No. 894,704. PATENTED JULY 28, 1908.

H. R. SARGENT.

COMBINED FUSE BOX AND RECEPTACLE.

APPLICATION FILED OCT. 1, 1907.

Fig. 1.

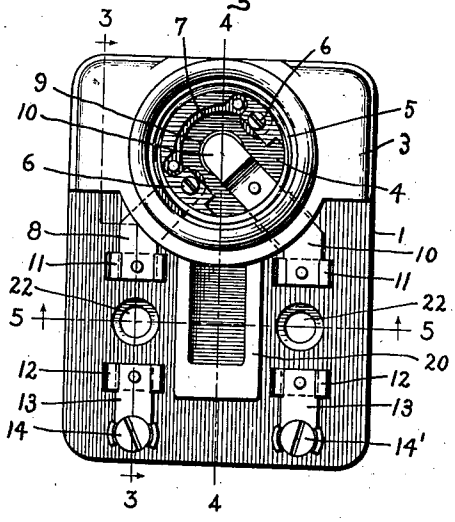


Fig. 2.

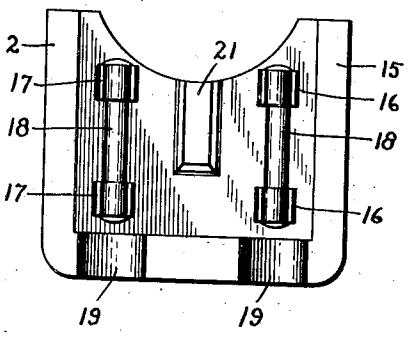


Fig. 3.

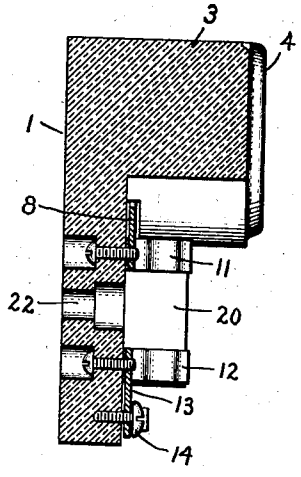


Fig. 4.

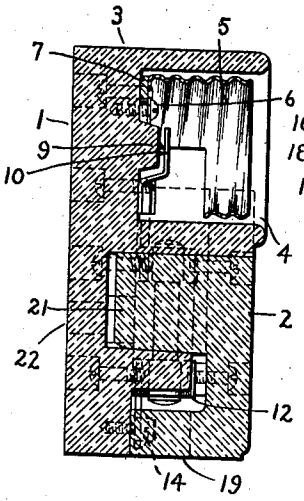
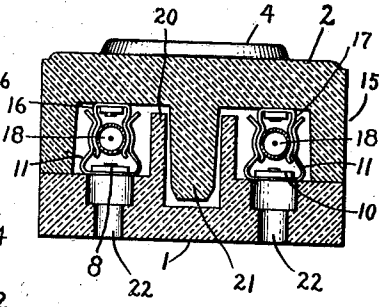


Fig. 5.



Witnesses:
J. Earl Ryan
J. Ellis Glen.

Inventor:
Howard R. Sargent
by Allen H. Davis
Atty.

UNITED STATES PATENT OFFICE.

HOWARD R. SARGENT, OF SCHENECTADY, NEW YORK, ASSIGNOR TO GENERAL ELECTRIC COMPANY, A CORPORATION OF NEW YORK.

COMBINED FUSE BOX AND RECEPTACLE.

No. 894,704. Specification of Letters Patent. Patented July 28, 1908.

Application filed October 1, 1907. Serial No. 395,458.

To all whom it may concern:

Be it known that I, HOWARD R. SARGENT, a citizen of the United States, residing at Schenectady, county of Schenectady, State of New York, have invented certain new and useful Improvements in a Combined Fuse Box and Receptacle, of which the following is a specification.

This invention relates to thermal cut-outs for electric circuits, and its object is to provide a convenient and simple device for enabling a branch circuit to be led off from a main circuit with suitable protective devices, such as removable inclosed fuses included in both sides of the circuit and arranged in such a way as to be readily accessible for replacement without the necessity of using tools to open the inclosing casing.

The special construction of the device and the particularly novel features thereof will appear from the following detailed description.

In the accompanying drawing, Figure 1 is a front elevation of a fuse box embodying the invention, the cover of the box being taken off; Fig. 2 is an elevation of the inside of the cover showing the fuses; Fig. 3 is a longitudinal section on the line 3—3, Fig. 1; Fig. 4 is a longitudinal section on the line 4—4, Fig. 1, and Fig. 5 is a cross section on the line 5—5, Fig. 1.

