

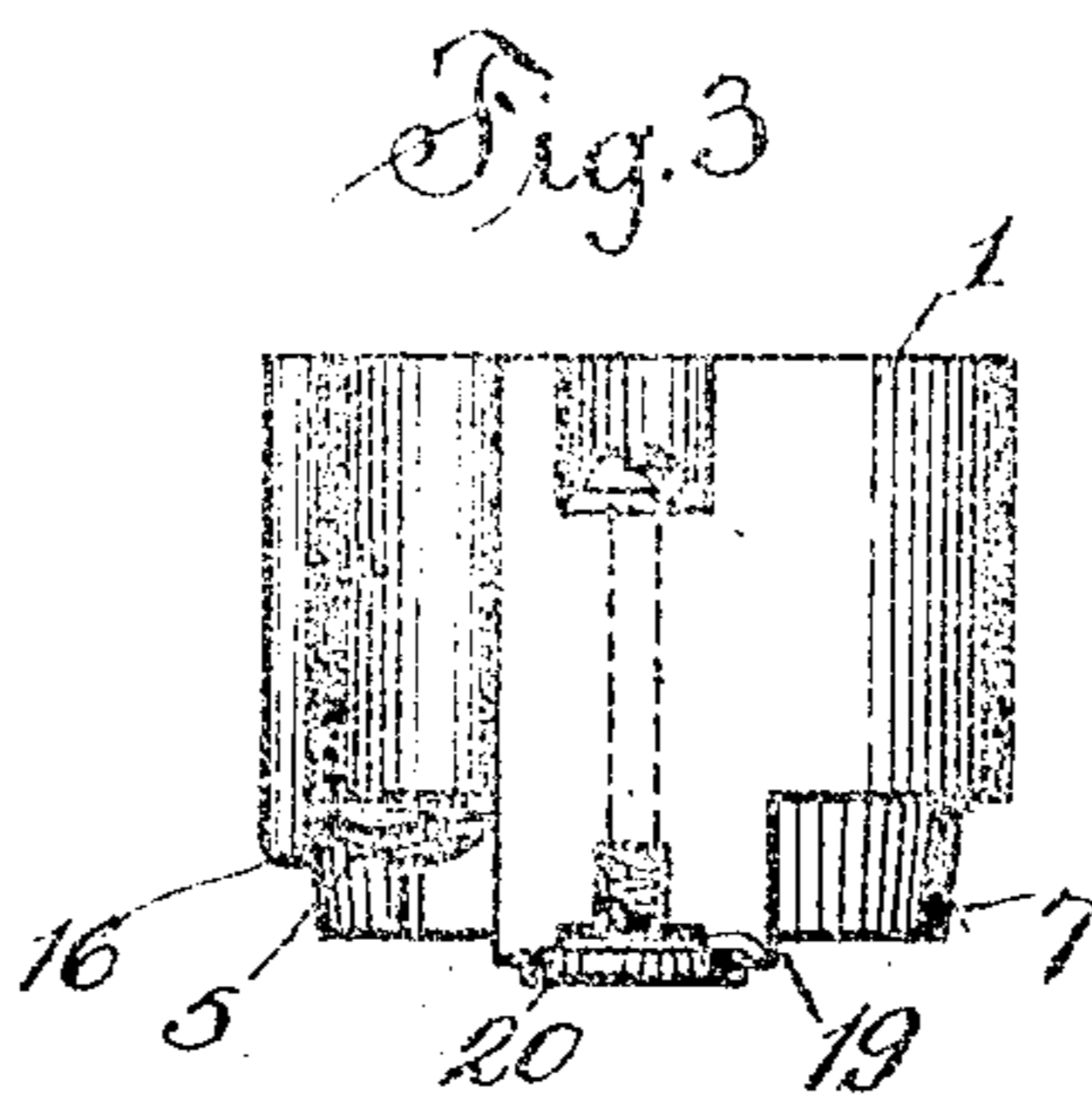
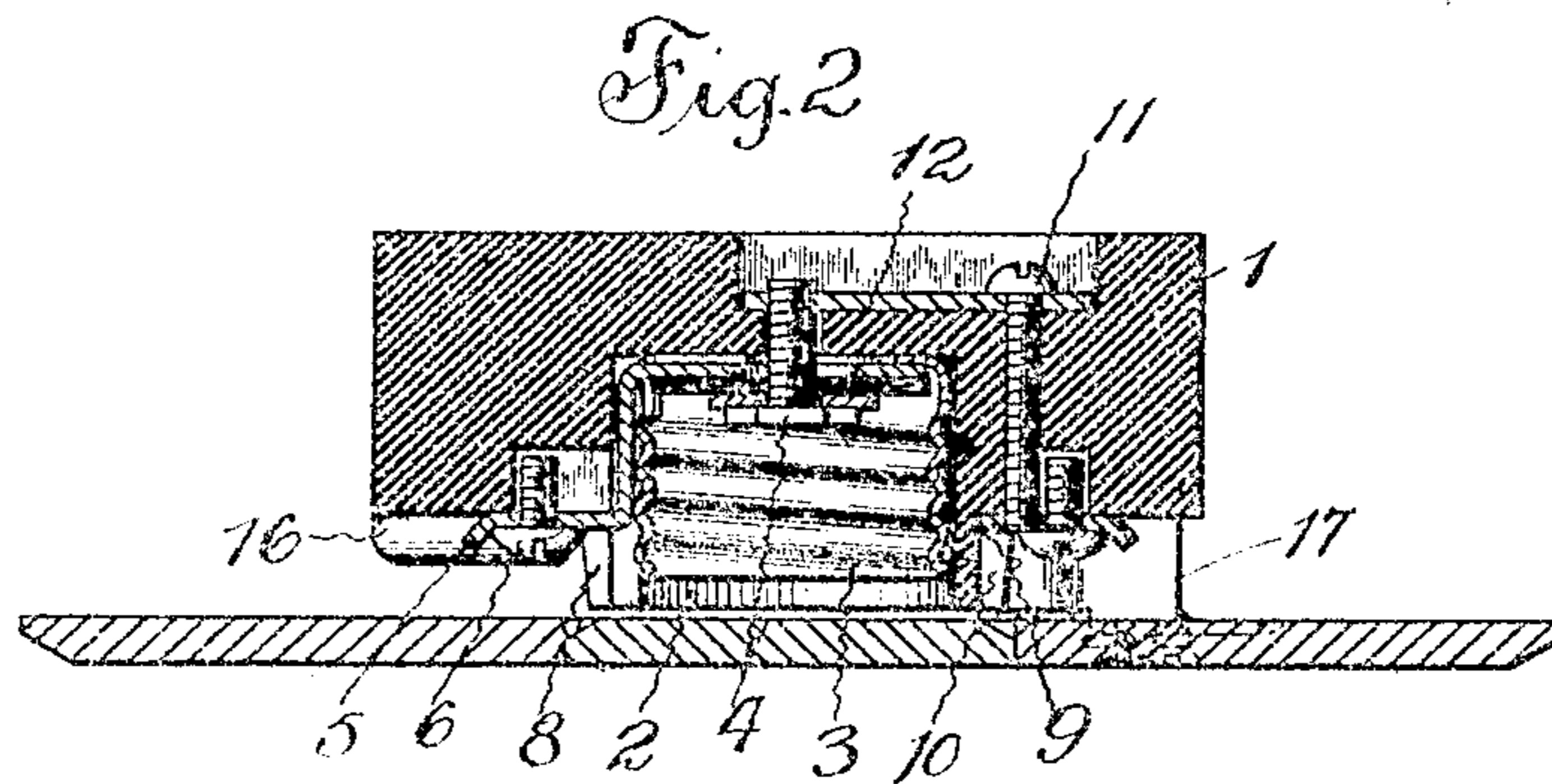
