No. 805,509. PATENTED NOV. 28, 1905.

W. P. WRIGHT.

ELECTRIC CUT-OUT.

APPLICATION FILED JUNE 13, 1904.

Fig. 1.

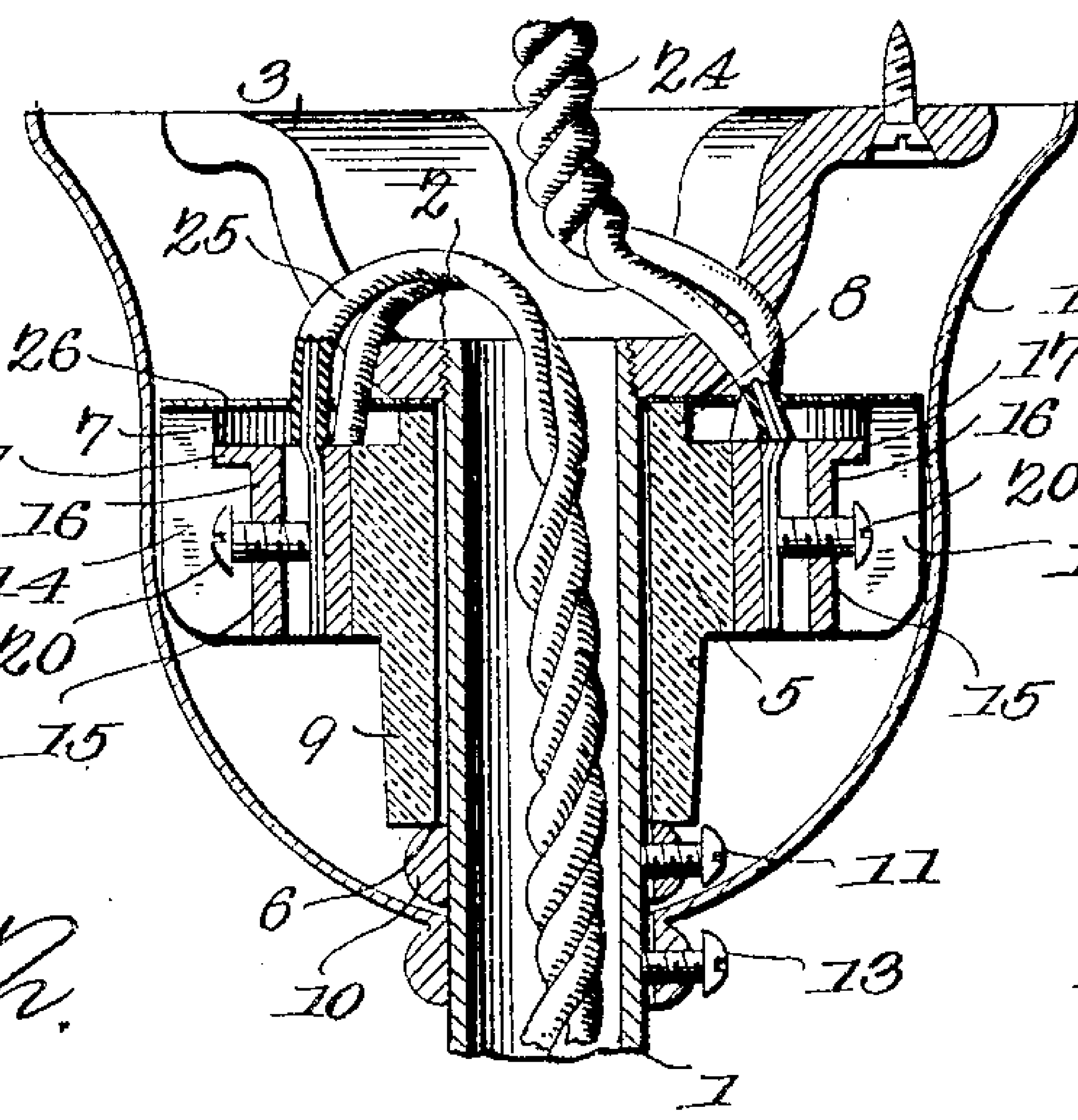


Fig. 2.

