

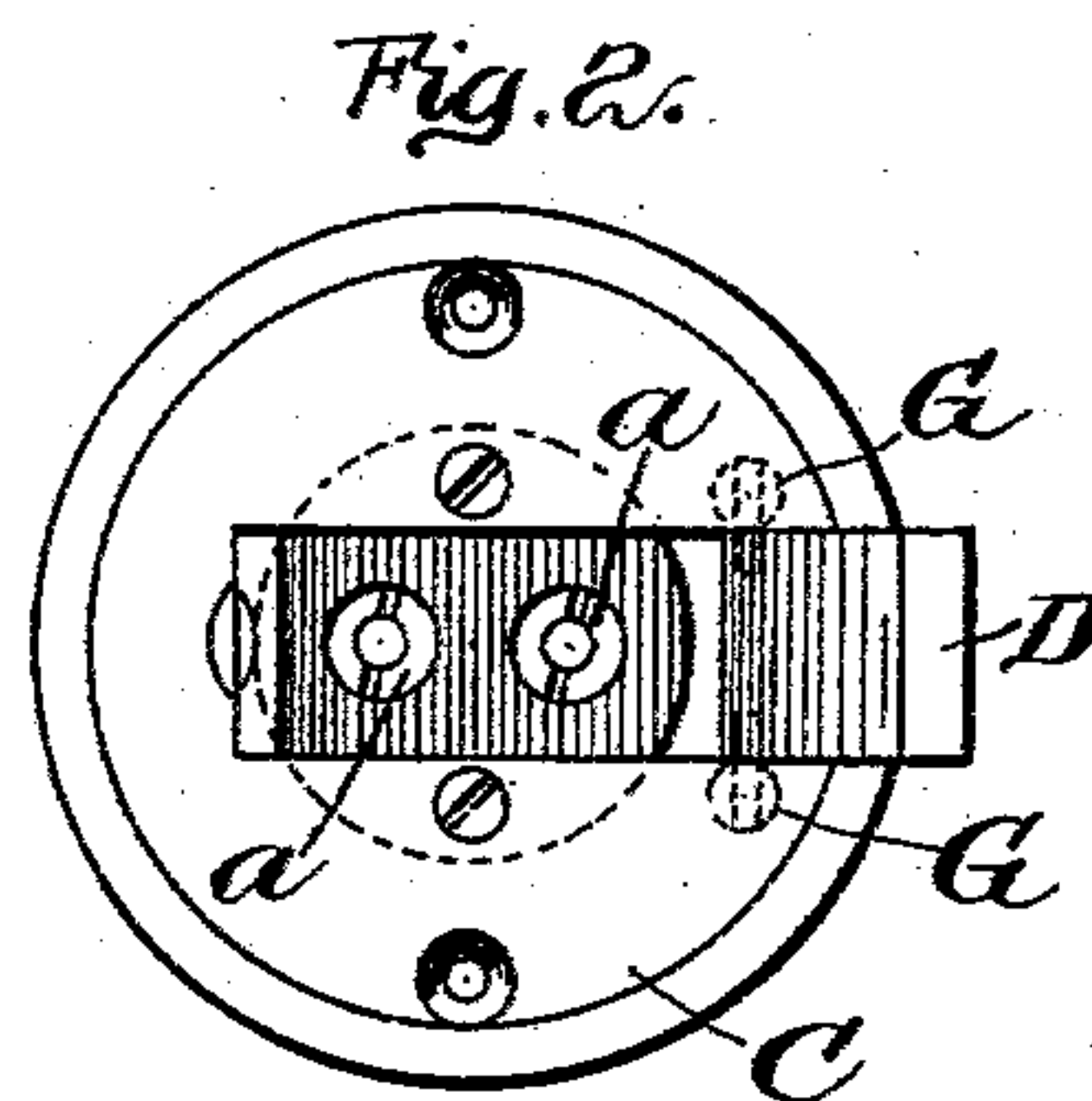
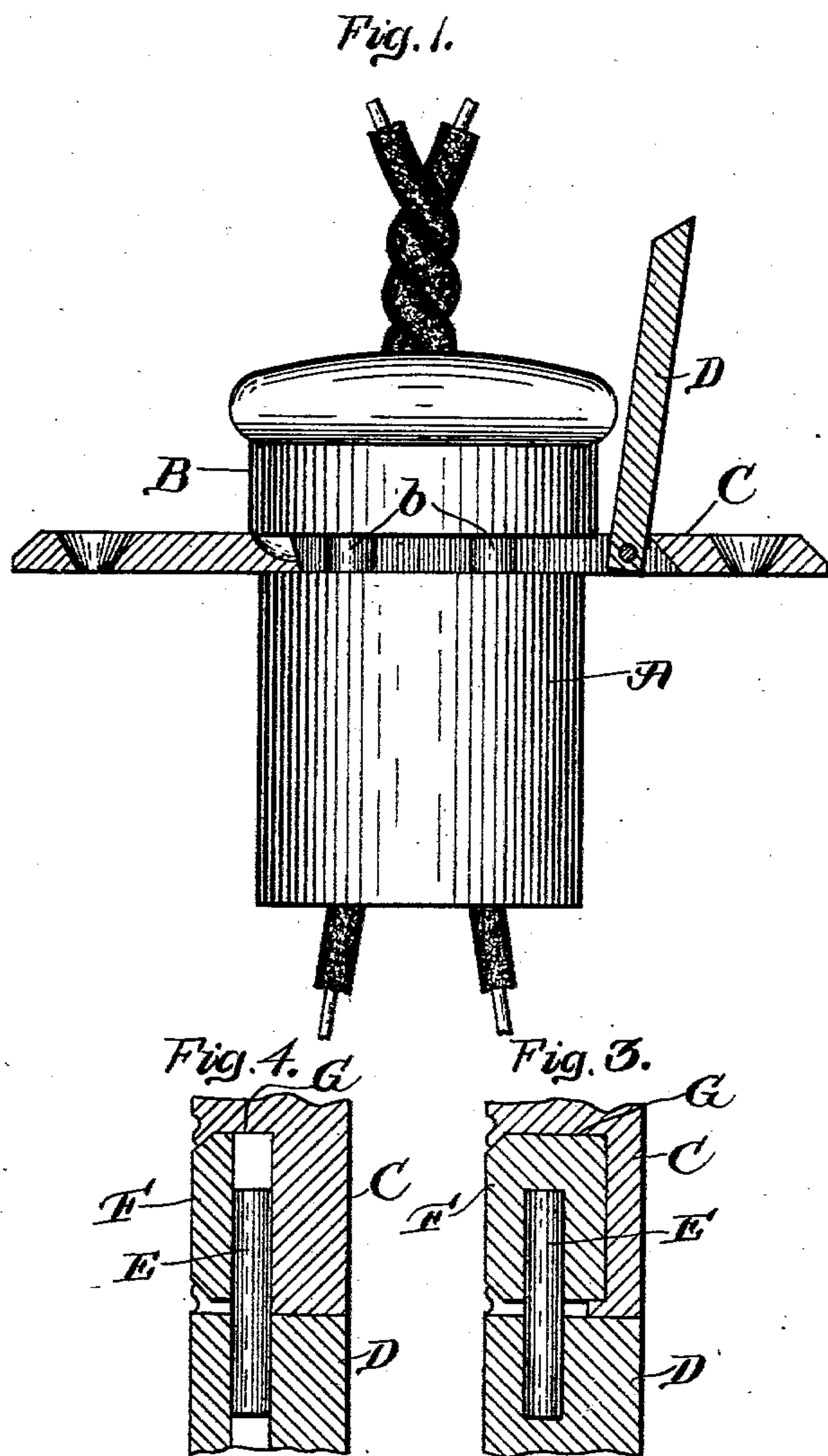
No. 715,209.

