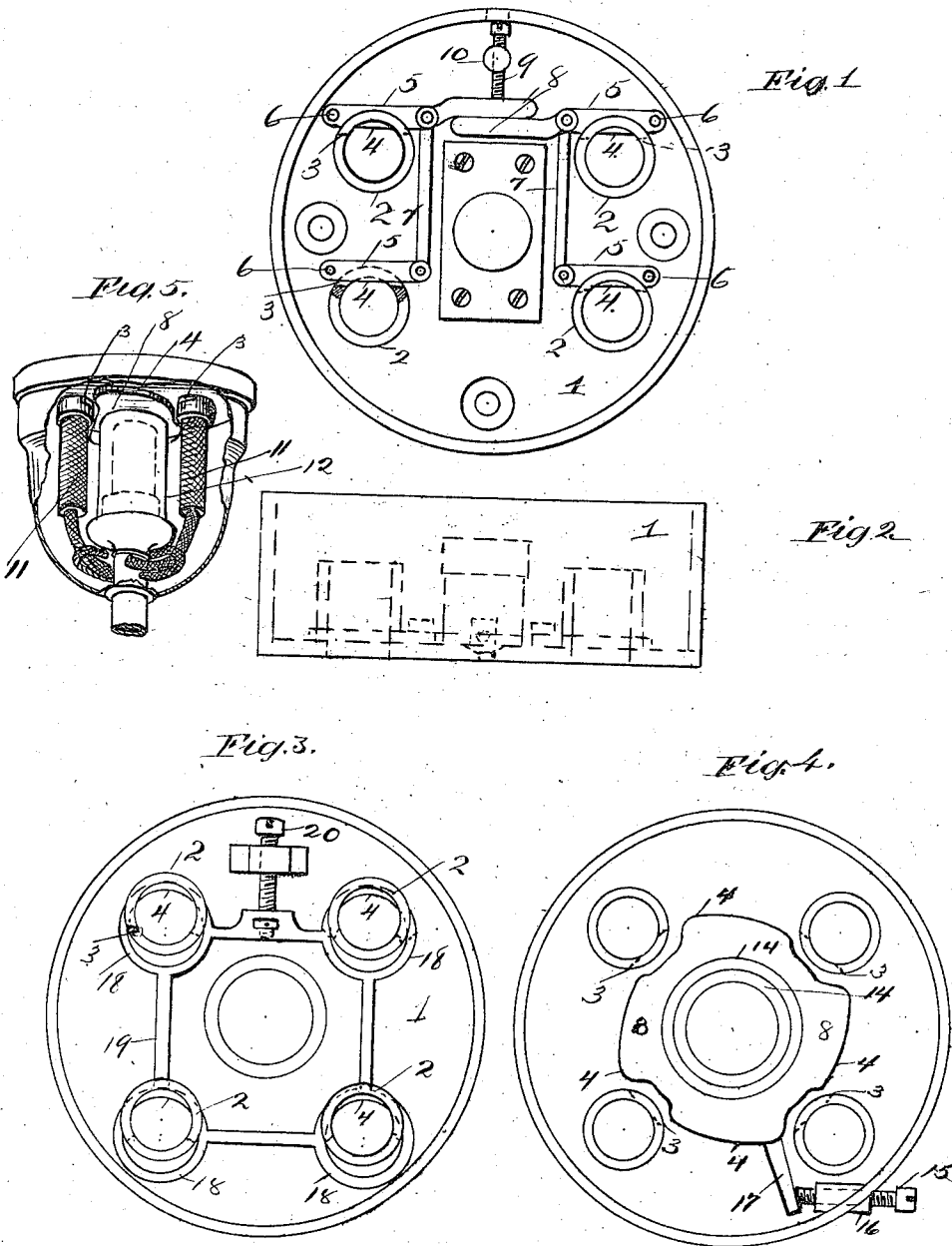


No. 847,718.

PATENTED MAR. 19, 1907.

W. P. AMBOS.
OUTLET BOX AND WALL PLATE.
APPLICATION FILED MAR. 5, 1906.



Witnesses
Lucille O'Neill.
C. H. Oles.

Inventor
Walter P. Ambos
By Wm. M. Moore
Attorney

UNITED STATES PATENT OFFICE.

WALTER P. AMBOS, OF CLEVELAND, OHIO.

OUTLET-BOX AND WALL PLATE.

No. 847,718.

Specification of Letters Patent.

Patented March 19, 1907.

Application filed March 5, 1906. Serial No. 304,165.

To all whom it may concern:

Be it known that I, WALTER P. AMBOS, a citizen of the United States, and a resident of Cleveland, county of Cuyahoga, State of Ohio, have invented certain new and useful Improvements in Outlet-Boxes and Wall-Plates, of which I hereby declare the following to be a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention relates to improvements in outlet-boxes and wall-plates for electric wiring and connecting fixtures; and the objects of the invention are to provide a wall plate or box to which the protruding ends of the flexible tubing which incloses the metallic circuit-wires for the electric current can be readily secured.