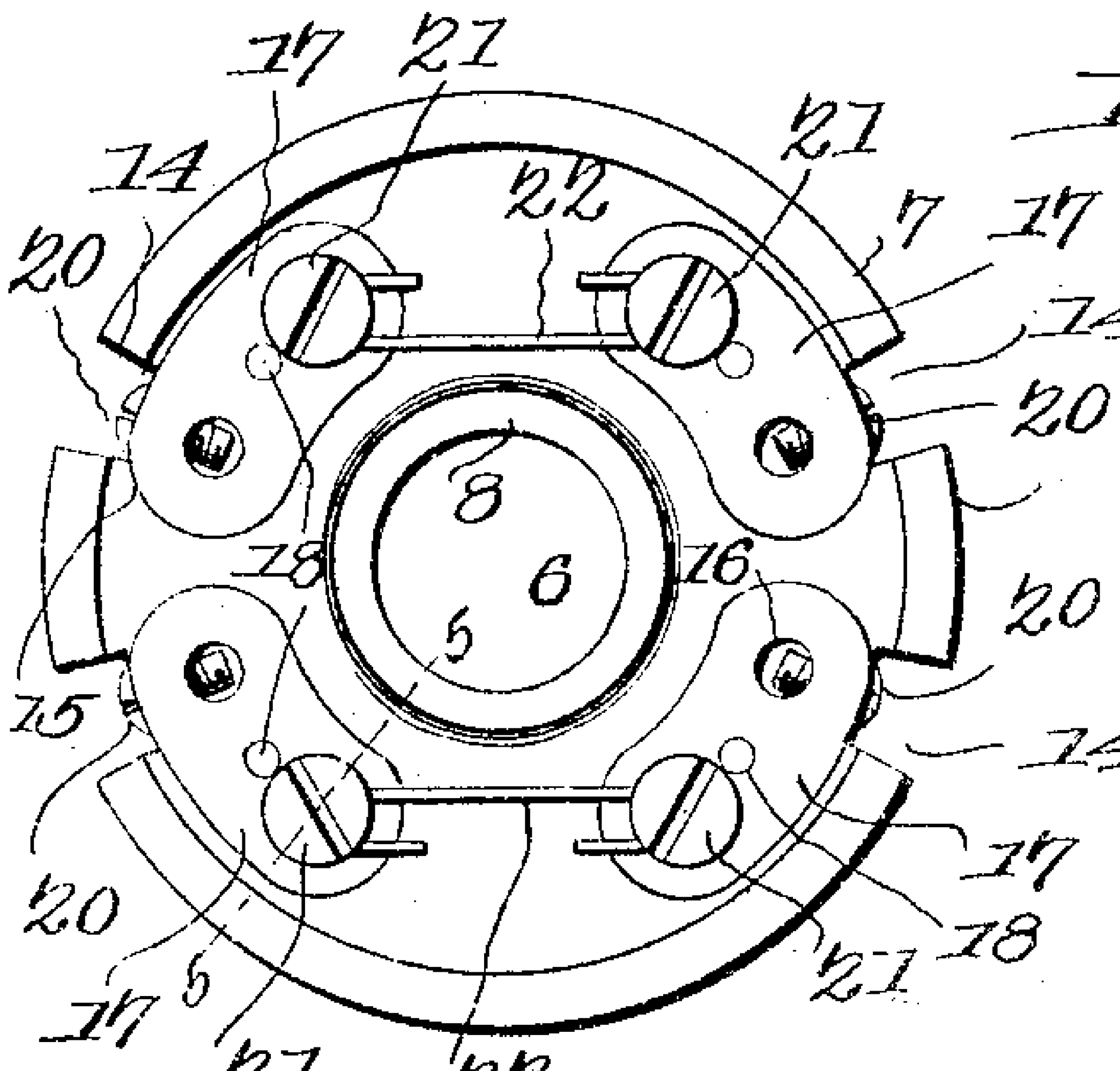


Fig. 4.

