June 24, 1930. E. A. STAPLES 1,767,323

FLOOR OUTLET

Filed May 22, 1929

Fig. 1.

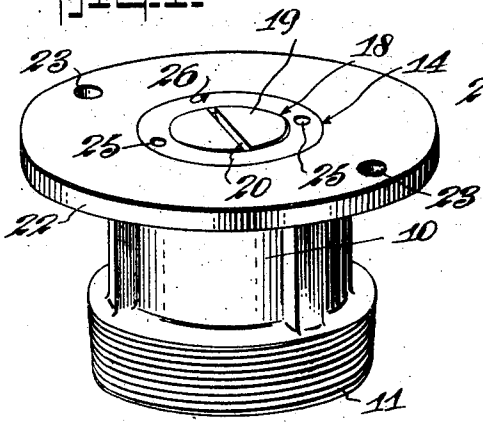
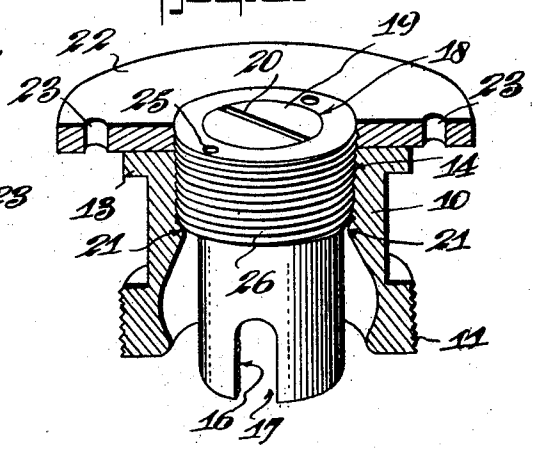


Fig. 2.



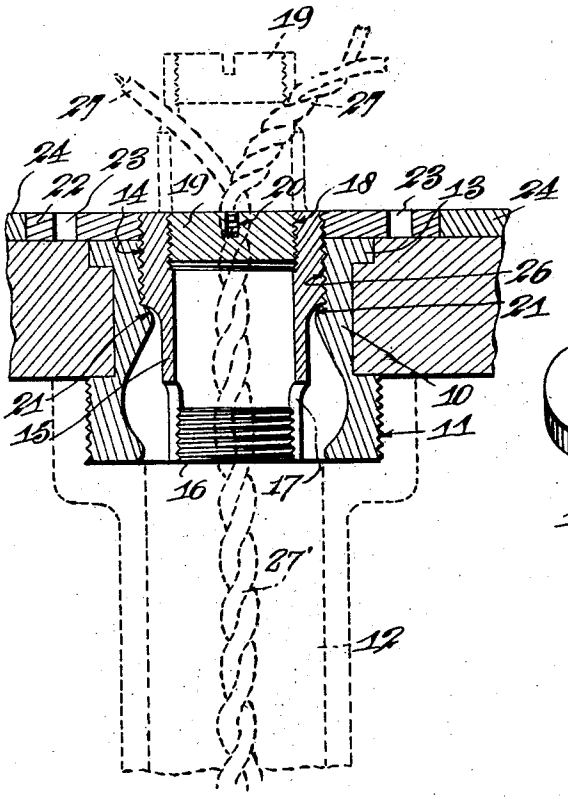
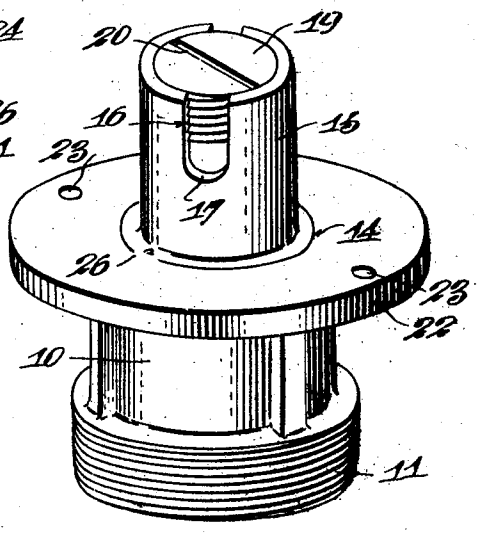


Fig. 4.

