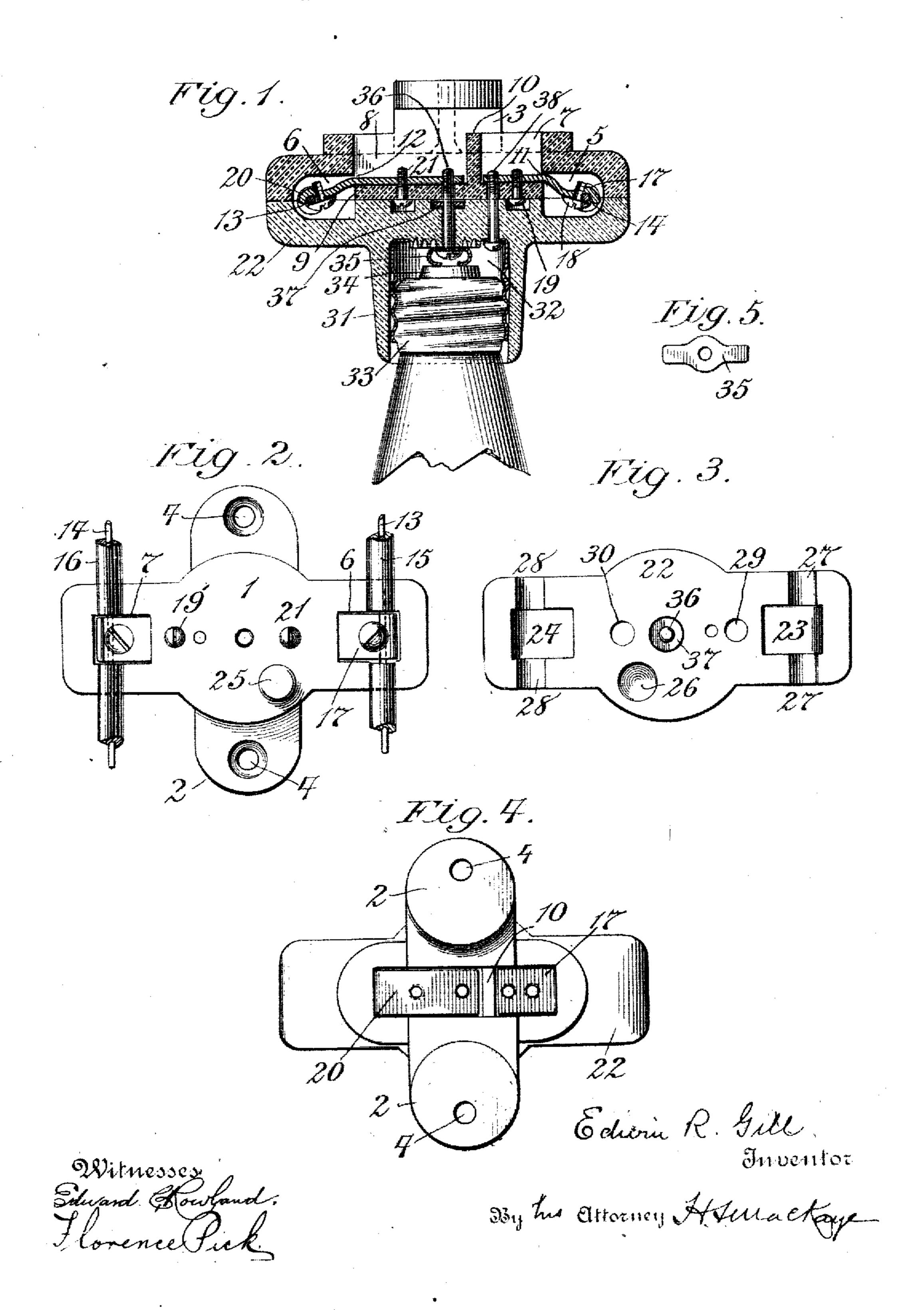
## E. R. GILL. SUPPORT FOR INCANDESCENT LAMPS. APPLICATION FILED JAN. 17, 1905.



## UNITED STATES PATENT OFFICE.

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## SUPPORT FOR INCANDESCENT LAMPS.

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Specification of Letters Patent.

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To all whom it may concern-

Be it known that I, EDWIN R. GILL, a citizen of the United States, residing in the city of Yonkers, county of Westchester, and State 5 of New York, have invented a certain new and useful Improvement in Supports for Incandescent Lamps, of which the following is a specification.