Patented Dec. 2, 1902.

N. MARSHALL.
FACE PLATE FOR ELECTRIC COUPLINGS.

(Application filed Apr. 14, 1902.)

(No Model.)



WITNESSES:
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FACE-PLATE FOR ELECTRIC COUPLINGS.

SPECIFICATION forming part of Letters Patent No. 715,209, dated December 2, 1902.

Original application filed November 7, 1900, Serial No. 35,775. Divided and this application filed April 14, 1902. Serial
No. 102,744. (No model.)

To all whom it may concern:

Be it known that I, NORMAN MARSHALL, of
Newton, in the county of Middlesex and State
of Massachusetts, have invented certain new
and useful Improvements in Face-Plates for
Electric Couplings, of which the following is
a specification.

This application is a division of application,
Serial No. 35,775, filed November 7, 1900.

10 The invention relates to devices for pivot-
ally securing a lid or plate within an open-
ing formed in a metallic plate and is espe-
cially useful in connection with the manu-
facture of face-plates for electric couplings.
15 These face-plates are provided with an open-
ing which is closed when the coupling is not
in use by a lid which fits within the opening.
This lid is pivoted within the opening in the
face-plate, so that it may be swung back
20 when the coupling is to be used or may be
turned down, so as to close the opening when
the coupling is not being used. The lid when
closed should be just flush with the face-plate,
so that the plate and lid will present a smooth
25 and substantially unbroken surface.

Heretofore it has been customary to form
the pivotal connections between the lid and
face-plate by drilling in from the opposite
edges of the plate until the drill enters the
30 opening in the plate and then inserting the
pivot-pins through the holes thus drilled. It
is impracticable to thus drill the holes with
accuracy, owing to the length of the hole
which must be drilled and the size of drill
35 employed, and it is impractical, therefore,
with this manner of forming the pivoted con-
nection between the lid and face-plate to
bring the lid exactly flush with the surface
of the face-plate. Moreover, this is a com-
40 paratively expensive construction, owing to
the time and skill required in making this
form of pivotal connection between the lid
and plate.