Fig. 3.



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UNITED STATES PATENT OFFICE

EUGENE A. STAPLES, OF BROOKLYN, NEW YORK

FLOOR OUTLET

Application filed May 22, 1929. Serial No. 365,136.

My invention relates to improvements in electric conduits, and the same has for its object more particularly to provide an outlet by means of which an apparatus, such as a telephone, telegraph instrument, light, fan, etc., may be readily connected with the electric conductors disposed in such conduit.

Further, said invention has for its object to provide an outlet having a member adapted to be secured in a plurality of positions therein to seal said outlet, and serving, in one of said positions, as a guide for the branch conductors extending from the main conductors in the conduit.

Further, said invention has for its object to provide an outlet to be secured in a floor, wall, or the like, having means serving substantially to seal said outlet when the latter is in an operative or an inoperative condition.

Further, said invention has for its object to provide an outlet having a sealing member which constitutes a structural part of the outlet to form a projecting guard for the branch conductors when the outlet is adjusted to its operative condition, and to form a tight closure for the outlet when the latter is adjusted to its inoperative condition.

Further, said invention has for its object to provide a floor outlet of the general type disclosed in my Patent No. 1,692,097, issued November 20, 1928, of a simplified form and one which can be manufactured at a somewhat lower cost than the specific embodiment of the invention illustrated in said Letters Patent.

Further, the invention has for its object to provide a floor outlet embodying a reversible tubular conduit member, the exposed end of which is closed by a removable cover, the cover and the reversible member being so designed with relation one to the other that the cover may be used on either end of the reversible member regardless of which end be the exposed end.

Further, said invention has for its object to provide an outlet of the character hereinbefore referred to which is especially adapted for use in floors having floor coverings as for example concrete floors with linoleum floor covering.

Further, said invention has for its object to provide an outlet that is particularly adapted for use with floors having a floor covering, the outlet being provided with means serving the dual function of filler for the opening in the floor covering and as a locking device for retaining the reversible member in either of its positions.

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

To the attainment of the aforesaid objects and ends, my invention consists in the novel details of construction, and in the combination, connection and arrangement of parts hereinafter more fully described and then pointed out in the claims.

In the accompanying drawings:

Figure 1 is a perspective view of a floor outlet embodying my present invention.

Fig. 2 is a perspective view, partly in section, illustrating the invention with the reversible member in the closed position.

Fig. 3 is a perspective view of the floor outlet shown in Figs. 1 and 2 with the reversible tubular conduit member in position ready for use.

Fig. 4 is a central vertical longitudinal section of the invention in position in a floor, the reversible member being illustrated in the closed position in full lines and in the ready-for-use position in dotted lines, the conduit pipe being also indicated.

In said drawings 10 designates the casing which may be of any convenient form, preferably that shown, and which is provided at its lower end with a screw-threaded portion 11 that is adapted to receive a conduit 12.

The upper end of the casing 10 is provided with an external shoulder 13 and upon its inner side it is screw-threaded for a determined distance from the end, as at 14. The casing 10 is also provided with a shoulder 21 at the bottom of the internally threaded portion 14, the purpose of which will presently appear.

The reversible tubular conduit member 15 is provided at one end with an external screw-threaded portion 26 that is adapted to

engage with the screw-threaded portion 14 of the casing. The reversible tubular conduit member is provided, at each end, with internal screw threads indicated by the reference numerals 16 and 18 respectively. At that end of the reversible tubular conduit member which is opposite to the externally threaded portion 14, the said member is provided with vertical recesses 17, the purpose of which will also presently appear.

19 designates a screw-threaded cover or top which is designed to be screwed into either end of the reversible tubular conduit member in cooperation with the threaded portions 26 and 18 respectively, depending upon which end of the reversible tubular conduit member is uppermost.

The cover or top 19 is provided with a slot 20 for the application of a screw driver or other tool, whereby the same may be secured in position or removed from the reversible tubular conduit member 15 when desired.

