

No. 625,473.

Patented May 23, 1899.

A. P. SEYMOUR.
ELECTRICAL ATTACHMENT PLUG.

(Application filed Feb. 9, 1899.)

(No Model.)

Fig. I.

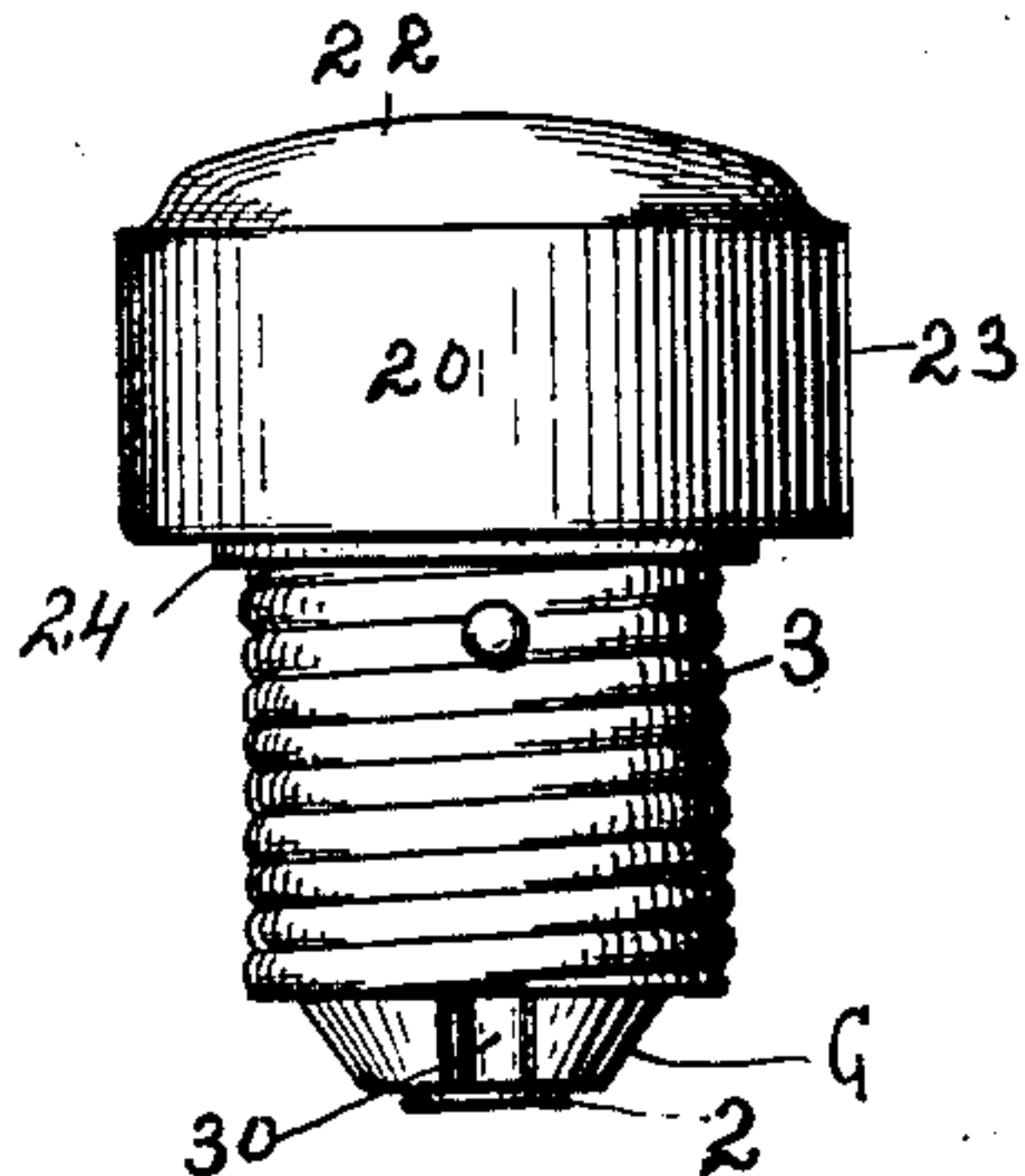


Fig. II.

