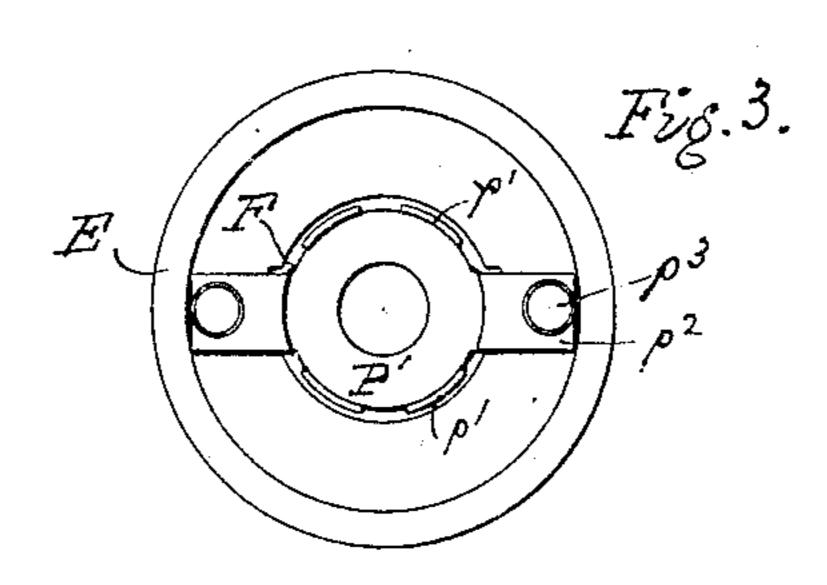
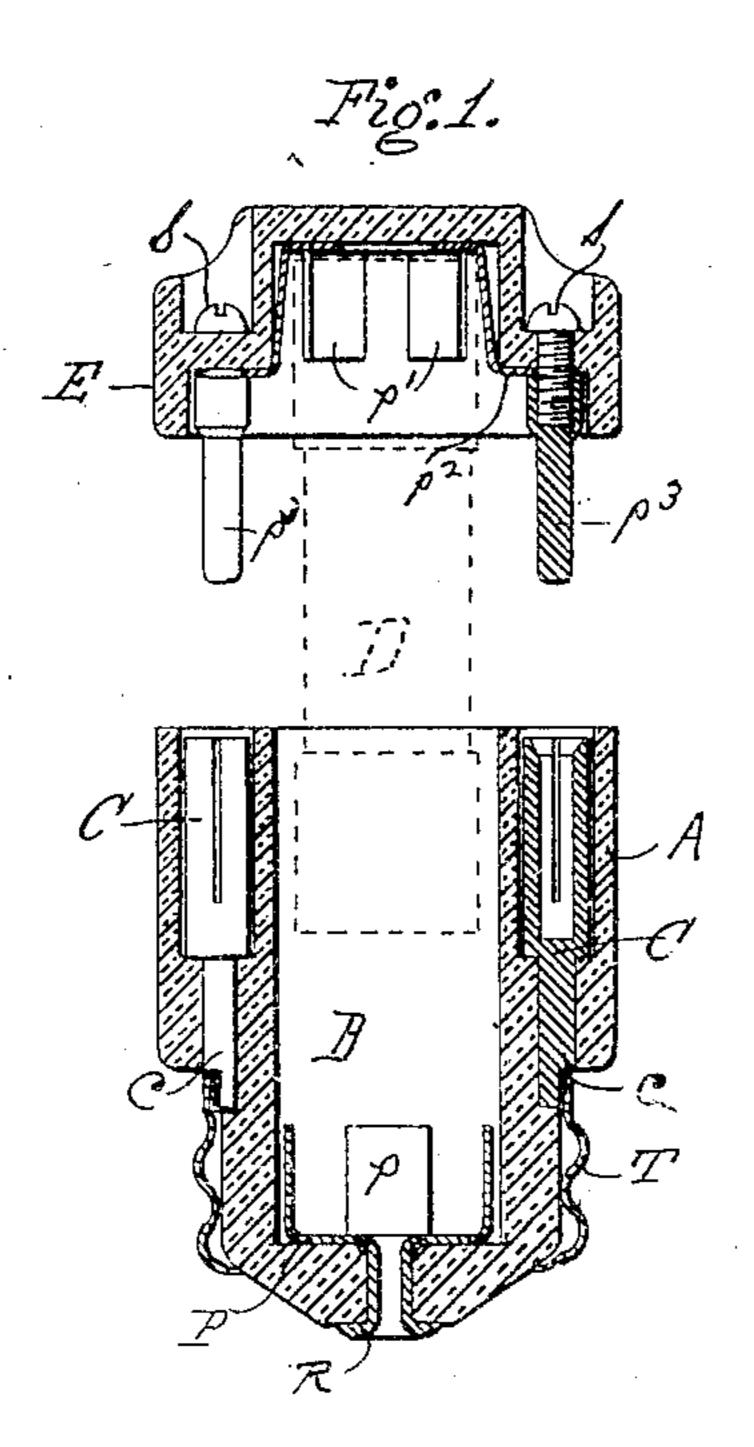
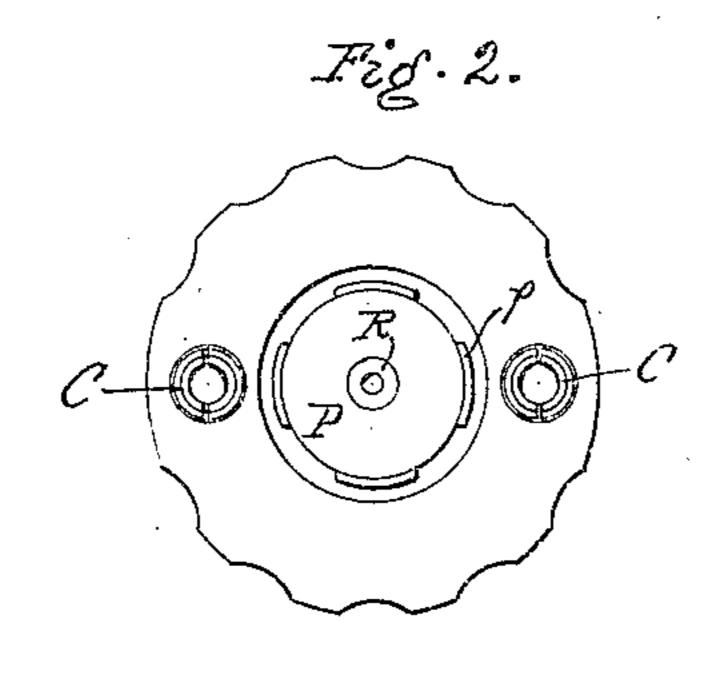
G. B. THOMAS.