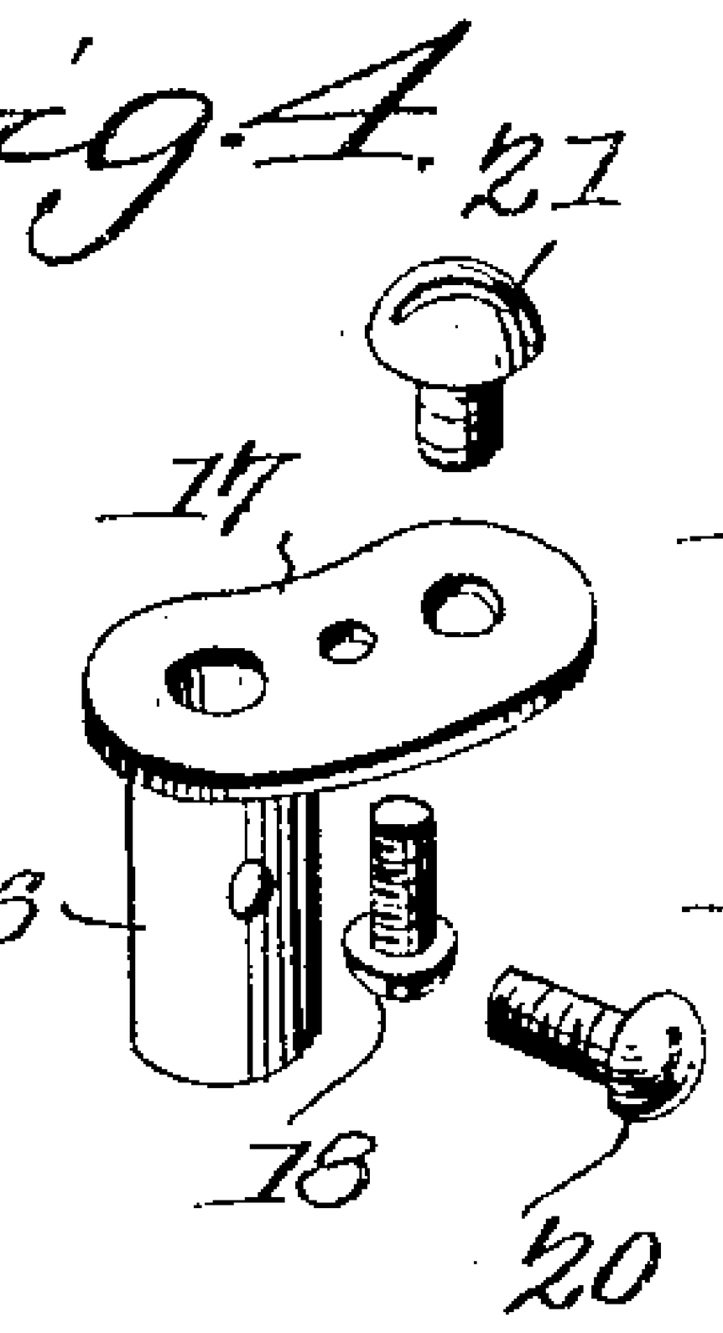


Fig. 3.