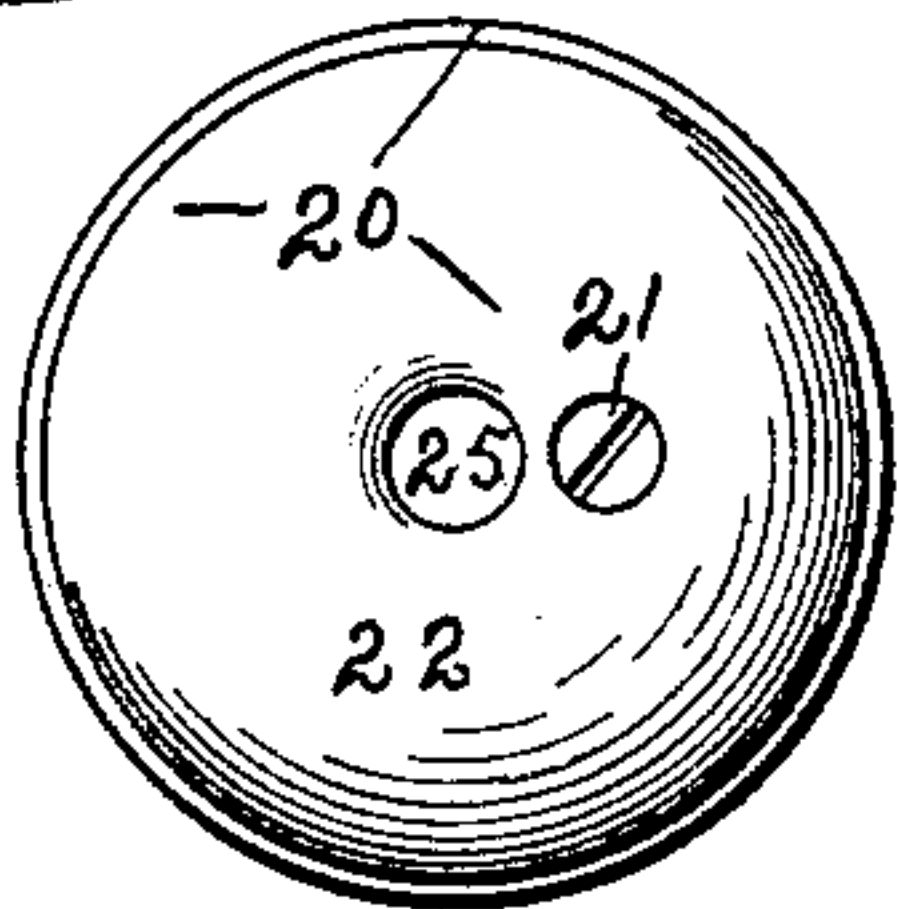


Fig. III.