ELECTRICAL FUSE PLUG.

APPLICATION FILED MAY 22, 1905.







WITNESSES

Faul ABlair Davier abbr INVENTOR

toward toward

George B. Thomas By

ATTORNEYS

## UNITED STATES PATENT OFFICE.

GEORGE B. THOMAS, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO THE BRYANT ELECTRIC COMPANY, OF BRIDGEPORT, CONNECTICUT, A COR-PORATION OF CONNECTICUT.

## ELECTRICAL FUSE-PLUG.

No. 804,070.

Specification of Letters Patent.

Patented Nov. 7, 1905.

Application filed May 22, 1905. Serial No. 261,604.

To all whom it may concern:

Be it known that I, George B. Thomas, a citizen of the United States of America, residing in the city of Bridgeport, in the county 5 of Fairfield, in the State of Connecticut, have invented an Improved Electrical Fuse-Plug, of which the following is a specification.

My invention relates to the thermal cutout plugs for electrical circuits, and particu-10 larly to that type of plug which is adapted to hold a removable fuse-cartridge and to be inserted in a suitable receiving or branch block

or other receptacle.

The object of this invention is to provide 15 a fuse-plug of the above character which will be efficient in use and inexpensive to manufacture and more convenient than any heretofore made, one of the principal objects of my invention being to so construct the plug 20 that the fuse-cartridge may be inserted or replaced without removing the entire plug from the branch block or receptacle, as will be hereinafter more fully described.

