

Jan. 8, 1924.

1,479,999

F. W. McDONALD

FUSIBLE LINK

Filed Aug. 25, 1920

FIG. 1

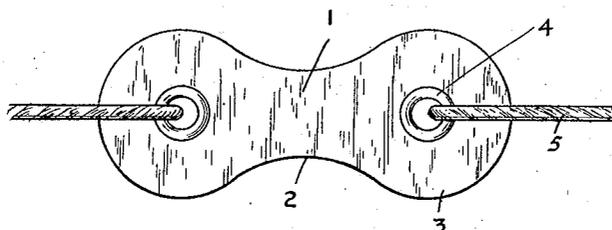


FIG. 2

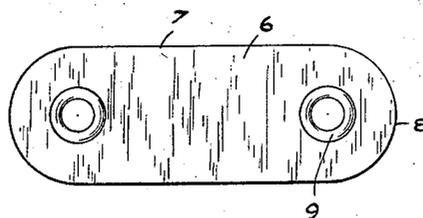
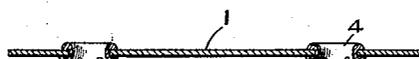


FIG. 3

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ATT'YS.

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# UNITED STATES PATENT OFFICE.

FREDERICK WILLIAM McDONALD, OF OAKLAND, CALIFORNIA, ASSIGNOR TO McDONALD & MOORE, OF OAKLAND, CALIFORNIA, A FIRM COMPOSED OF FRED W. McDONALD AND H. B. MOORE.

## FUSIBLE LINK.

Application filed August 25, 1920. Serial No. 405,861.

*To all whom it may concern:*

Be it known that I, FREDERICK W. McDONALD, a citizen of the United States, residing at Oakland, in the county of Alameda and State of California, have invented new and useful Improvements in Fusible Links, of which the following is a specification.

The present invention relates to improvements in fusible links, such as used in connection with means for holding trap fire-doors, windows and other fire proof closures open as required by the fire underwriters laws in various States.

The object of this invention is to provide a simple and inexpensive fusible link of the character described which is primarily intended for use in connection with motion picture projecting rooms of theaters and the like wherein the link is arranged in juxtaposition to the projecting machine so that in case of fire the link will readily burn or fuse and allow the fire doors and other closures to move into closed position. However, the link may be used with other kinds of fire prevention apparatus.

An object of the invention is to provide a link of the character described which is made of the highly combustible semi-rigid and relatively strong material such as celluloid and for this reason may be easily and inexpensively produced.

The invention possesses other advantages and features, some of which, with the foregoing will be set forth at length in the following description where I shall outline in full that form of the invention which I have selected for illustration in the drawings accompanying and forming a part of the present specification. In said drawings, I have shown one form of the construction of my invention, but it is to be understood that I do not limit myself to such form since the invention as expressed in the claim may be embodied in a plurality of forms.

Referring to the drawing, Figure 1 is a top plan view of the link of this invention, showing the flexible elements attached thereto. Figure 2 is a longitudinal sectional view of the link. Figure 3 is a top plan view of a modified form of the invention.

Referring particularly to the drawings 1 indicates the link of this invention, which link is made of a relatively strong, semi-rigid, highly combustible substance such as celluloid. The link is provided with a central reduced portion 2, the formation of

which provides enlarged end portions 3 in which end portions eyelets 4 are riveted. Inserted through and fastened to the eyelets are flexible elements 5, such as cords, wires, or cables. These flexible elements are suitably connected with the fire doors or the other trap closures, and in use the link is disposed adjacent to points where conflagration is apt to start.

The link may be of such thickness as required to make it sufficiently strong to support fire doors, windows and the like. With tough material such as celluloid, comparatively thin links may be used. By providing the rivets 4 in the enlarged end 3 of the link all possibility of the flexible elements tearing out through the ends of the links is prevented and the link is also reinforced. In having the central portion of the link reduced the fusing or burning of the link will take place more rapidly and will thus insure accuracy and rapidity of operation of the fire prevention apparatus with which the link is associated.

Referring particularly to Figure 3, the modified form of link 3 shown therein is in the form of a strip of celluloid or like material provided with parallel side edges 7 and rounded end edges 8. Adjacent the ends of this link there are riveted eyelets 9 as in the preferred form of the invention. Other shapes and forms of link may be used as desired but I prefer to use a relatively thin and centrally narrowed link formed of highly combustible semi-rigid material such as celluloid. By the use of a celluloid link of the character described instead of the usual metal fusible link it is believed that fire prevention apparatus will operate with a greater degree of certainty and reliability due to the fact that the celluloid is capable of more rapid fusing and will burn more readily than fusible metal. On the other hand celluloid is comparatively cheap, plentiful and may be readily and more easily stamped or cut into any shape desired so as to form a suitable fusible link.

I claim:—

A fusible link of the character described embodying an elongated comparatively thin strip of celluloid narrowed centrally of its ends to provide enlarged end portions and a thin web joining said end portions and eyelets riveted in the centers of the enlarged end portions.

FREDERICK WILLIAM McDONALD.