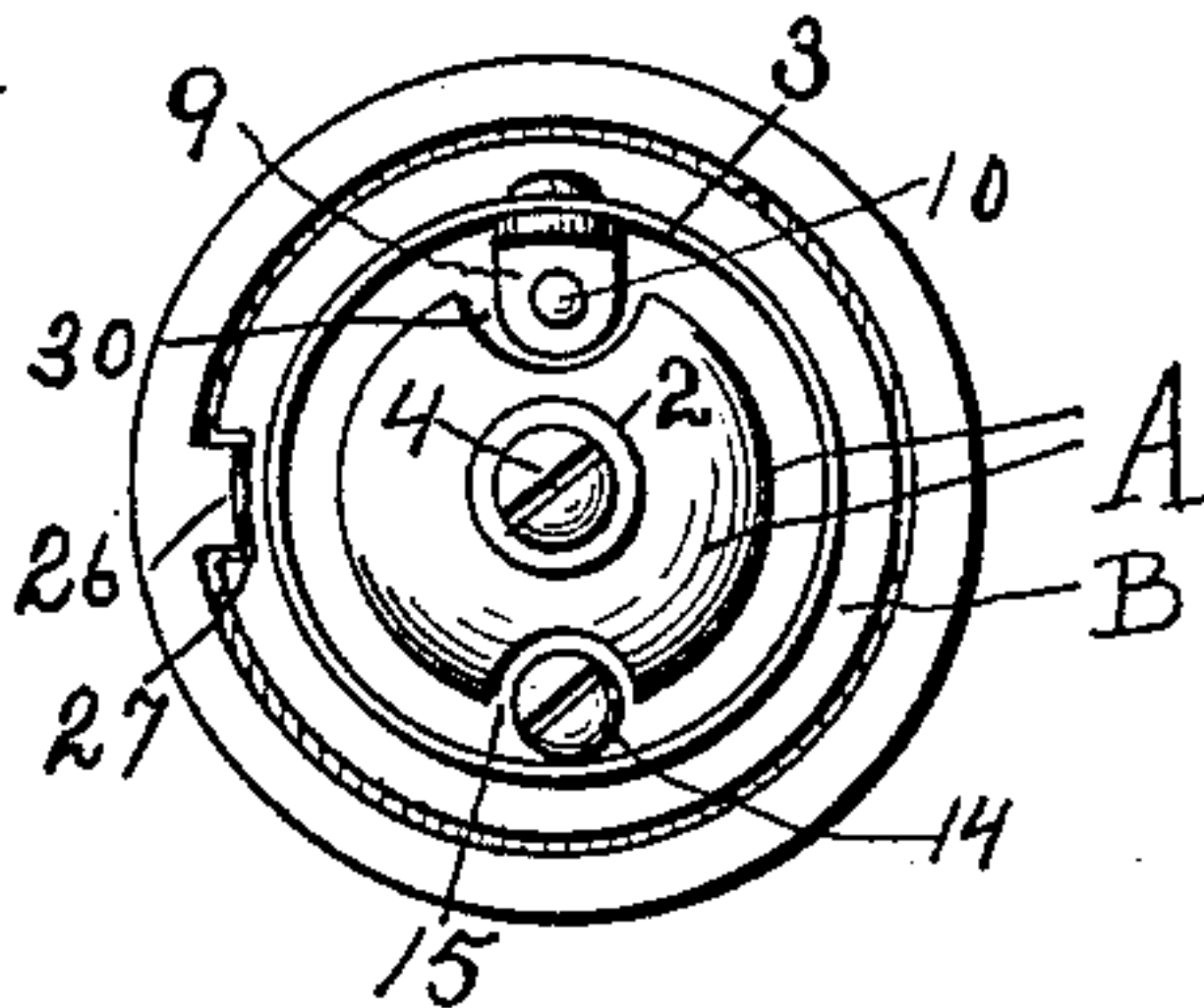


Fig. IV.

