W. MENZEL.

SAFETY FUSE.

APPLICATION FILED AUG. 3, 1906.

930,675. Patented Aug. 10, 1909.

Fig. 1

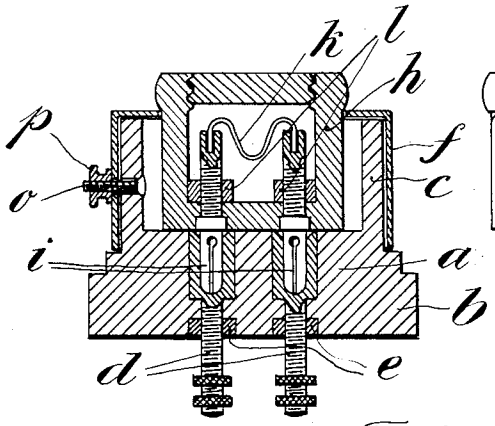


Fig. 2

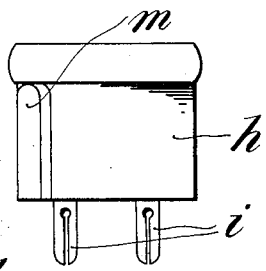


Fig. 4

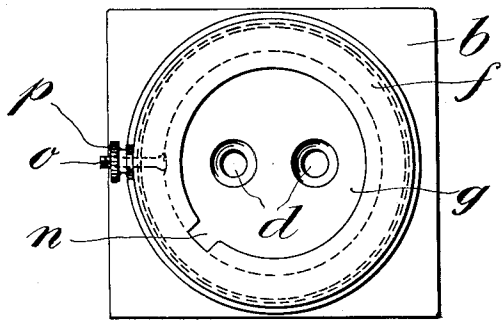
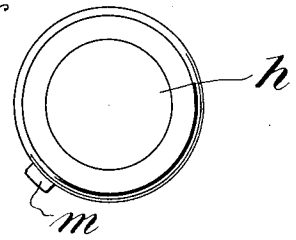


Fig. 3



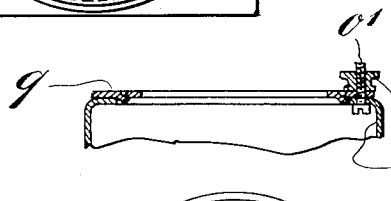
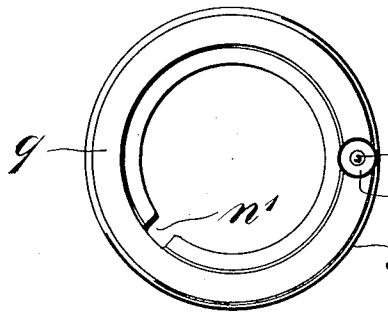


Fig. 5

Fig. 6



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UNITED STATES PATENT OFFICE.

WERNER MENZEL, OF HANOVER, GERMANY.

SAFETY-FUSE.

No. 930,675. Specification of Letters Patent. Patented Aug. 10, 1909.

Application filed August 3, 1906. Serial No. 328,992.

To all whom it may concern:

Be it known that I, WERNER MENZEL, engineer, a subject of the King of Prussia, residing at 7 Klagesmarkt, in the city of Hanover, German Empire, have invented a new and useful Improvement in Electric Safety-Fuses, of which the following is a specification.

My invention relates to safety fuse plug mechanism for electrical circuits, and has for its object the provision of means whereby the substitution of fuse plugs of different capacity, from the predetermined one, will be prevented.

The object of my invention is illustrated on the accompanying drawing in which—

Figure 1 is a sectional view of the fuse-box having the plug inserted. Fig. 2 shows a side elevation of the plug, Fig. 3 shows the same in plan, Fig. 4 is a plan view of the fuse-box shown by Fig. 1, Fig. 5 shows in sectional view the end-portion of a modified construction of the socket of the fuse-box, and Fig. 6 shows said socket in plan.

With reference to the drawing *a* is the fuse-box which consists of the base plate *b* and an upright circular wall *c*. To the base plate there are attached contact screws *d* having central bores at one end and nuts at the other end. These screws *d* are fastened to the base plate *b* by means of nuts *e*. The upright wall *c* is covered by a socket *f* of sheet metal or the like. This socket has a central opening *g*.

The plug of the fuse consists of a cylindrical casing *h* provided at one end with two contact pins *i* corresponding to the borings of the contact screws *d*. The other ends of these pins project into the inner space of the casing *h* and are in connection with the fuse wire *k*. They are held in position by nuts *l*. The cylindrical outer surface of the plug is provided with a radially projecting rib *m* being adjusted in a predetermined position to the contact pins *i*, according to the capacity proper of the fuse. Corresponding to the position and shape of the rib *m* to the edge of the socket *f* forming the opening *g* there is arranged a notch *n*, so that the plug *h* with its contact pins may be inserted into the boxes of the contact screws *d*, whereas a plug having the rib *m* at another place or the rib of another shape is prevented from insertion.

The socket *f* is fastened to the fuse-box *a* by means of a set screw *o*. For this purpose corresponding perforations are provided at a suitable place of the socket wall and the upright wall *c*. The screw *o* is inserted from within and fastened by an outward nut *p*. In the modification of Figs. 5 and 6 at the front wall of the socket *f'* is provided a central flat ring 9 the opening of which is somewhat narrower than that of the socket *f'*. The ring has at its inner edge a notch *n'* and is fastened by a set screw *o'* and a nut *p'* screwed thereon. For this purpose corresponding perforations in the front wall of the socket and the ring are arranged.

Having now described my invention what I claim is:

1. In a safety fuse plug mechanism the combination of a plug having a peripheral rib, contact pins, a fuse inclosed therein and connecting said pins, a fuse-box having bored contact screws, a socket which has a notch coöperating with said rib, and a set screw for locking said socket, as and for the purpose specified.

2. In a safety fuse plug mechanism the combination of a plug having a peripheral rib, contact pins, a fuse inclosed therein and connecting said pins, a fuse-box, a socket, provided with an adjustable ring which has a notch coöperating with said rib, and a set screw for locking said ring in said socket, as and for the purpose specified.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

WERNER MENZEL.

Witnesses:
HENRY J. FULLER,
ANNA DIPPEL.