This invention has relation to an improved 10 form of support for lamp-sockets, whereby incandescent electric lamps can be rapidly and easily installed by the use of means providing a maximum of safety from fire or leakage. The means employed are simple, cheap, and easily molded from porcelain or any other appropriate material.

My invention is illustrated in a preferred form in the accompanying drawings, where-111---

Figure 1 is a vertical section of my device as applied to a ceiling. Figs. 2 and 3 are plan views of the two parts of my device turned through one hundred and eighty degrees as compared with Fig. i and showing the faces 25 which come together. Fig. 4 is a view underneath the device, and Fig 5 is a detail of a

contact-spring used in my socket. This device is composed of what I term a "wall-section" and a "lamp-section," these 30 two parts or sections being easily separable. The lamp is carried on one section, which is carried by the other, this latter in turn being attached to the wall or ceiling and acting as the support for the whole. It is one advan-35 tage of this invention that it provides a cheap and easily-handled means whereby both of the wires which supply the current to the lamps are supported independently of the lamp-supporting member of the socket and 40 at the same time are effectually preserved from contact with walls or ceilings, thus avoiding danger from fire and loss of current by leakage. In the preferred form shown the wall-section 1 is supported at a considerable 45 distance above the wall or ceiling by means of rounded feet 2, joined by an arch, one-half of which is seen at 3 in Fig. 1. These feet are. provided with perforations 4, through which bolts or screws can be passed, as indicated in 50 the dotted lines in Fig. 1. The main body of the wall-section extends at right angles to | against the inner face of the wall-section and the line joining the centers of the two feet 2, and is provided with two pairs of cavities in two different planes. The inner cavities are 55 shown at 5 and 6 in Fig. 1, and these are open

on the inner or contact face of the wall-sec-

tion. The outer cavities are shown at 7 and 8, and lie in a plane nearer the wall or ceiling than the inner cavities. The inner cavities are symmetrically situated and are separated 60 by the plate 9, from which there extends a partition 10, which separates the cavities 7 and 8. Under the two outer edges of the plate 9 two slots are provided at I1 and 12, whereby communication is had between the 65 cavities 5 and 7 on one side and the cavities 6 and 8 on the other. In the preferred form of attachment, wherein contact is made with a central terminal in the lamp, the partition 10 is placed on one side of the center, as is plainly 70 shown in Figs. 1 and 4. The cavities 7 and 8 may be left open or not, as desired, and the drawings illustrate the form given to the socket as sent out from the factory and as preferably molded in porcelain or the like.

The two wires which supply current to the lamp are shown at 13 and 14, and their insulation at 15 and 16. These insulated wires pass across the inner face of the section 1, there being provided semicircular openings 80 into the sides of the cavities 5 and 6, so as to bring the center of each wire 13 and 14 into the plane of the contact-face, as plainly shown in Fig. 1. The wires are secured in this position as follows: The insulation is cut off of 8; the wires for a distance corresponding to the width of the cavities 5 and 6, and the bare wires are firmly attached by conducting means to the leading-in strips. The wire 14 is secured to the shorter leading-in strip 17 go by means of the set-screw 18, and this strip is so bent that it can be pushed from the cavity 5 into the cavity 7, so as to lie flat against the under side of the plate 9, while extending out to the position shown in Fig. 1, where it 95 partly embraces the wire 14. A screw. 19 passes through an appropriate opening in the plate 9 and screws into the strip 17, so as to hold it in place. The leading-in strip 20 is secured to the wire 13 in the same manner as 100 described above for the strip 17; but the strip 20 is longer than the strip 17, both strips ending at the foot of the partition 10. The strip 20 is fastened in place by a screw 21 passing through the plate 9.

The hamp-supporting section 22 fits closely is provided with the cavities at the two ends of its contact-surface shown at 23 and 24, which register, respectively, with the cavities 110 7 and 6 of the wall-section. In order that all mistakes may be avoided in fitting one sec

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tion upon the other, a projection, as 25, is on [ one of the sections and the other section is provided with the cavity 26 to receive the same when the two sections are rightly placed 5 together. Semicircular openings 27 and 28 are provided in the sides of the cavities 23 and 24, respectively, and these openings register with the similar openings heretofore mentioned for providing circular passages 10 which accommodates the insulation 15 and 16 on the fitting wires. These semicircular openings should fit tightly down around the insulation on the wires, and thus prevent ac- | ratus without departing from the spirit of cess of moisture. The contact-face of the 15 section 22 is provided with smaller cavities 29 and 30, which fit over the heads of the screws 19 and 21, respectively.