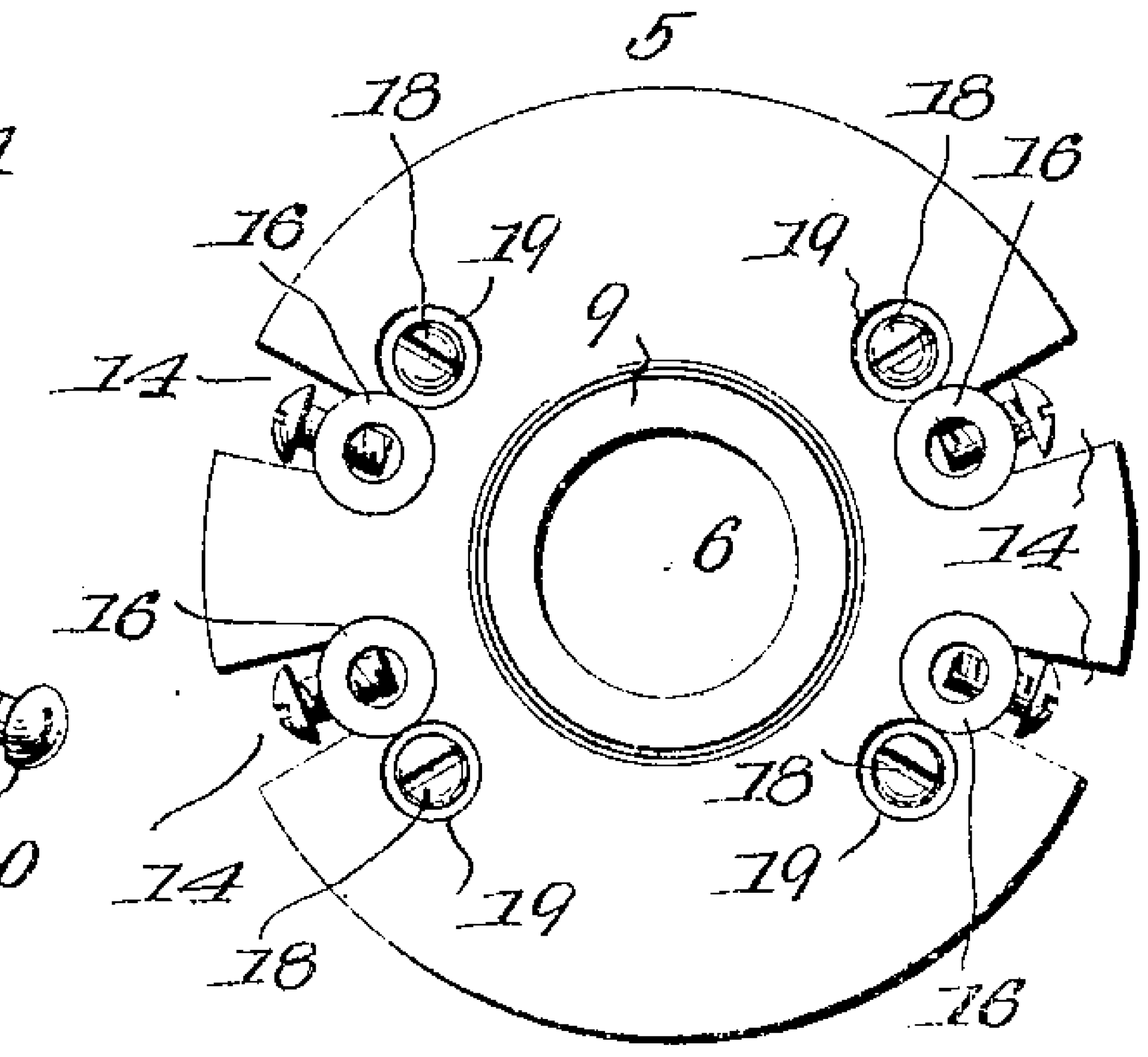


Fig. 6