When the conduit member 15 is screwed fully home, within the casing 10, as shown in Figs. 1 and 2, and in full lines in Fig. 4, the end of the screw thread 26 nearest the recessed end of the reversible member will abut against the shoulder 21 formed on the inner side of the casing 10 and arrest the further downward movement of the member 15, thereby causing the end of the member 15 which is uppermost to project out of and above the upper edge of the shoulder 13. The projecting end of the threaded portion 26 of the conduit member 15 is adapted to receive the combined filler-plate and lock washer 22, which is provided with oppositely located apertures 23 for the reception of a spanner wrench whereby said plate may be rotated. The plate 22 serves the double purpose of a lock washer to hold the reversible tubular conduit member 15 securely in position, and also as a filler-plate to compensate for the thickness of the linoleum or other floor covering 24 disposed upon the floor 28 of the building. By this arrangement, when the parts are assembled as shown in Figs. 1 and 2, and in full lines in Fig. 4, the then upper end of the reversible tubular conduit member lies flush with the upper surface of the linoleum or floor covering 24 as does also the exposed face of the combined filler-plate and lock washer 22.

When the parts described are in the position indicated in Figs. 1 and 2, and in full lines in Fig. 4, they are in what may be termed the inoperative or closed position—that is to say the device is not in use for electrical purposes, and a perfectly water-tight closure is provided, which will prevent any water entering the conduit 12 when the floors are scrubbed.

When it is desired to connect the wires 27 that are disposed within the conduit 12 with a telephone or telegraph key or any other electrical device, the filler-plate 23 is removed, whereupon the reversible tubular conduit member 15 may be unscrewed from the casing 10 by means of a spanner engaging the openings 25. The cover plate 19 is then removed from the end of the conduit member 15 having the threads 18, and the conduit member is reversed and threaded over the ends of the conductor wires 27 which are carried through the casing 10 and through the reversible member and extended over the ends thereof, whereupon the reversible member 15 is screwed into the casing 10, as indicated in Fig. 3, and in dotted lines in Fig. 4, and the ends of the conductor wires 27 are then passed through one or both of the slots 17 in the end of the member 15. Whereupon, the cover member 19 is screwed into place into the threaded end 16 of the member 15, thereby sealing the upper end of the conduit member 15, except for the two openings 17, through which the conductor wires 27 may extend.

When the outlet is used on buildings having floors which are covered with linoleum or other similar floor coverings, it will be seen that by reason of the engagement of the upper end of the conduit pipe 12 with the under surface of the flooring and the engagement of the combined lock washer and filler-plate 22 with the top surface of the floor, a convenient means is provided for securing the outlet to the floor and holding it rigidly in position.

Having thus described my said invention what I claim and desire to secure by Letters Patent is:

1. A device of the class described comprising a casing having an opening at the top thereof and having a shoulder below the top, that portion of the casing above the shoulder being internally threaded, said casing at the bottom thereof having means to receive and hold a conduit, a reversible tubular conduit member having an externally threaded portion at one end fitting into the threaded part of said casing and abutting said shoulder, and also having an internally threaded portion at the end which has the external threads, that end of the reversible member which is opposite to the end having the externally threaded portion being provided with an outlet for wires, and a removable cap screwed into said internally threaded portion.

2. A device of the class described comprising a casing having an opening at the top thereof and having a shoulder below the top, that portion of the casing above the shoulder being internally threaded, said casing at the bottom thereof having means to receive and hold a conduit, a reversible tubular conduit member having an externally threaded portion at one end fitting into the threaded part of said casing and abutting said shoulder, the other end of said reversible tubular con-

duit member having vertical recesses for wires, said reversible tubular conduit member also having an internally threaded portion at the end having the external threads, and a removable cap screwed into said internally threaded portion.