The invention is particularly applicable to situations where the wiring has been installed so that the lighting-fixtures can be adapted to either electric or gas light, and is designed to overcome certain objectionable and dangerous features of construction in prior use of these devices.

Heretofore when gas-fixtures have been employed in connection with protruding wires arranged for electric lighting the workmen have often pushed back the wires into the plaster and woodwork and carelessly wound them about the protruding nipple of the gas-pipe. From this habit many fires have originated, the careless manner in which the protruding wires have been arranged resulting sometimes in short circuits and contact with metals, such as the pipes leading to ground. To avoid these dangers and to obtain such further advantages as may hereinafter appear, I employ the clutch devices operating in connection with projecting collars upon the wall plates and boxes as are hereinafter described, shown in the accompanying drawings, and specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan view of a form of box in which the projecting slotted collars form guides for a series of simultaneously-acting grips or clutch-bars and showing link-and-lever mechanism therefor and an operating-screw. Fig. 2 is a side elevation thereof. Fig. 4 shows a box or plate provided with similar collars and an axially-rotatable plate provided with cam edges operating in the same manner in slots in the collars to engage and secure the flexible tubing. Fig. 3 shows the clutch edges

mounted upon a single frame and having a diametrical movement adapted to make engagement with all the flexible tubes simultaneously. The clutch device in all the figures is adjusted by means of a set-screw. Fig. 5 is a perspective view of a perfect wall-plate in which the flexible tubes are shown projecting far enough beyond the plate to prevent contact of the wires with the gas-pipe.

It is readily understood from the figures that if the flexible tubing incasing the wires projects beyond the end of the gas-pipe nipple that there will be no temptation to wind the loose ends about the iron pipe. To insure this protection, the plate 1 in the figures is provided with projecting collars 2, which are transversely slotted at one side at 3 to permit the clutching edges 4 to enter, so that they can press upon the flexible tubing. These edges are shown to be retained in and guided by these slots and to be simultaneously adjustable, so that one movement will secure them all at once. In Fig. 1 this object is accomplished by forming these edges upon short bars 5, which are pivoted at 6 at their outer ends to the plate and are connected by means of links 7 into pairs. The inner ends of two of these bars project at 8 and overlap, and a set-screw 9, moving in a lug 10 upon the plate, serves to throw in all the bars and clutch edges into engagement with the flexible tubing 11 and prevent the ends thereof from being accidentally or intentionally pushed back into the wall. In Fig. 5 the iron gas-pipe projects from the wall, and the fixture is attached thereto by means of an insulating-tube 12, and the ends of the flexible incasing-tube should project from the wall to a distance of not less than the outer end of the insulating-tube, which is formed usually of hard insulating composition, such as mica composition. In Fig. 4 the flexible tubing is secured by means of similar narrow clutching edges 4 upon a rotatable plate 8, moving about a central collar 14. These edges are cam-shaped, so that a slight revolution of the plate will bring all of them into engagement at once. A set-screw 15, moving in a lug 16 upon the plate and engaging with an arm 17, adjusts the clutch edges. In Fig. 3 the clutch edges are upon a series of rings 18, which enter the slots in the collars, and the rings are mounted upon a central connecting-ring 19, which receives diametrical adjustment by means of a set-

screw 20. In all of these devices the important features are found in the collars which receive the extremities of the flexible tubing, the clutch edges which enter the slots and are guided thereby; and mechanism for simultaneously moving the clutching edges to engage the flexible tubing. I exemplify these features in the constructional forms above described.

10 Having described the invention, what I claim as new, and desire to secure by Letters Patent, is—

15 1. The combination with a wall plate or box having openings adapted to receive flexible tubes, of collars about said openings, said collars having transverse slots in their walls, clutch members having edges adapted to enter said slots and engage said flexible tubing and adjustable mechanism, substantially as
20 described, for simultaneously moving said clutch members in said slots to engage said flexible tubing.

25 2. The combination with a wall box or plate having openings arranged to receive the

circling said openings, said collars having transverse slots in their walls, clutch members having edges adapted to enter said slots and be guided thereby, and to engage said flexible tubing, a device operatively connect- 30 ing said clutch members, whereby their movements are simultaneous, and an adjusting-screw mounted in said plate and engaging said connecting device.

35 3. The combination with a wall-plate provided with openings for the insertion of insulating-tubes, of raised collars about said openings, said collars having transverse slots, and means for securing said tubes simultaneously
40 in said slots consisting of a rotatable disk upon said plate, and cam edges upon said disk, said cam edges being adapted to enter said slots and engage said tubes, and means for rotating said disk.

In testimony whereof I hereunto set my
45 hand this 20th day of February, 1906.

WALTER P. AMBOS.

Witnesses:

C. H. OLDS,
Wm. M. MONROE.