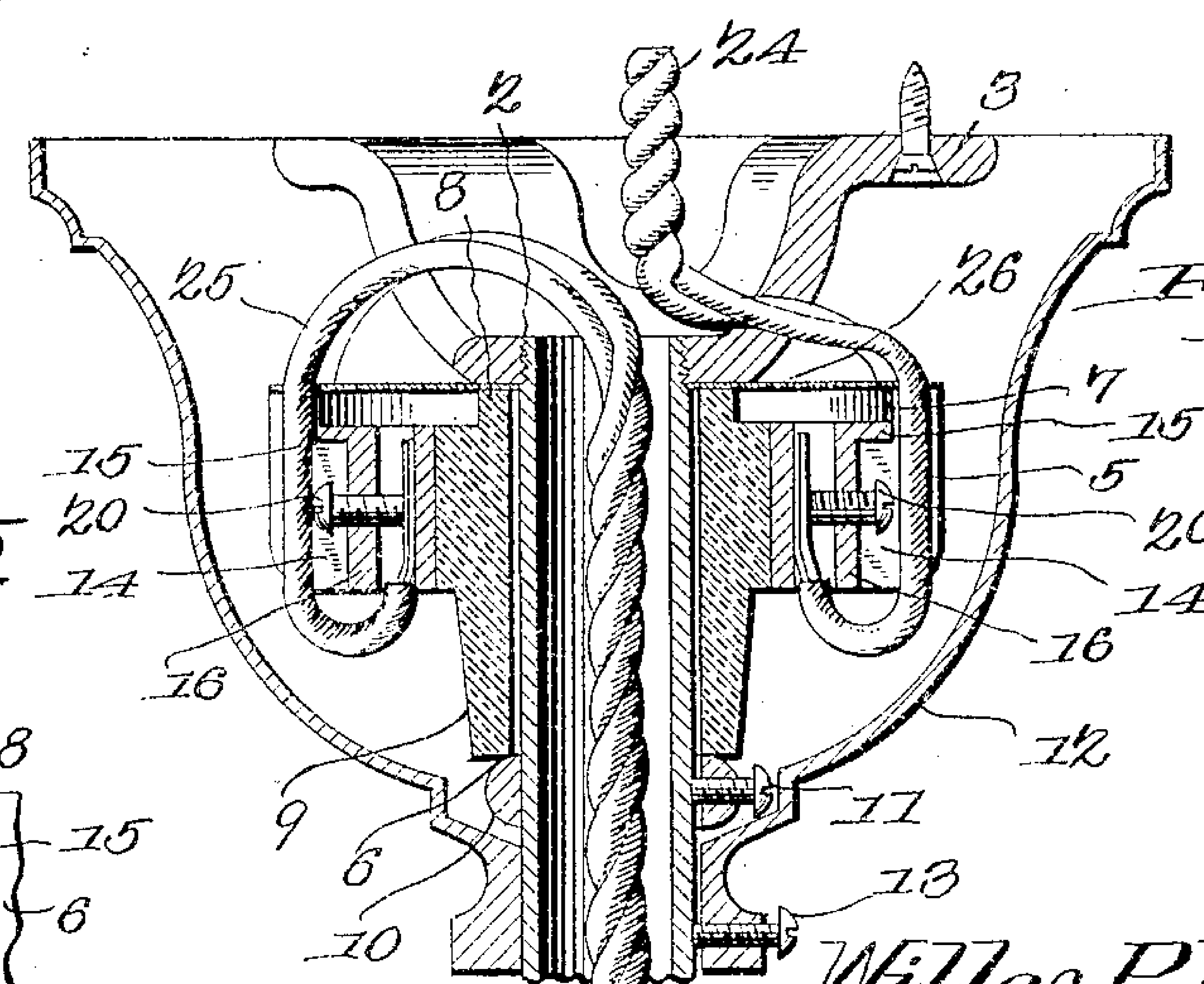
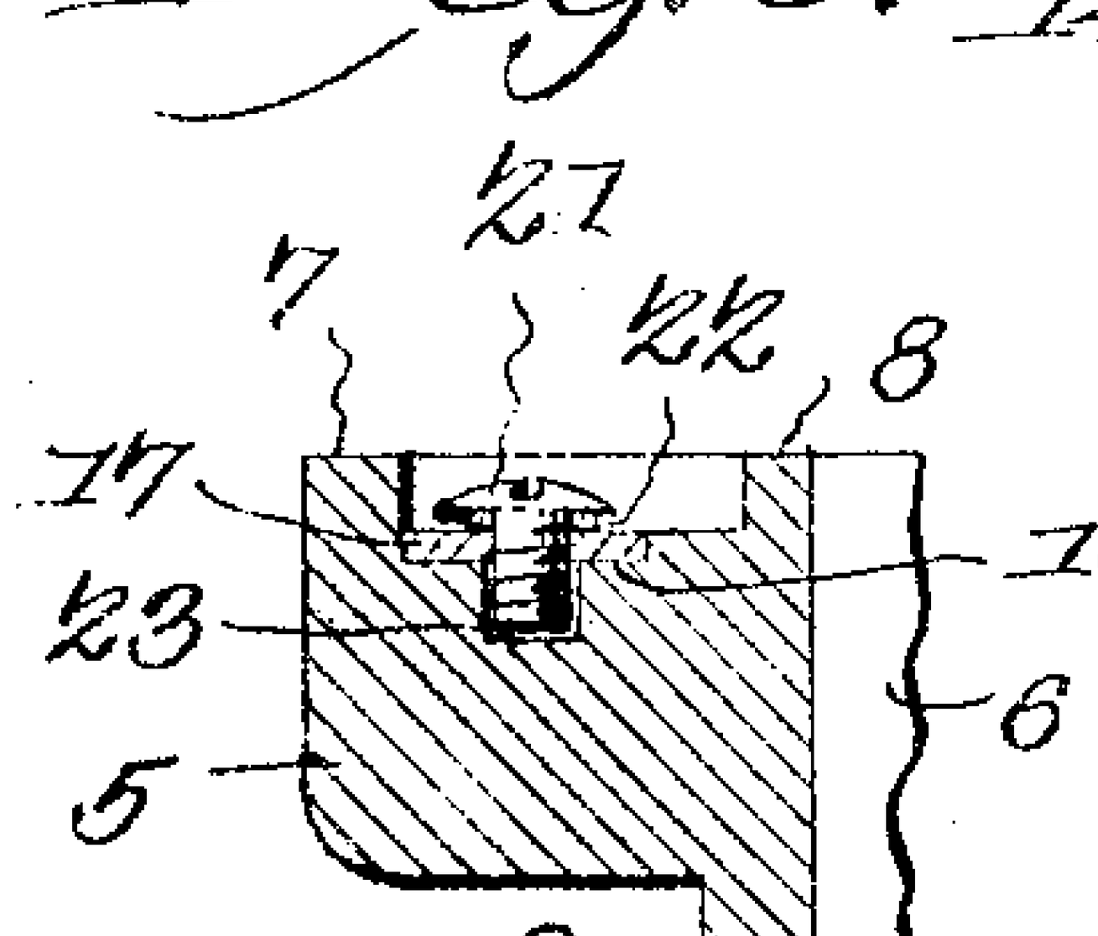