The outer side of the lamp-section 22 is provided with a cylindrical extension 31, 20 containing the threaded metallic shell 32, the bottom of which shell is annular, as shown in Fig. 1, and surrounds an inward projection of the body of the lamp-section 22, which is preferably fluted or grooved, as shown in Fig. 25 1. The metallic stem of the lamp is shown at 33 and screws into the shell 32, so as to bring the central terminal 34 down upon an appropriate terminal in the socket which, in the form shown, takes the shape of a spring 30 35, held in place by the central screw 36 and having its end curled up over the head of said

screw to make a spring contact with the lampterminal. The screw 23 passes through registering openings in the two socket-sections 35 and screws into the leading-in strip 20 near its inner end. A retaining-washer 37 is preferably supplied, surrounding the screw 36 and fitting it tightly enough to prevent the screw

from dropping out when the lamp-section is 40 held in the position shown in Fig. 1 and before a lamp is inserted. This washer may be of any material, such as paper or other cheap stuff, and fits within an appropriate cavity in one or the other of the socket-sections. In

45 the form illustrated the cavity is supplied on the lamp-section. The screw 38 passes through appropriate registering openings in the bottom of the shell and in the two socketsections and screws into the threaded open-50 ing in the strip 17 near the partition 10.

When the whole device is assembled with a lamp, as shown in Fig. 1, current entering, for instance, by the wire 13 passes through the strip 20 to the screw 36, thence by the 55 spring 35, to the lamp-terminal 34. Passing out by the terminal 33 and shell 32 the current traverses the screw 38, the strip 17, and the wire 14 back to the generator.

It will be seen that by the use of this form 60 of socket the wall-sections can be rapidly adjusted in place and the feed-wires secured thereto before the lamp-supporting sections are adjusted in place. These latter are quickly secured by the two screws 36 and 38,

and to bring the current to the two terminals inside of the socket.

The parts made as described can be easily molded in porcelain or other appropriate material and require very little manipulation to 70 prepare them for the market. The exposed portions of the wires and of the leading-in strips are so placed as to be entirely out of danger of contact with anything in the vicinity which might cause difficulty or danger by 75 touching them.

Various changes can be made in this appamy invention, and I am not to be limited to the precise details herein shown and de- 80 scribed.

What I claim is—

1. In a device of the class described, a wallsection having a pair of electrically-separated cavities on its inner side and a corresponding 85 pair of electrically-separated cavities on its outer side and having openings joining each inner cavity to its corresponding outer cavity, two metallic leading-in strips, one at each end, and each extending from an outer go cavity through one of said openings into the corresponding inner cavities, means within each inner cavity for making electrical connection between each leading-in strip and an electric wire, a lamp-supporting section fit- 95 ting over said wall-section, a lamp-socket thereon, and means for making electrical connections between each of said leading-in strips and said socket, substantially as described.

100 2. In a device of the class described; a wallsection and a lamp-supporting section made each with a flat face to fit the other and each having two open cavities in said faces pierced on opposite sides with semicircular openings, 105 insulated electric wire passing through and fitting said openings and having each a bare portion within its appropriate cavity, a lampsocket on the outer side of the lamp-supporting section, a threaded shell in said socket, a rro central screw having its head in the bottom of said socket and extending through both sections of the entire device, a side screw passing through the edge of said shell and through both sections of the device and lead-115 ing-in strips extending from the threaded tips of said two screws to the bare parts of said insulated wires, substantially as described.

3. As an article of manufacture, a support 120 for incandescent lamps comprising the following parts, to wit: a wall-section having an inner flat face with a cavity at each end semicircularly pierced on the opposite sides and having corresponding cavities on its un- 125 der side separated by an insulating-partition and each communicating by an opening with its corresponding inner cavity; in combination with a lamp-supporting section having a 65 which act both to hold the sections together | flat inner face with cavities semicircularly 130

pierced on opposite sides, all to register with the inner cavities on the wall-section, and a socket on the outer side of said lamp-supporting section, substantially as described.

4. In a device of the class described, a wall-section having an insulating-partition on its under side, two leading-in strips extending outward from the foot of said partition, permanent retaining-screws passing through the body of said wall-section and said leading-in strips, a lamp-supporting section fitting over

said wall-section and provided with cavities to go over the heads of said screws and two connecting and securing screws passing through both of said sections and screwing 15 into said two strips, substantially as described.

EDWIN R. GILL.

Witnesses:
H. S. MacKaye,
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