By the construction embodying the present
45 invention a pivotal connection is provided
which may be conveniently and cheaply made
and a connection which enables the lid to be
brought even with the face of the plate when
forming the connections. This construction

comprises two plugs, which are drilled or 50
slotted to receive pivot-pins extending from
the edges of the lid and are secured in holes
located at the sides of the opening in the face-
plate and extending partially through said
plate from the back. In assembling the parts 55
the pivot-pins are secured in the lid (or they
might be secured in the plugs) and are then
passed into the holes or grooves in the plugs.
The lid is then placed in the opening and at
the same time the plugs are introduced into 60
the holes in the back of the face-plate and
secured therein either by the friction be-
tween the plugs and the sides of the hole or
by drawing in the metal at the edges of the
holes over the edges of the plugs or in any 65
other manner.

The features of the invention will be better
understood from a detailed description of a
face-plate embodying the same, and in the
accompanying drawings I have shown a face- 70
plate such as is used in connection with elec-
tric couplings.

In the drawings, Figure 1 is a sectional
view showing an electric coupling provided
with a face-plate having a lid for closing the 75
opening therein. Fig. 2 is a plan view of the
face-plate and the receptacle of the coupling.
Fig. 3 is an enlarged sectional view showing
a pivotal connection, and Fig. 4 is a similar
view of a modified form of connection. 80

In the drawings, A indicates a receptacle
forming one member of an electric coupling,
the other member of which consists of a plug
B, having coupling-pins *b*, adapted to be tem-
porarily inserted in the coupling-sleeves *a*, 85
carried by the receptacle A. The face-plate
C is secured to the end of the receptacle A
and is provided with an opening or recess *c*,
through which the pins *b* are inserted in the
sleeves *a*. A lid D fits within the recess *c* 90
and is pivotally connected with the plate A,
so that it may be turned back, as shown in
Fig. 1, or may be turned down to fill the re-
cess *c*. The pivotal connections between the
plate A and lid D, Fig. 3, consist of pivot- 95
pins E, projecting from the opposite edges of
the lid and entering plugs F, secured in holes
formed in the back of the plate A and ex-

tending partially through the plate. In forming the pivotal connections the lid is drilled in its edges and the pins E driven in about one-half their length. The face-plate A is
 5 drilled at the points near the edge of the lid-recess c, but only a part way through. The plugs F, which have been drilled laterally to receive the pins E, are placed on the pins and inserted in the recesses G. The outer edges
 10 of the plugs may be beveled, as shown, and the plugs may be secured in the recesses G by swaging or drawing in the metal of the plate A over these beveled edges, as shown. With this construction the holes in the plugs
 15 may be accurately formed to bring the lid flush with the face-plate when the parts are assembled. This joint may also be cheaply made and forms a strong and reliable connection.

20 In the construction shown in Fig. 4 the plug F' is slotted across its inner end instead of being drilled, as in Fig. 3. In assembling the parts the lid is placed in the recess c, with the pins E extending into the recesses G, and
 25 then the plugs are inserted, so that the slots register with the pins and confine the pins between the bottoms of the recesses G and the bottoms of the slots.

What I claim, and desire to secure by Letters Patent, is—

30 1. A plate having an opening therein, a lid fitting within said opening, pivotal connections between said plate and lid consisting of pins extending laterally from the edges of
 35 said lid and plugs secured in recesses in the plate into which said pins extend, substantially as described.

2. As an article of manufacture, a face-

plate with an opening adapted to be closed by a pivoted lid, a pivotal connection constructed with pins in the edge of the lid which
 40 extend laterally into round plugs inserted into closely-fitting recesses extending partially through the face-plate and held in position by closing the surrounding metal of the
 45 face-plate over the edge of the plugs, substantially as described.

3. In a face-plate, a pivotal connection consisting of pins projecting laterally from the edges of the lid and extending into round
 50 plugs secured in holes in the back of the face-plate, substantially as described.

4. In a face-plate, a pivotal connection consisting of pins projecting laterally from the edges of the lid and extending into round
 55 plugs secured in holes in the back of the face-plate by closing the metal of the plate over the edge of the plugs, substantially as described.

5. A pivotal connection between two plates consisting of a pivot-pin projecting from the edge of one plate and a round plug secured
 60 in a recess extending in from the surface of the other plate, substantially as described.

6. A pivotal connection between two plates consisting of a pin E projecting from the edge of one of the plates, and a plug F' secured in a recess G in the other plate and having a slot across its inner end for receiving
 65 said pin, substantially as described.

In testimony whereof I have affixed my signature in presence of two witnesses.

NORMAN MARSHALL.

Witnesses:

F. N. KIRSCHBAUM,
 E. M. BAKER.