Fig. 5.



Witnesses

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ELECTRIC CUT-OUT.

No. 805,509. Specification of Letters Patent. Patented Nov. 28, 1905.

Application filed June 13, 1904. Serial No. 212,407.

To all whom it may concern:

Be it known that I, WILLES P. WRIGHT, a citizen of the United States, residing at Blandinsville, in the county of McDonough and State of Illinois, have invented a new and useful Electric Cut-Out, of which the following is a specification.

This invention relates to electric cut-outs, and while primarily designed for use in connection with electroliers to form a fusible connection between the circuit-wires and the lead-wires to the lamps it is of course capable of use in a general capacity as a cut-out.

An important object of the invention is to facilitate the connection of the several wires to the contacts or binding-posts of the cut-out and to provide for running the lead-wires from the cut-out downwardly through the tubular stems or standards of electroliers and to have the device capable of being effectually housed within any common or ordinary form of canopy commonly employed as an ornament at the upper end of the stem or standards.

A still further object of the invention is to provide for securing the stem or standard of an electrolier to the ceiling independently of the cut-out in order that the latter may be relieved of all unnecessary weight and at the same time to provide for conveniently supporting the cut-out upon the stem or standard independently of the canopy.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a vertical sectional view taken through the cut-out of the present invention applied to the stem or standard of an electrolier. Fig. 2 is a top plan view of the cut-out detached. Fig. 3 is an inverted plan view thereof. Fig 4. is a detail perspective view of one of the binding-posts. Fig. 5 is a detail sectional view on the line 5 5 of Fig. 2. Fig. 6 is a view similar to Fig. 1, showing the lead-wires applied from the under side of the cut-out.

Like characters of reference designate corresponding parts in each and every figure of the drawings.

To illustrate the application of the present cut-out, the upper portion 1 of the tubular stem or standard of any ordinary or preferred form of electrolier has been shown in the accompanying drawings, the upper end of the stem being screw-threaded and detachably fitted into the screw-threaded seat or socket 2 of a bracket 3, which is secured to the ceiling 4 by means of suitable fastenings. The bracket 3 is skeleton in form, preferably in the nature of a tripod, so as to present openings through which the several wires may be passed to permit connecting of the same with the cut-out.

The body 5 of the cut-out is preferably in the form of a disk and is made of porcelain or other non-conducting material and provided with a central bore or opening 6 for the reception of the standard. At the top of the body there is an upstanding peripheral flange 7 and an inner peripheral flange 8, said flanges being of the same height and constituting an annular channel or recess in the top of the body. A pendent annular flange or hub portion 9 extends from the lower end of the bore 6 and is designed to rest upon a sleeve or collar 10, adjustably held upon the standard by a suitable set-screw 11. It will here be explained that the collar 10 and the body of the cut-out are applied to the standard before the latter is fitted to the bracket 3, and afterward the cut-out is moved upwardly into contact with the bracket and held thereagainst by sliding the sleeve or collar 10 upwardly into engagement with the hub 9 and fastening the same in this position by the set-screw 11. Any ordinary form of canopy 12 is fitted to the standard, so as to entirely house the cut-out and is adjustably held in place by the usual set-screw 13.