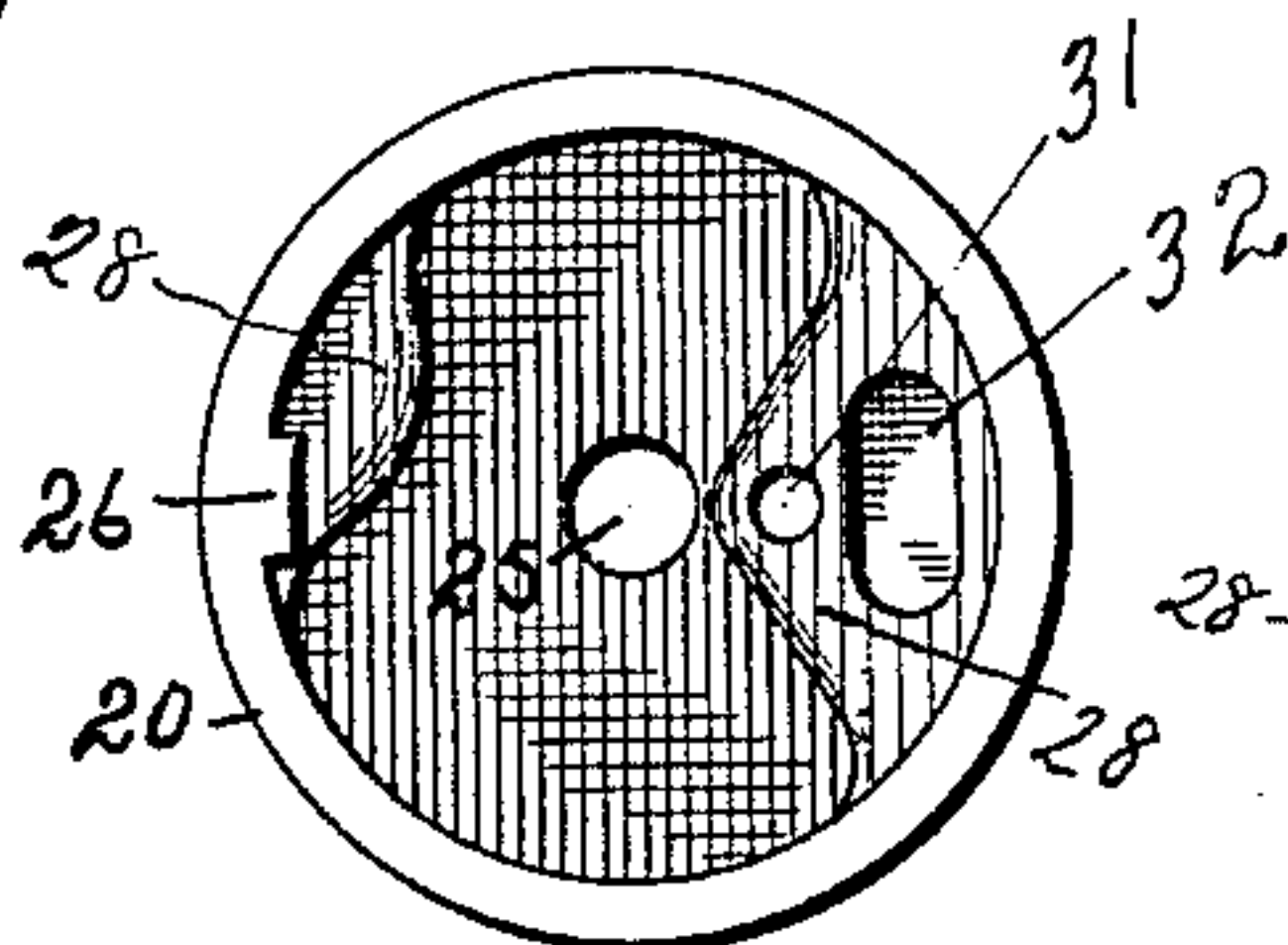


Fig. V.