The base-plate 1 and cover 2 are made of insulating material. The base-plate has an integral thicker portion 3 extending across one end, and the cover is of the same thickness as this portion 3 and of the same width and length as the remainder of the base-plate, so that when the two are assembled they form a rectangular block. In the thicker portion 3 of the base-plate is a cylindrical well or socket 4 in which is housed a metallic screw-threaded shell or receptacle 5 having a flange at its inner end which is fastened by screws 6 to a curved strip of metal 7 having an arm 8 projecting out through a hole in one side of said socket on a level with the surface of the base-plate. At the center of the socket there is, preferably, a low stud 9, above which is located one end of a metallic strip 10 which passes out through a cut-away portion of the shell and through a hole in the wall of the socket on a level with the surface of the base-plate. The two strips 8 10 lie at an angle with each other and terminate respectively near the opposite sides of the base-plate, where each is fastened in the bight of a U-shaped clip 11 of sheet metal projecting from the surface of the base-plate.

In line with each clip 11 is a similar clip 12 secured in place by a screw entering a strip of metal 13 which overlaps the clip and terminates near the end of the base-plate, where each strip is provided with a binding screw 14 14′.

The cover fits at one end against the thicker portion of the base-plate, and on the other three sides has a flange 15, leaving a chamber in which are located two pairs of sheet metal clips 16 17. An inclosed fuse 18 is removably held in each pair of clips, which are of such a size that when the cover is placed in position on the base-plate, the clips 16 enter the clips 11 and 12 and the clips 17 enter the other clips 11 and 12 so that the cover is held in place and an electrical circuit is closed between the strips 7 10 and their respective binding screws 14 14′. Notches 19 in the end flange on the cover enable line wires to be led into the binding screws.

Between the pairs of clips 11 12 is a partition or septum 20 integral with the base-plate and containing a recess adapted to receive a tongue 21 formed on the inside of the cover. The two fuses are thus efficiently separated so that all danger of short-circuiting is avoided.

The receptacle is adapted to hold an incandescent lamp, or an attaching plug for leading off a flexible conducting cable or the like; the shell and the strip 10 forming the contacts. Holes 22 are formed in the base-plate for the reception of screws for attaching the base-plate to a wall, a piece of furniture, a machine, or any other suitable support.

The device affords a convenient and simple appliance for connecting up branch circuits as the fuses are in the cover and can be removed and replaced by an attendant without danger of shock, and when the cover is pushed on or pulled off the contacts are inclosed so that the hand is protected from any arc that may form. The cover is held tightly in place solely by the engagement of the clips so that there are no fastening screws

or other devices needing attention, nor are any tools required to open the box and get at the fuses.

What I claim as new and desire to secure by Letters Patent of the United States, is,—

1. A fuse box comprising a base-plate having at one end a thicker portion containing a socket, clips on the base-plate, a cover for said base-plate, and fuses mounted in said cover and coöperating with said clips.

2. The combination with a base-plate having at one end a thicker portion containing a socket, clips on said base-plate, a cover, clips in said cover adapted to enter those on the base-plate and serving to hold said cover in place, and removable fuses held in the clips on the cover.

3. The combination with a base-plate having at one end a thicker portion containing a socket, metallic strips passing through the wall of said socket, a screw-threaded shell in said socket connected with one of said strips, clips on said base-plate at the other ends of said strips, opposite clips near the end of said base-plate, a cover carrying coöperating pairs of clips serving to attach said cover to said base, and removable fuses held in the clips on the cover.

4. The combination with a base-plate having a thicker portion at one end containing a socket, contacts in said socket, two pairs of clips on said base-plate, one clip of each pair being connected with its respective contact, a recessed partition on said base-plate between said pairs of clips, a cover having a tongue to enter the recess, and fuses on said cover adapted to engage with said clips when the cover is placed in position on said base-plate.

5. A combined fuse box and receptacle, consisting of a rectangular block composed of a base-plate and cover, said base-plate having one end thicker than the other and containing a receptacle, and said cover being chambered to inclose a pair of removable fuses in circuit with said receptacle.

In witness whereof, I have hereunto set my hand this 27th day of September, 1907.

HOWARD R. SARGENT.

Witnesses:

BENJAMIN B. HULL,

HELEN ORFORD.