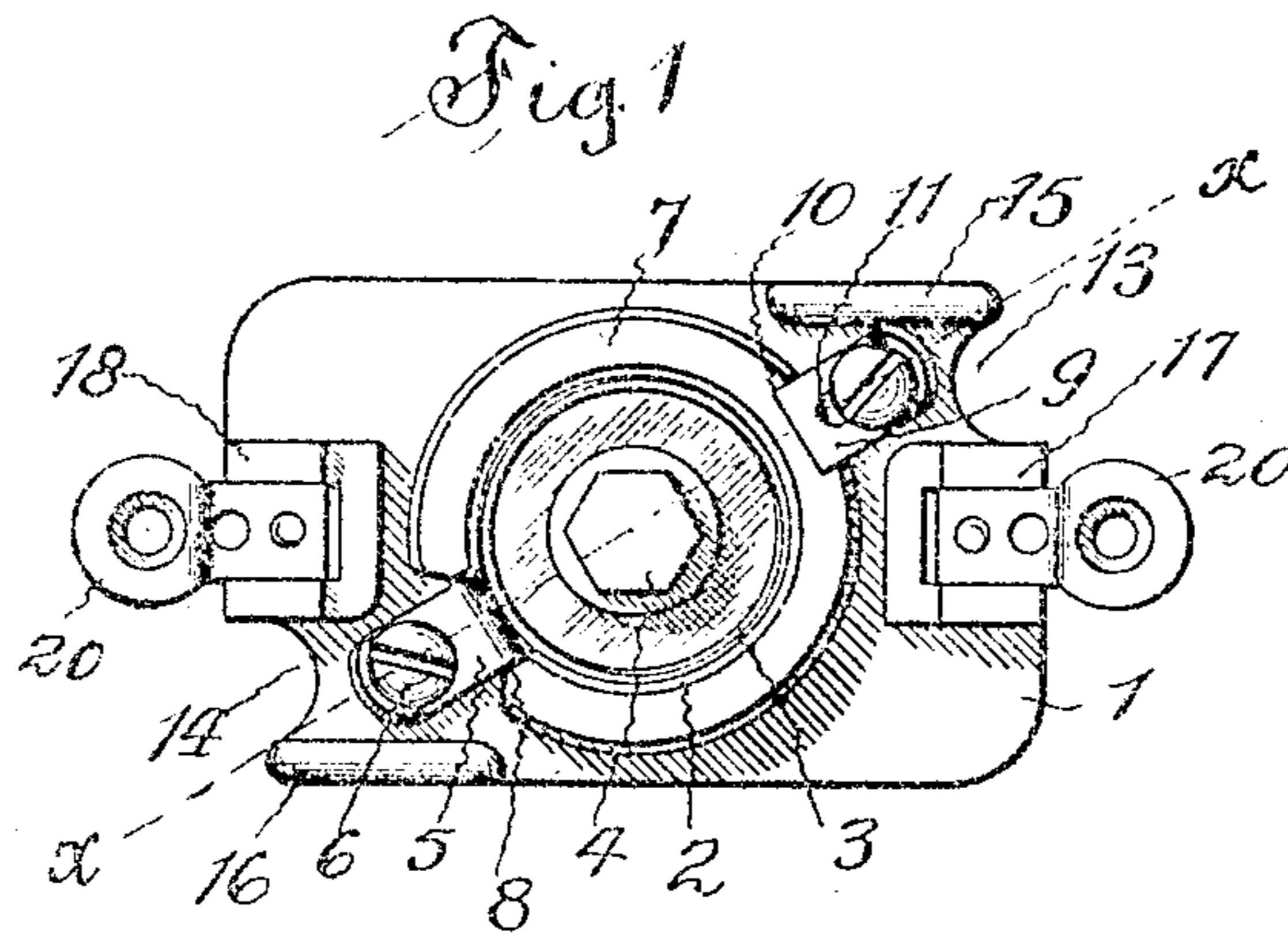
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F. T. WHEELER.