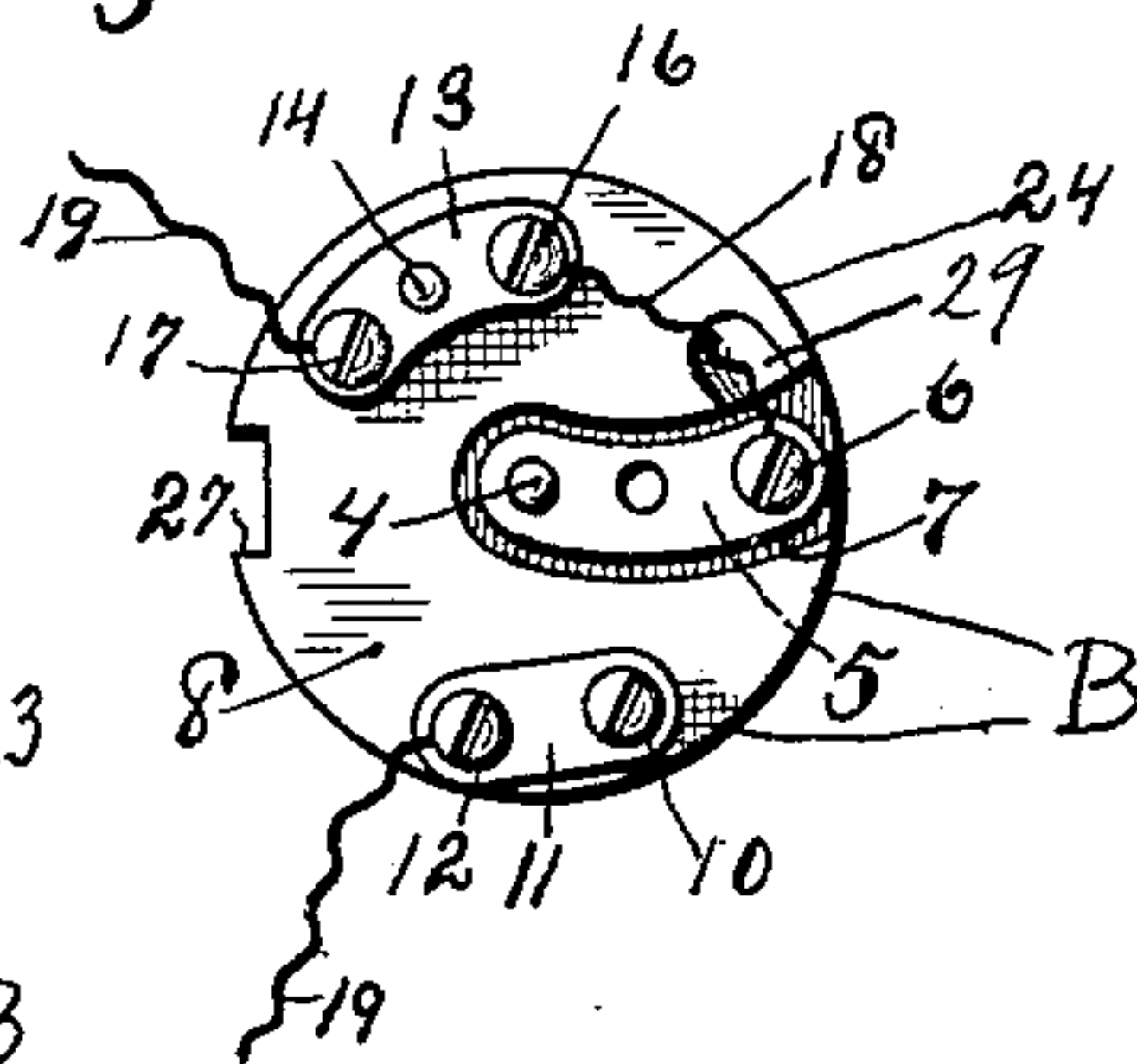
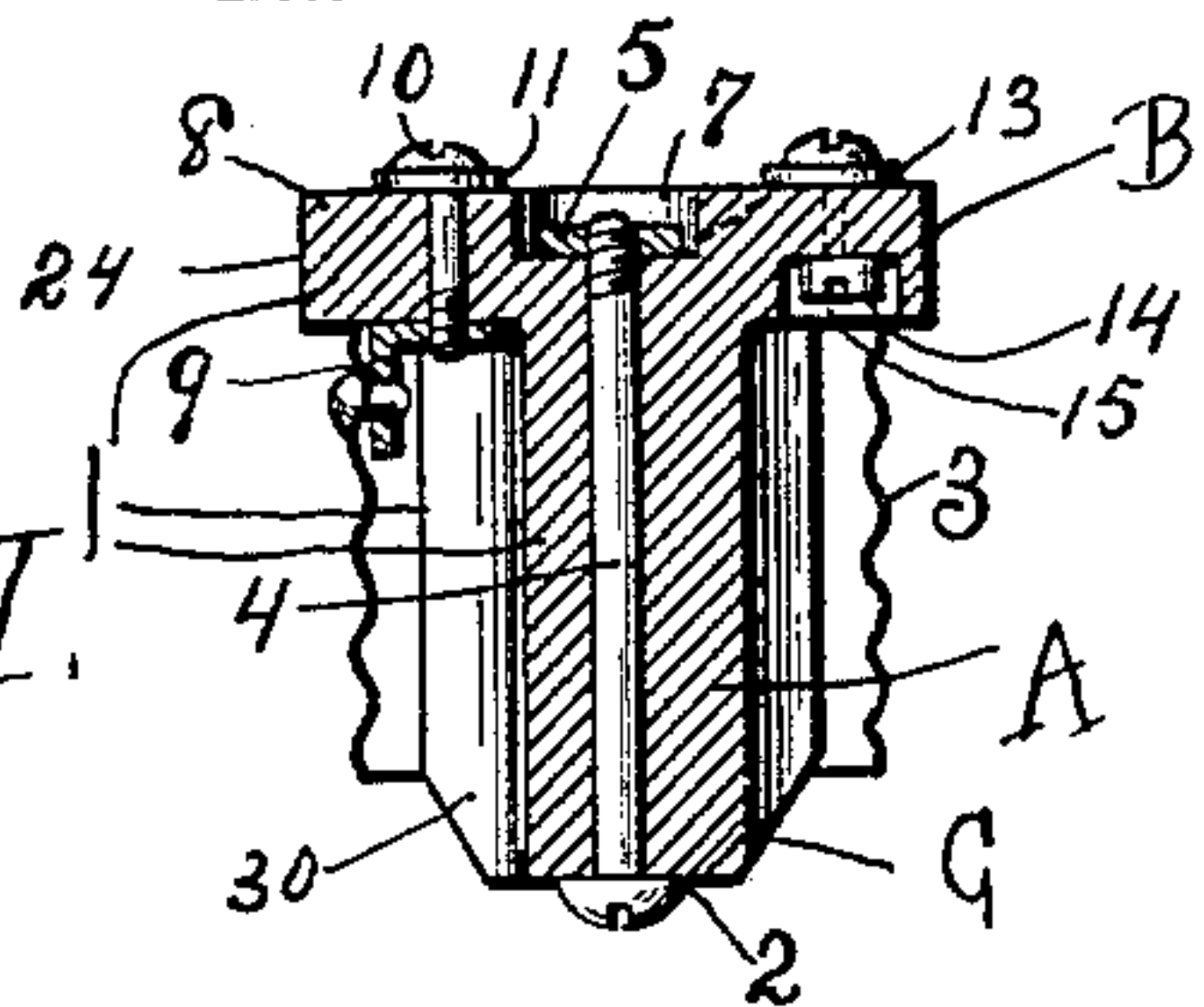


