

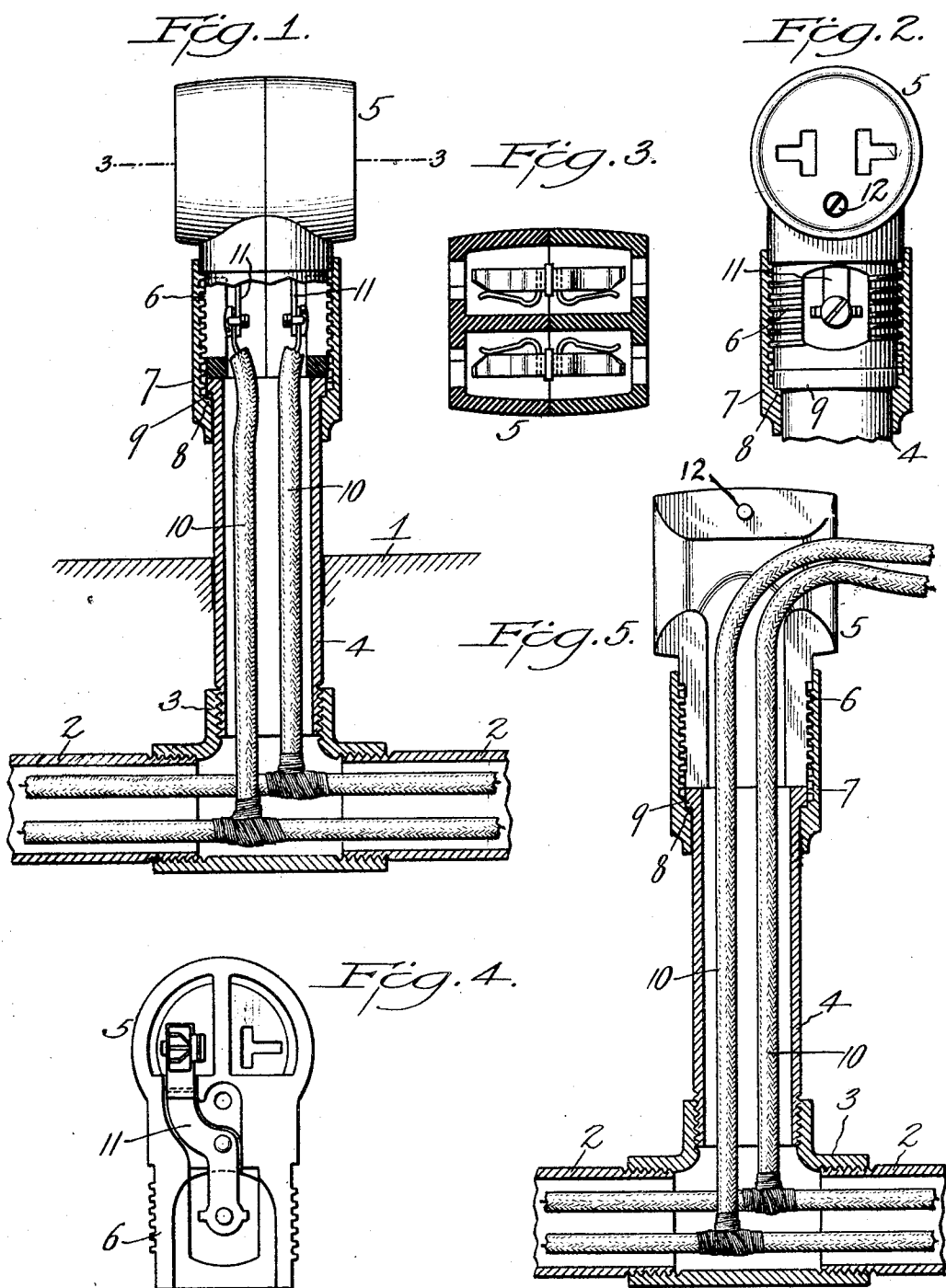
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FLOOR RISER

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WITNESS

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UNITED STATES PATENT OFFICE

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FLOOR RISER

Continuation of application Serial No. 327,019, filed December 19, 1928. This application filed January 21, 1931. Serial No. 510,239.

This application is a continuation of my application, Serial No. 327,019, filed December 19, 1928.

This invention relates to outlets for electrical conductors, particularly those which are used for making electrical connections through the floors of buildings.

In modern office buildings it has become customary to have electrical distribution provided under the floors in such a manner as will enable ready access through suitable outlets at any part of the floor for the purpose of bringing electric service to any particular locality as for example an office desk. Such outlets should not be flush with the floor as they might in that case become impaired by sweepings or washings. It becomes desirable therefore to have the outlet, where the electrical connections are to be made, raised slightly above the floor and as such "risers" are liable to be impinged against by furniture being moved, or by the feet of persons, it becomes desirable to have the fittings properly secured against injury by any such accidents.

