To all whom it may concern:

Be it known that I, THOMAS E. MURRAY, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented a certain new and useful Improvement in Electric-Fuse Cases, of which the following is a specification.

The invention relates to electric fuse cases or plugs, and consists in the construction of the case, and in the means for diffusing the shock due to the blowing of the fuse and so protecting the material of the case from breakage.

In the accompanying drawings—Figure 1 is a perspective view on an enlarged scale, of one of the metal caps to which the end of the fuse is attached. Fig. 2 is a vertical longitudinal section of my fuse case on the line x, x, of Fig. 3. Fig. 3 is a cross section on the line y, y, of Fig. 2. Fig. 4 shows the fuse separately. Fig. 5 is an end elevation of my fuse case.

Similar numbers of reference indicate like parts.

The fuse case proper, 1, is preferably made of porcelain and in arched shape, as shown, with two integral projections 2, 3, on its lower side, which enter the usual block or holder, not shown, containing the circuit connections. On each of said projections is a sheet metal cap 6, having bent up side walls 7, which, when the cap is in place, cover two sides of the projection. Between the walls 7 on the outer side of the cap is a bent up portion 8, having two clips 9, 10, and a middle lug 11 having outwardly projecting edges 12, also forming a clip. On the inner side of the cap is a bent up portion 13, having two clips 14, 15. The cap is secured on the projection by bending over the clips 9, 10, into a transverse recess 16 on the outer side of the projection, and by bending over the clips 14, 15 into a similar recess 17 on the inner side of said projection.

The fuse 4, shown separately in Fig. 5, has a contracted portion at 5. It is received in an arched bore in the fuse case, the ends of which are closed by plugs 18 of cement. The extremities of the fuse pass through the cement plugs and are held in the clip formed by the lug 11; the projecting edges 12 thereof being folded over upon the fuse, as shown in Fig. 5. The space within the case surrounding the fuse is filled with an inert and refractory pulverized material, such as pulverized magnesia, or the like.

I have found that while the disrupting effect of the fuse explosion, upon an inclosing case of fictile material of given thickness, may be prevented by embedding the fuse in an inert and refractory body, which absorbs the shock and so protects the said material from breakage, it is possible to secure such protection with a thinner case by wrapping the fuse with a non-combustible fabric, such as asbestos paper. This wrapping, indicated at 19, prevents concentration of the explosive shock and diffuses it over an area in some degree dependent upon the length of the applied layer.

I claim:

1. The combination of a fuse case of fictile material, a fuse therein, a wrapping of non-combustible fabric surrounding said fuse, and a body of inert and refractory pulverized material completely filling said case and surrounding said fuse and wrapping.

2. The combination of a fuse case of fictile material, a fuse therein, a wrapping of non-combustible material surrounding said fuse over a portion of the length thereof, and a body of inert and refractory pulverized material completely filling said case and surrounding said fuse.

In testimony whereof I have affixed my signature in presence of two witnesses.

THOMAS E. MURRAY.

Witnesses:

GERTRUDE T. PORTER,
MAY T. McGARRY.