FLUSH RECEPTACLE.

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FLUSH-RECEPTACLE.

No. 882,225.

Specification of Letters Patent.

Patented March 17, 1908.

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To all whom it may concern:

Be it known that I, FRANK T. WHEELER, a citizen of the United States, and a resident of Plainville, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Flush-Receptacles, of which the following is a full, clear, and exact description, whereby any one skilled in the art may make and use the same.

The invention relates generally to receptacles such as are used for making electrical connections for an electric lamp or other device, through the medium of a plug which may be introduced into the receptacle.

It relates more particularly to what is known as a flush receptacle, that is, a device arranged to be inserted in an opening in the floor or wall, having all the parts contained within the body of the device, which in turn is inserted in the opening and covered by a plate which lies flush with the surface of the floor or wall.

The objects of the invention are to provide a simple, strong and compact structure which may be readily applied, and to the terminals of which the line wires may be readily secured.

A further object is to provide a special form of insulating body in which the terminals and metallic parts may be arranged and perfectly isolated and insulated.

A still further object is to produce a device light and compact in construction and with the insulating parts arranged in such manner as to reduce the liability of fracture.

Referring to the drawings:—Figure 1 is a plan view of the receptacle with the face plate removed. Fig. 2 is a vertical sectional view on the line $x-x$ of Fig. 1. Fig. 3 is an end view of the device.

One of the particular objects of the present invention is to provide a means whereby the face plate which covers the receptacle and wall opening, may be applied to the body of the receptacle without liability of fracturing the porcelain or other insulating material. It is of course necessary to have all of the conductors and metal parts thoroughly insulated, and great difficulty has been heretofore experienced in securing the proper insulation at the same time providing mechanical connections in a safe and convenient manner.

Referring to the drawings:—The numeral

1 denotes a piece of insulating material such as porcelain or composition which is provided with a central cavity 2, within which there is mounted a threaded sleeve contact 3, held in place within the opening 2 by a central stud contact 4 suitably insulated from the sleeve contact and passing through a conductor located in the recess in the rear face of the block of insulating material.