Fig. VI.



WITNESSES:

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ELECTRICAL ATTACHMENT-PLUG.

SPECIFICATION forming part of Letters Patent No. 625,473, dated May 23, 1899.

Application filed February 9, 1899. Serial No. 705,040. (No model.)

To all whom it may concern:

Be it known that I, ALBERT P. SEYMOUR, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Electrical Attachment-Plugs, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to an attachment-plug for electric cut-outs, and lies in its new form and in certain features of construction, by which is produced a plug that is strong and simple, more effective and a better insulator in use, easier and cheaper to manufacture, and also of an improved appearance.

My invention consists, essentially, of two members—an unglazed porcelain plug or plug member made as small as possible, to which are secured the terminals and the metallic parts for the attachment of the fuse and line-wires, and an externally-glazed porcelain cover fitting over the plug, protecting and insulating the metallic parts from injury, dampness, and accidental contact.

My invention will be better understood by reference to the accompanying drawings, in which the same reference-numerals indicate the same parts in all the figures.

Figure I is an elevation of my complete attachment-plug. Fig. II is a top plan view thereof. Fig. III is an inverted plan. Fig. IV is a bottom plan of the cover detached. Fig. V is a top plan of the plug member detached, and Fig. VI is a vertical section of the whole plug with the parts separated.

In the figures, 1 indicates the porcelain plug or plug member, formed with a substantially cylindrical shank A, having preferably a tapering lower end C and an integral disk-shaped top B, only slightly greater in diameter than the shank. On the shank are secured the two terminals—tip-terminal 2 and annular or screw-ring terminal 3, terminal 2 on its lower end, by means of the single screw 4, engaging with terminal-plate 5, provided with binding-screw 6 for fuse and arranged in depression 7 in flat upper surface 8 of the plug, and screw-ring terminal 3 by means of a short angular connecting-piece 9, to which it is riveted and with which engages screw 10, connecting it to terminal-plate 11, also pro-

vided with binding-screw 12 for line-wire. A third terminal-plate 13 is also secured on the upper surface of the plug by means of screw 14, whose head lies in depression 15, 16 being the binding-screw for the fuse 18 and 17 for the line-wire, 19 19 being the line-wires.

The cover 20, secured by single screw 21 to plate 5, is formed with a flattened top 22 and a rather wide marginal wall 23, forming an opening to receive the top of the plug, which it entirely covers and protects. The cover is formed with wire-hole 25, with projection 26 engaging with notch 27 on the plug to prevent rotation of the parts, and with internal reinforcing projections 28 28, which extend down a short distance within the cavity of the plug and engage with upper surface of plug between the terminal-plates, leaving a small space or chamber, but permitting the wall to drop far enough to entirely protect and conceal the plug-top. Through one of these projections extends screw-hole 31, affording a strong hold for screw 21. Notch 29 is formed in edge of depression 7 for the fuse and depression 32 in projection 28 for head of screw 6.

In Figs. I and III tip-terminal 2 is shown in form of washer held in place by screw 4. In Fig. VI the washer is dispensed with, head of screw itself being the terminal 2.