In the accompanying drawings, Figure 1 25 represents a vertical axial section of a fuseplug with a fuse therein embodying my invention, the cap being separated from the main casing; and Fig. 2 is a plan view of the casing with the cap removed. Fig. 3 is a

30 view of the inner face of the cap.

A represents a casing of porcelain or other suitable insulating material, preferably in the form of a hollow cylinder adapted to be opened at one end for the admission of the 35 fuse-cartridge and closed at the other end by the contact-terminals of the plug. If the plug is of the familiar form, having a threaded terminal adapted to fit a socket and a central contact-terminal, the closed end is made 40 of the proper size to receive on its outside the usual external threaded ring T, as shown in the drawings. The terminal ring is electrically connected by solder or otherwise to the extended lower ends c of sockets C, which are 45 set in openings in the side walls of the casing A and are open at the upper or open end of the casing. These sockets are preferably split at their open ends, as shown. The casing, which is of cylindrical shape, has a cen-50 tral chamber B, preferably cylindrical and slightly larger than the fuse-cartridge D to be inserted therein. At the lower end of the chamber B is a spring clip-piece P, having a

plurality of legs p, in this case four, adapted to mechanically engage the metallic end of 55 the fuse-cartridge D and be in electrical contact therewith as well. This clip-piece is secured to the casing by any suitable means, such as the rivet R, which passes through the central part of the closed end of the casing 60 and forms the central terminal of the plug. The open end of the casing is provided with a cap E, which is preferably slightly hollowed on its inner face and has a central recess F, in which is secured a clip P', similar to the clip 65 P in the casing, except that the clip in the cap is provided with more or stronger grasping-legs p' to engage the upper end of the fuse-cartridge D, so that the clip P within the casing will yield sooner than the clip P' 70 within the cap, and therefore when the cap is removed the fuse will come off with the cap for ready inspection and renewal. The clip P' has laterally-extending legs  $p^2$  in electrical connection with pins  $p^3$ , which are 75 adapted to enter the split spring-sockets C.C. These pins  $p^3$  may be mechanically secured to the cap by screws s, which may also serve to secure the clip-piece p'.

I claim as my invention—

1. In a fuse-plug for fuse-cartridges, an insulating-casing carrying external contactterminals, and a clip-piece secured to the inner end of said casing, adapted to engage a fuse-cartridge, in combination with a cap to 85 cover the end of said casing, and means therein adapted to remove said fuse from the casing when the cap is removed.

2. In a fuse-plug for fuse-cartridges, an insulating-casing carrying external contact- 90 terminals and means secured to the inner end of said casing adapted to engage a fuse-cartridge, in combination with a cap to cover the end of said casing, and means in said cap to engage said fuse-cartridge, said engaging 95

means in the cap being the stronger.

3. In a fuse-plug for fuse-cartridges, an insulating-casing carrying an external terminal ring, and a clip-piece secured to the inner end of said casing adapted to engage one 100 end of a fuse-cartridge, in combination with a cap to fit over said casing and a clip-piece in the cap to engage the opposite end of said cartridge, said second clip being stronger than said first clip.

4. In a fuse-plug for fuse-cartridges, an in-

sulating-casing carrying an external terminal ring, sockets in the upper part of said casing connected to said ring, in combination with a cap for said casing, means in the cap for engaging a fuse-cartridge, and pins on said cap adapted to fit in said sockets and secure said cap to said casing and close the circuit through the fuse-cartridge.

5. In a fuse-plug for fuse-cartridges, an insulating-casing having at one end a terminal
ring, and a central contact-terminal, in combination with a cap having a clip to engage

the cartridge and remove the same when said cap is removed and means whereby said clip is electrically connected to one of said termi
15 nals, when the cap is put in place.

nals, when the cap is put in place.
In testimony whereof I have signed my name to this specification in the presence of

two subscribing witnesses.

GEORGE B. THOMAS.

Witnesses:

G. W. Goodridge, H. W. Goldsborough.