrical outlet device comprising at least one preassembled unit including a housing, a conductor in said housing, said housing including means providing for electrical connection with said conductor, a block of insulating material secured at each end of said housing, and a terminal on corresponding faces of said blocks and connected to the adjacent end of the conductor, said housing having an opening at each end and on one side thereof disclosing said terminals, said device also comprising a fitting arranged in endwise alignment and in abutting relation with said unit, said fitting comprising a housing having a channel therein and flanges on the side edges thereof adapted to engage the side edges of a face plate for closing said channel, and a lining in the housing of said fitting increasing the wall thickness thereof to properly enclose a wire passed through said fitting and connected to the terminal in the block at the end of said unit abutted with said fitting, and means embracing the housing of the unit and the housing of the fitting on opposite sides of the abutment of the unit and the fitting and mechanically interconnecting said unit and fitting, the face plate on said fitting being extended over the opening in the housing of said unit whereby said face plate closes the channel in the housing of said fitting and the opening in the housing of said unit.

12. A fitting adapted for use in a continuous electrical outlet device and comprising a housing

ing having a channel therein and flanges thereon along the side edges thereof adapted to embrace the side edges of a face plate for closing the open side of said channel, and a lining in said fitting
5 increasing the wall thickness thereof to properly enclose a wire passed through said fitting, said lining terminating in spaced relation with said flanges whereby said face plate passes over the upper edges thereof.
10 13. An electrical outlet unit comprising a housing having a pair of channels therein extending in parallel relation, a web interconnecting adja-

cent sides of said channels, an insulating member in each channel, a conductor in each insulating member, a face plate secured to said housing to close the open sides of said channels and having openings therein through which electrical
5 connection can be made with said conductors, and means on said housing adjacent said web and extending into said channels and engageable with the insulating members to limit movement of said
10 insulating members toward said face plate.

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