At diametrically opposite points the outer peripheral edge of the body of the cut-out is intersected by a pair of substantially radial slots 14, while the top of the body is provided with a depression or socket 15, leading away from the respective slots. In each of these slots there is a tubular metallic binding-post 16, which is provided at its upper end with a lateral extension or plate 17, fitting the depression 15 and substantially flush with the top of the body of the cut-out. A screw-threaded fastening 18 pierces the body of the

cut-out and engages a screw-threaded opening in the plate, so as to rigidly secure the latter and the tubular binding-post in place, the opening through which the fastening 18 passes being enlarged at its lower end, as indicated at 19, so as to permit of the head of the fastening lying within the body of the cut-out and at the same time accessible by a screw-driver to facilitate application and removal of the fastening. A clamping-screw 20 pierces the tubular binding-post with its outer end located in the slot 14, so as to be accessible for adjustment. At the outer end of the plate 17 there is a screw-threaded post 21, which has an enlarged head in its upper end, and said head is provided with a screw-driver seat to facilitate the adjustment of the post to clamp the adjacent end of a fuse element 22 between the head of the post and the plate. The body of the cut-out is provided with a suitable depression or seat 23 to receive the lower end of the post 21. It will here be noted that the members of each pair of tubular binding-posts are not connected; but the corresponding members of the two pairs are electrically connected through the medium of the respective fuse elements 22, which are capable of being fused under abnormal conditions to automatically cut-out lamps before the latter can become fused or damaged by an excess current or a short-circuit.

The insulated circuit-wires 24 extend through an opening in the ceiling and are passed outwardly through the opening in the bracket formed by the space between the adjacent legs thereof with the bare extremities of the wires fitted into the open upper ends of adjacent tubular binding-posts 16, the clamping-screws 20 of course being set up tight against the bare ends of the wires. The lead-wires 25 have their bare ends engaged with either the upper or lower openings of the other pair of tubular binding-posts, as indicated in Figs. 1 and 6 of the drawings, from which said wires extend upwardly, thence inwardly through the bracket 3 and then downwardly through the open top of the tubular stem 1 to the lamps. (Not shown.)

An insulating-sheet 26, preferably of mica, is fitted to the upper edges of the flanges 7 and 8 and is held in place by means of the wires which pass through suitable openings in the sheet. The purpose of this insulating-sheet is to prevent the escape of flames or sparks which may be occasioned by the burning out of the fuse-wires, and thereby to protect adjacent portions of the ceiling which might otherwise become damaged by the heat and flames.

The present form of cut-out is particularly advantageous in that it is capable of application to any ordinary electrolier or chandelier without altering or changing the latter, and it is arranged to be carried by the electrolier, so as to avoid strains thereon by the weight of the electrolier. Moreover, the device has been adapted to the ordinary manner of house-wiring and electrolier-wiring, and the binding-posts or contacts have been arranged for convenient access to the tops and bottoms thereof to permit of the wires being engaged with the cut-out from the top or the bottom thereof, as may be most convenient.

Having thus described the construction and operation of my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a hollow bracket having a central and opposite side openings, of a tubular electrolier-standard having an open end fitted in the central opening of the bracket, a cut-out carried by the standard below the bracket, line-wires entering the bracket and passing out through one of the side openings to the cut-out, and lead-wires extending from the cut-out into the hollow bracket through the other side opening and thence into the tubular standard through its open end.

2. The combination with a hollow bracket having a central opening and side openings, of a tubular electrolier-standard having an open end fitted in the central opening of the bracket, a collar adjustable upon the standard below the bracket, a cut-out slidably embracing the standard and adjustably supported upon the collar, line-wires extending into the hollow bracket and thence outward through one of the side openings and connected with the cut-out, and lead-wires extending from the cut-out through the other opening of the bracket and thence through the open end of the standard into the interior thereof.

3. The combination of a hollow bracket having central and side openings, a tubular electrolier-standard having an open end fitted in the central opening of the bracket, a cut-out embracing and carried by the tubular standard below the bracket and provided with binding-posts piercing the cut-out and accessible at the top and bottom thereof, line-wires extending into the hollow bracket and thence outward through one of the side openings and connected with certain of the binding-posts, and lead-wires extending from the other binding-posts through the other opening of the bracket and thence through the open end of the standard into the interior thereof.

4. A cut-out comprising a body having a central opening for the reception of the standard of an electrolier and provided upon its top with inner and outer upstanding annular flanges and upon its under side with a pendent cylindrical flange forming a continuation of the central opening, the peripheral edge of the body being intersected by slots, binding-posts fitted in the slots and provided with clamping-screws located in and accessible through said slots, fuse elements connecting

opposite binding-posts, and an insulating-plate to rest upon the tops of the upstanding flanges and provided with a central opening to register with the central opening of the body and also having other openings to register with the binding-posts.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLES P. WRIGHT.

Witnesses:
ROBERT Q. MOORE,
STEPHEN E. ALDRICH.