I am aware that plugs used for the same purpose as mine are in common use; but I have obtained certain decided advantages over them by improvements in construction. Instead of my small flat top with the terminal-plates conveniently and accessibly arranged thereon these prior plugs have a larger top with a central cavity and an upwardly-extending margin around the edge, with a substantially flat cover fitted thereto, a construction not only more troublesome to manufacture, as the side margin of the plug-top is exposed to view and must be glazed, but inconvenient for attaching the parts and weak, the cover often being broken and edges nicked. Also it is impossible to make the cover fit exactly. In mine the annular side surface is clean and unbroken. In these prior plugs it is broken by the joint between cover and plug, which becomes worse and worse in appearance from chipping of the edges, gathering of dust, &c. Dust and moisture enter-

ing this joint often cause a short circuit. My plug being entirely concealed from view is not glazed, only the cover, a single piece.

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

1. In combination, in an electric attachment-plug, a porcelain plug member having a substantially cylindrical shank and an integral disk-shaped top of slightly-larger diameter than said shank, said top having a flat upper surface and a smooth annular margin, terminals secured to the shank, terminal-plates arranged on the flat upper surface, connections between said terminals and said terminal-plates, a porcelain cap of slightly-larger internal diameter than said top, said cap having a depending marginal wall of such depth as entirely to cover and conceal the side margin of said top, so that when the parts are assembled the upper and larger portion of said plug presents a smooth, unbroken surface, and a screw for securing said cover to said plug member.

2. In combination, in an electric attachment-plug, a porcelain plug member formed with a shank and an integral disk-shaped top, of slightly-larger diameter than said shank and having a flat upper surface, one terminal secured to the tip of the shank, a second annular terminal arranged around said shank, terminal-plates secured on said flat upper surface, a short angular connecting-piece riveted to said annular terminal, a screw engaging with one of said terminal-plates and said connecting-piece for retaining the annular terminal in position, and a connection between said tip-terminal and a second terminal-plate, and in combination therewith an externally-glazed porcelain cover having a depending marginal wall adapted to surround and protect said disk-like top when the members are brought together, and a screw for securing the cover to the plug member.

3. In combination, in an electric attachment-plug, an unglazed porcelain plug member formed with a substantially cylindrical shank having a tapering lower end and with an integral disk-shaped top of slightly-greater diameter than said shank having a flat upper surface, terminals secured to the shank, a depression in said upper surface extending from about the center outwardly to the edge, two terminal-plates secured on said flat top and a third plate in said depression, screws for securing said terminals and said terminal-plates to the shank, and in combination therewith an externally-glazed porcelain cover having a depending marginal wall adapted to surround and protect said disk-like top

when the members are brought together, and a screw for securing the cover to the plug member.

4. In an electric attachment-plug, an unglazed porcelain plug member formed with a shank and a disk-shaped upper portion of only slightly-greater diameter than said shank, having a flat upper surface, terminals secured to the shank and terminals arranged and secured on said flat upper surface, and an externally-glazed cap having a depending marginal wall forming within an opening fitted to receive the top of the plug, and integral reinforcing projections within the opening extending downwardly and inwardly to engage with said upper surface between the terminal-plates and sustain the cover a short distance above the flat surface, but permitting it to drop sufficiently to surround the plug-top.

5. In combination, in an electric attachment-plug, an unglazed porcelain plug formed with a substantially cylindrical shank having a tapering end, and with a disk-shaped top of only slightly-greater diameter than said shank, having a substantially flat upper surface with a depression therein extending inwardly from one edge to about the center, two metallic terminal-plates secured on said top, and a third terminal-plate in said depression, a terminal secured on the end of said shank by a screw engaging with said third terminal-plate, a second screw-ring terminal arranged around said shank, a short right-angle metallic connecting-piece riveted to said screw-ring terminal and connected by a screw to one of said terminals arranged on said flat upper surface, an externally-glazed cover having a depending integral margin forming a circular opening in the lower surface of said cover of sufficient size to receive said top, said margin extending downwardly a sufficient distance to cover and conceal the whole of said top when the parts are brought together, integral reinforcing projections within said cover engaging with said flat upper surface between the terminals and adapted to sustain the cover a sufficient distance above said surface to form a small chamber, a notch in the edge of the top and a projection on the cover engaging therewith to prevent rotation, a wire-hole formed in the top of the cover, and a screw to secure said cover to said plug member, substantially as described and shown.

In testimony whereof I have hereunto signed my name.

ALBERT P. SEYMOUR. [L. S.]

Witnesses:

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