

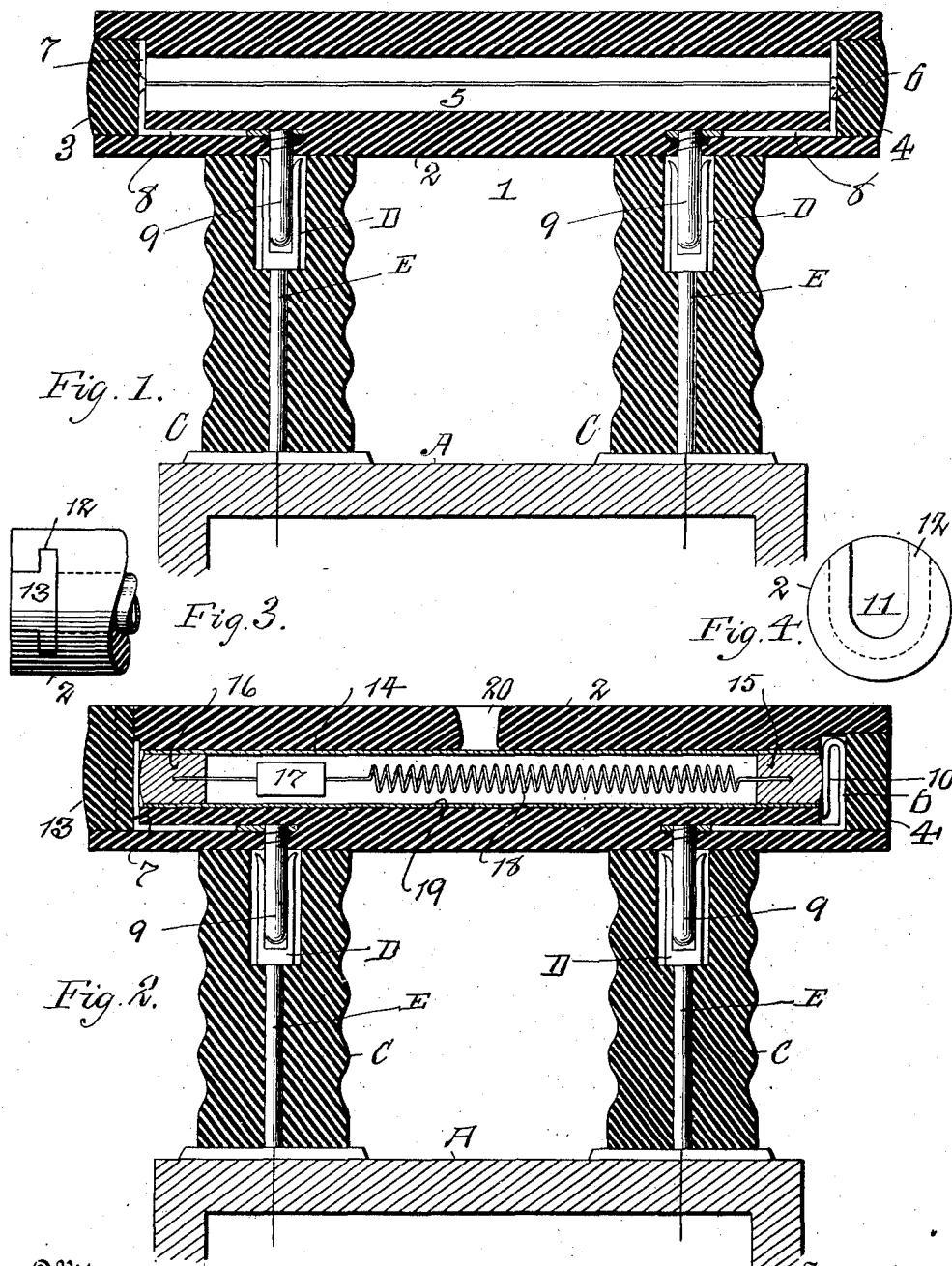
T. E. MURRAY.