3. A device of the class described comprising a casing having an opening at the top thereof and having a shoulder below the top, that portion of the casing above the shoulder being internally threaded, said casing at the bottom thereof having means to receive and hold a conduit, a reversible tubular conduit member having an externally threaded portion at one end fitting into the threaded part of said casing and abutting said shoulder, and also having an internally threaded portion at the end which has the external threads, a removable cap screwed into said internally threaded portion, said externally threaded portion of said reversible tubular conduit member being of a greater length than the depth of said internally threaded portion of said casing, that end of the reversible member which is opposite to the end having the externally threaded portion being provided with an outlet for wires, and a washer threaded onto said externally threaded portion of said reversible tubular conduit member and engaging said casing.

4. A device of the class described comprising a casing having an opening at the top thereof and having a shoulder below the top, that portion of the casing above the shoulder being internally threaded, said casing at the bottom thereof having means to receive and hold a conduit, a reversible tubular conduit member having an externally threaded portion at one end fitting into the threaded part of said casing and abutting said shoulder, the other end of said reversible tubular conduit member having vertical recesses for wires, said reversible tubular conduit member also having an internally threaded portion at the end having the external threads, a removable cap screwed into said internally threaded portion, said externally threaded portion of said reversible tubular conduit member being of a greater length than the depth of said internally threaded portion of said casing, and a washer threaded onto said externally threaded portion of said reversible tubular conduit member and engaging said casing.

5. A device of the class described comprising a casing having an opening at the top thereof and having a shoulder below the top, that portion of the casing above the shoulder being internally threaded, said casing at the bottom thereof having means to receive and hold a conduit, a reversible tubular conduit member having an externally threaded portion at one end fitting into the threaded part of said casing and abutting said shoulder, the other end of said reversible tubular conduit member having vertical recesses for wires, said reversible tubular conduit member also having an internally threaded portion at the end having the external threads, a removable cap screwed into said internally threaded portion, said externally threaded portion of said reversible tubular conduit member being of a greater length than the depth of said internally threaded portion of said casing, and a washer threaded onto said externally threaded portion of said reversible tubular conduit member and engaging said casing, said reversible tubular conduit member also having its recessed end internally threaded for the reception of said cover, whereby said cover may be used regardless of which end of said reversible tubular conduit member is uppermost.

6. In combination with a floor and a floor covering, a device of the character described comprising a casing having an open top, said casing being set in said floor with its top end flush with the face of the floor and having its lower end provided with means for the attachment of a conduit, said casing having an internal shoulder spaced from its top end, a reversible tubular conduit member having at one end a portion adapted to fit into and interlock with that portion of said casing which lies between said shoulder and the top of the casing, said fitting and interlocking portion projecting above the top of said casing, and a combined filler and lock washer secured on the projecting portion of said removable tubular conduit member and engaging the top of said casing.

7. In combination with a floor and a floor covering, a device of the character described comprising a casing having an open top, said casing being set in said floor with its top end flush with the face of the floor and having its lower end provided with means for the attachment of a conduit, said casing having an internal shoulder spaced from its top end, a reversible tubular conduit member having at one end a portion adapted to fit into and interlock with that portion of said casing which lies between said shoulder and the top of the casing, said fitting and interlocking portion projecting above the top of said casing, and a combined filler and lock washer secured on the projecting portion of said removable tubular conduit member and engaging the top of said casing, said washer being of a thickness corresponding to the thickness of said floor covering whereby its top face will be flush with that of the floor covering.

8. In combination with a floor and a floor covering, a device of the character described comprising a casing having an open top, said casing being set in said floor with its top end flush with the face of the floor and having its lower end provided with means for

the attachment of a conduit, said casing having an internal shoulder spaced from its top end, a reversible tubular conduit member having at one end a portion adapted to fit into and interlock with that portion of said casing which lies between said shoulder and the top of the casing, said fitting and interlocking portion projecting above the top of said casing, and a combined filler and lock washer secured on the projecting portion of said removable tubular conduit member and engaging the top of said casing, said casing projecting below the floor, and a conduit pipe into which the projecting portion of said casing is socketed and secured with the conduit member lying against the under surface of the floor while said combined filler and lock washer lies against the upper surface of the floor thereby to retain the device in place.

Signed at the city of New York, in the county and State of New York, this 25th day of April, one thousand nine hundred and twenty-nine.

EUGENE A. STAPLES.