The invention comprises certain improvements in tubular risers or "block heads" which are to be securely attached to an underfloor conduit, or otherwise fixed in the floor, and to rise a few inches above the floor. An insulating plug through which the conductors emerging from the tube are threaded, and to which (in one embodiment of the invention) their ends may be secured, has a neck portion which is adapted to fit on the top of the tube and form an extension thereof. To secure the insulating plug to the tubular support in a manner at once simple and rugged, I provide a sleeve that has a flange and an internal thread adapted to engage a flange and thread on the neck of the plug and the support, so that the plug may be drawn down tightly onto the upper end of the tubular support and held there securely against displacement or injury. I prefer to make the insulating plug in two halves, split longitudinally, as this greatly facilitates its manufacture and assembly. Where the wiring is to be secured to the plug, the terminals are accessible through recesses in the neck

wall, which recesses are covered by the sleeve when the latter is screwed over the neck.

Embodiments of my invention are illustrated in the accompanying drawings, in which

Figure 1 is a vertical section of a floor riser showing one embodiment of my invention;

Figure 2 is a side view in partial section showing the outlet fitting at right angles to Figure 1;

Figure 3 is a section through the outlet fitting on line 3—3 of Figure 1;

Figure 4 is a face view showing the interior face of one-half of the outlet fitting; and

Figure 5 is a view similar to Figure 1 showing a modified form of outlet fitting which also embodies my invention.

At 1 is shown the floor which may for example be the floor of an office building. At 2 is shown an example of a sub-surface conduit for the conveyance of electrical conductors. 3 is a T which may be employed in this type of conduit to provide an outlet and support for a riser conduit 4 which projects through the floor 1 and rises a few inches above the floor to serve as a support for an outlet fitting or plug 5. This outlet plug 5 is adapted to receive the jacks of the usual extension plugs and is preferably split longitudinally (i. e. vertically of the fixture when positioned as here shown), into two halves and has a threaded lower portion or neck 6, that is adapted to rest on the upper end of the riser tube or support 4 and form an extension thereon. The neck 6 is recessed to expose the wiring terminals. To secure the parts of outlet plug 5 together and to the tubular support 4, I employ a sleeve 7 that has a threaded portion adapted to engage the threaded neck portion 6 of (for example) the plug 5 and has also an interior flange 8 which engages underneath a circumferential flange 9 of (for example) the tubular riser 4. The sleeve 7 is as shown rotatably mounted on the tube 4. The outlet plug 5, after the conductors 10 are suitably secured thereto, may be secured to the tubular support 4 by holding the plug 5 stationary and turning the sleeve. It will be seen from the construction that no slack wire need be provided to push

down into the tubular riser or support as the electrical conductors 10 may be just long enough to reach the position required for attachment to terminals 11 whose upper ends are embedded in the insulating material of plug 5, and whose lower ends project below the head thereof into the neck 6, so as to lie opposite the recesses or openings in the neck, as shown in Figure 2. These terminals are covered by the sleeve 7 when the parts are assembled. It is also to be noted that the outlet does not have to be rotated and thus the wires do not become twisted. The same advantage appears in the modification shown in Figure 5 where the insulating outlet fitting 5 is made in the form of a T-shaped bushing split axially into two halves, the two halves being (if desired) secured together by a screw, as at 12, and in additional held together by the clamping sleeve 7. In this case the outlet fitting serves as a guide for an extension "cord" or cable, and it will be seen that the conductors again do not need to be twisted or even cut to be threaded through the insulating outlet. With a riser of this construction the insulating outlet fitting is held together in a firm grip and reinforced by the sleeve 7 and the riser 4, which latter in turn is anchored securely in the floor, so that the entire fitting is of a most rugged and substantial construction, able to withstand any ordinary blow that may be brought to bear upon it by movable furniture or by a person's foot.

I claim—

1. In an outlet floor riser the combination of a tubular support member and a plug member divided longitudinally in two halves, one member having a circumferential flange and the other a threaded portion, and a sleeve having an internal circumferential flange adapted to engage against the flange of the one member and an internal thread adapted to engage the threaded member to hold the two halves of the plug member together and draw them into abutment with the support member.

2. A floor riser comprising in combination, a tubular support member having a circumferential flange, an insulating outlet member having a screw threaded end and being split longitudinally through the screw threaded portion, and a sleeve having an internal flange adapted to engage under the flange on the support and an interior screw thread adapted to engage with the screw threads on the outlet member to hold the same together and to the support.

3. A floor riser comprising in combination, a tubular support member adapted to be secured to a sub-floor conduit and extend above the floor, a longitudinally split insulating plug adapted to form insulating holders for the terminals of conductors extending through the support and having external

screw threads, a sleeve turnable on the tubular support and having means for limiting its endwise motion thereon and having also an interior screw thread adapted to engage with the screw thread of the plug to secure the plug to the tube without material rotation or endwise movement of the plug.

4. A floor riser comprising an outlet member having wiring terminals and provided with an apertured threaded neck through which said terminals are accessible, a tubular support for said outlet member, and a threaded sleeve rotatably secured on said tubular support and adapted to be screwed over the apertured threaded neck of said outlet member to secure said fitting to its support and cover the wiring terminals.

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