FUSE CASE.

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1,028,255.

Patented June 4, 1912.



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UNITED STATES PATENT OFFICE.

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FUSE-CASE.

1,028,255.

Specification of Letters Patent. Patented June 4, 1912.

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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 Fuse-Cases, of which the following is a specification.

The invention is a fuse case and means for detachably connecting the same to fixed circuit terminals on a suitable support—the construction being such as to permit of the use of a fuse case, or fuse therein, longer than the distance between the two fixed circuit terminals, to allow of said case being easily affixed to or removed from said terminals, and to simplify and cheapen the manufacture of said case.

In the accompanying drawings—Figure 1 is a longitudinal section of my fuse case and support, shown applied to a transformer, only one coil of which is diagrammatically indicated. Fig. 2 shows the same, but adapted to a transparent removable inner fuse case. Fig. 3 is a top view of the left hand end of the outer fuse case of Fig. 2, and Fig. 4 is a face view of said end.

Similar letters and numbers of reference indicate like parts.

A represents the wall of a transformer casing, with one coil of which transformer the fuse here shown may be connected in series. On said wall are two standards C, of refractory insulating material, in the ends of which are metal clips D, connected to the transformer coil terminals by rods E.

The fuse case 1 comprises a tubular portion 2, of refractory insulating material, shouldered at its extremities to receive the plugs 3, 4, of similar material, which may be cemented in place. The fuse strip 5 may be connected at its ends to the contact plates 6, 7 which are held between the plugs 3, 4 and the shoulders on the body portion 2 of the fuse case, and which are bent, as shown at 8, to extend for a distance longitudinally inward through and so become embedded in the wall of said body portion. Entering said wall and engaging said bent portions 8 of contact plates 6, 7 are threaded rods 9, which enter the clips D when the device is in place on standards C.

In assembling the device, the fuse strip 5

may be first connected to contact plate 6 which is inserted in place in the body portion 2, and the plug 4 at that end cemented 55 in position. The opposite contact plate 7 is then applied, the fuse strip fastened to it and the plug 3 secured. The threaded rods 9 are then inserted to engage contact plates 6, 7, as already described. 60

In the form of my device shown in Fig. 2, the contact plate 6 is bent back on itself to form a spring 10, the body portion being suitably recessed to receive the same. The opposite end wall of the body portion 2 is 65 formed integral with the peripheral wall, and is provided with a U-shaped opening 11, Fig. 4, having grooves 12 in its edges to receive the sliding closing piece 13, Fig. 3. This construction adapts the device to an inner removable tubular fuse case 14 which is inserted through the U-shaped opening 11 until its end terminal 15 bears against the spring 10 of contact plate 6. The other contact plate 7 is then put in position to 75 bear against the other end terminal 16, and the sliding piece 13 finally closes the opening 11. The particular type of inner removable fuse case here illustrated is that in which the fuse proper 17 is a block of material capable of fusing under predetermined conditions and connected to a helical spring 18, which is normally under tension, but which when the fuse blows, contracts and so separates the ruptured parts. The 80 inner fuse case 14 is here made of glass, through which internal conditions can be seen. For this last purpose an opening 20 is made in the body portion 2. 85

I claim:

1. A tubular case closed at both ends, contacts within said case on the inner faces of the end closures thereof, parallel projections of conducting material extending through and surrounded by the wall of said case at right angles to the central longitudinal axis thereof disposed in the same plane and located between and at a distance from each of said contacts, and connections from said contacts to said projections. 90

2. A tubular case closed at both ends, contacts within said case on the inner faces of the end closures thereof, parallel projections of conducting material extending through

and surrounded by the wall of said case at right angles to the central longitudinal axis thereof disposed in the same plane and located between and at a distance from each 5 of said contacts, and connections from said contacts to said projections wholly inclosed in the material of the wall of said case.

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

THOMAS E. MURRAY.

Witnesses:

GERTRUDE T. PORTER,
MAY T. McGARRY.