

J. S. JOHNSTON.

FUSE.

APPLICATION FILED MAR. 15, 1910.

1,053,606.

Patented Feb. 18, 1913.

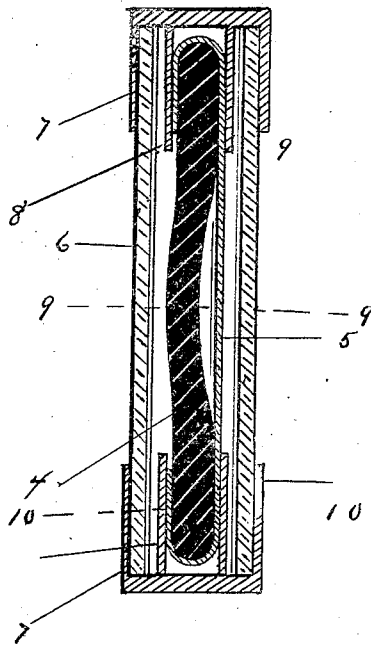


Fig 1

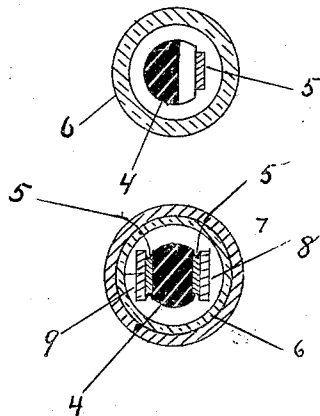


Fig 3

Fig 2

WITNESSES

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UNITED STATES PATENT OFFICE.

JAMES S. JOHNSTON, OF UTICA, NEW YORK, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO JOHNSTON MANUFACTURING COMPANY, OF UTICA, NEW YORK, A CORPORATION OF NEW YORK.

FUSE.

1,053,606.

Specification of Letters Patent.

Patented Feb. 18, 1913.

Original application filed March 15, 1909, Serial No. 483,344. Divided and this application filed March 15, 1910. Serial No. 549,418.

To all whom it may concern:

Be it known that I, JAMES S. JOHNSTON, a citizen of the United States, residing in Utica, in the county of Oneida and State of New York, have invented certain new and useful Improvements in Fuses, of which the following is a specification.

This invention provides a safety-fuse for use in the art of electricity, and it is one of the objects thereof to so construct and arrange a structure of this nature, that assemblage may be effected by the assistance of frictional engagement of the various parts, thus rendering the use of assembling rivets, screws and such other elements unnecessary, and at the same time perfect a permanent organization except when the fuse proper is "blown", when the parts may be easily disassociated at will for the purpose of rebuilding and refilling.

The subject-matters of this application are divided out of an application pending before the United States Patent Office, in the name of James S. Johnston, for electrical fuse plug, filed March 15th, 1909, Serial Number 483,344.

The drawing accompanying this specification, sets forth an embodiment of the invention, which while at present may be considered practical for all purposes may be modified or re-arranged, at will, to meet the demands of those skilled in the art.

In the drawing, Figure 1 illustrates a sectional view, somewhat on an enlarged scale, of a structure embodying a plug which may be more practical in circuits of a small carrying capacity. Fig. 2 is a cross-sectional view, taken on line 10—10 of the first figure, and Fig. 3 is a cross-sectional view taken on line 9—9 of said first figure.

Similar characters of reference indicate similar parts in the views.

A support 4, which may be constructed of any suitable material of an insulating nature is designed to hold a fuse 5, which, as shown, may be in the form of an elongated member, such as a strip, with its ends passing around or over the free ends of the support 4. This support may be formed in any suitable manner, and is here shown as partly arched intermediate of its extremities, whereby, to separate it from the fuse 5, at or near such a point in the fuse member as the latter may burn or blow, in which case

the fusing action will not render the support useless. The assemblage thus created may be inclosed within a suitable casing 6, which may comprise a tubing of non-conducting material, and preferably transparent, whereby the action of the interior structure may be observed at will. This casing 6 may be closed at its ends by suitable closures 7, which, comprise metallic caps adapted to frictionally engage with the outer wall of the casing 6. Formed either integrally with, or otherwise suitably associated with these caps or closures 7 are contacting elements 8 and 9, which, together, in connection with each closure, in the present case, form bifurcated clips designed to grip, frictionally, the fuse which surrounds the ends of the support, and incidentally the latter, and it will now be noticed through this connection, that the support 4 not only serves the purpose of suspending the fuse, but also serves to assist in the pressing together of the parts during assemblage of the structure.

The general structural character of the closures 7 may be modified according to necessity without departing from the spirit of this invention.

It is to be observed that this structure, as generally set forth herein, may be created without the assistance of screws, bolts, rivets or solder, which is a desideratum in this art, and the simplicity of structure lends considerable assistance to the creation of the parts, as well as the substitution of them, when required.

Having thus described this invention, I claim:

1. In a fuse of the character described, the combination of a casing, caps, means on said caps to frictionally engage said casing, whereby the interior of said casing may be quickly reached, contacting elements forming bifurcated clips on said caps, a fuse, a non-conducting support for said fuse, said fuse and support adapted to be held by said bifurcated clips, and an arch in said support, whereby to facilitate in assembling said parts.

2. In a fuse, the combination of a glass casing, caps, means on said caps to frictionally engage the ends of said casing, whereby the contents of said casing may be quickly removed, contacting elements forming bi-

furcated clips on said caps, a fuse, a non-conducting support for said fuse, said fuse having its ends passing around the free ends of said support, and said support being arched intermediate its length, whereby same may be separated from said fuse at the point in the fuse likely to blow and whereby to facilitate in assembling the parts of the fuse.

Signed at Utica, in the county of Oneida, 10
and State of New York, this 14th day of
March, in the year of our Lord nineteen
ten.

JAMES S. JOHNSTON.

Witnesses:

FRED. W. BARNACLO,
S. I. DE VINE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