The threaded sleeve contact is connected with a line wire terminal 5 provided with suitable line wire attaching means 6. This terminal 5 is brought up along the side of the threaded sleeve contact, and has an out-turned portion which rests upon the front face of the base piece. The central opening is surrounded by a wall or lip of insulating material 7 raised to a considerable distance above the main face of the base and is cut away as at 8, to form a passage for the conductor 5.

The central stud contact 4 is electrically connected with the terminal conductor 9. This conductor consists of a metallic strip, one end of which is entered in the slot 10, formed in the outer surface of the rim or lip 7. It is electrically connected with the central stud contact 4, through a screw 11, passing through a metallic strip 12 located in the rear face of the base, and in contact with the central stud contact 4.

To provide for the admission of line wires, two grooves or slots 13, 14 are provided in the base piece appurtenant to the contact terminals 9 and 5. Thus the wires may be brought through from the rear, and all connections may be made on the face of the block of insulating material or base. At the outer edge of the base and arranged adjacent to the terminals 9 and 5 and the wire openings 13—14, are ribs of insulation 15—16. These are just a sufficient height to preclude the possibility of the end of the line wire rubbing against the outlet box in which the receptacle is usually mounted, or against any other conducting material whereby a short circuit between the terminals may be established.

At both ends of the base piece are raised blocks or face plate supports 17 and 18, each provided with a ledge 19, upon which is mounted an eye 20, which forms a convenient means for securing the receptacle in the wall opening, as well as for securing the face plate to the receptacle. It will be noted that the central rim 7 and the bosses 17—18 are

not connected together, and thus it is quite possible to secure the face plate in place without liability of fracturing the base plate owing to its uneven contour.

5 In devices of this class where porcelain is used, although the dies may be formed with the greatest accuracy, porcelain often warps in cooling to such an extent that its surface does not remain level and square with the
10 main parts of the base. It therefore follows that the base plate cannot be applied in proper position. To overcome these objections, the present device contemplates the use of the central insulating rim 7 and the
15 two end bosses so arranged that the plate will rest upon and may be screwed to the bosses and always held in parallelism with the main face of the base piece. It will also be noted that the main face of the base piece
20 is a considerable distance from the face plate, and thus free space for insulation is secured for the terminal wires without necessitating the use of recesses which increase the liability of fracture.

25 In the device herein described, the various parts to which a tool must be applied, are free and open and rest upon the strong body part of the insulator, in contradistinction to devices in common use where recesses in the
30 face of the insulator are employed. In the latter class of devices it is a common occurrence to fracture the insulator upon inserting a tool such as a screw-driver.

Obviously the exact details may be varied
35 to a considerable extent without departing from the spirit or intent of the invention.

What I claim as my invention and desire to secure by Letters Patent is:—

40 1. A flush receptacle comprising a base or block of insulating material having a central opening, a threaded sleeve contact and a central stud contact mounted therein and insulated one from the other, terminals extending along the face of the block and connected
45 respectively with the threaded contact and the central stud contact, an annular flange or projection surrounding the central opening

and rising from the face of the block of insulating material, isolated bosses of insulating material arranged on opposite sides and also
50 rising from the face of the block to a greater distance than the height of the annular flange, a face plate resting upon said bosses and eyes secured to the bosses and providing
55 a means of attachment for the face plate, and a means of attachment for the block of insulating material.

2. In a flush receptacle, in combination, a base of insulating material, provided with a central cavity, a threaded sleeve contact and
60 a central stud contact mounted therein and insulated one from the other, terminals connected respectively with the threaded sleeve contact and the central stud contact and resting upon the face of the base piece, an
65 annular flange extending about the central opening and above the face of the base piece, isolated bosses of a less width than the width of the base piece, said bosses extending above the face of said base piece and forming sup-
70 ports for a face plate, means for attaching said face plate to the bosses, and guards of insulating material extending from the face of the base piece adjacent to the terminals.

3. In a device of the class specified, a base
75 of insulating material having a central recess in its front face, a rim of insulating material encircling the central opening and extending above the face of the base and provided with a cutaway portion, bosses arranged upon op-
80 posite sides of said central projection and provided with means for attachment of a face plate, terminal contacts mounted upon the front face of the base, one of said con-
85 tacts extending through the cutaway portion in the rim and connected with the tubular sleeve contact within the central opening, the second of said conductors connected with the central stud contact, and a conductor uniting the central stud contact and its terminal.

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