

No. 800,825.

PATENTED OCT. 3, 1905.

C. A. ROLFE.
FUSE DEVICE.

APPLICATION FILED FEB. 13, 1903.

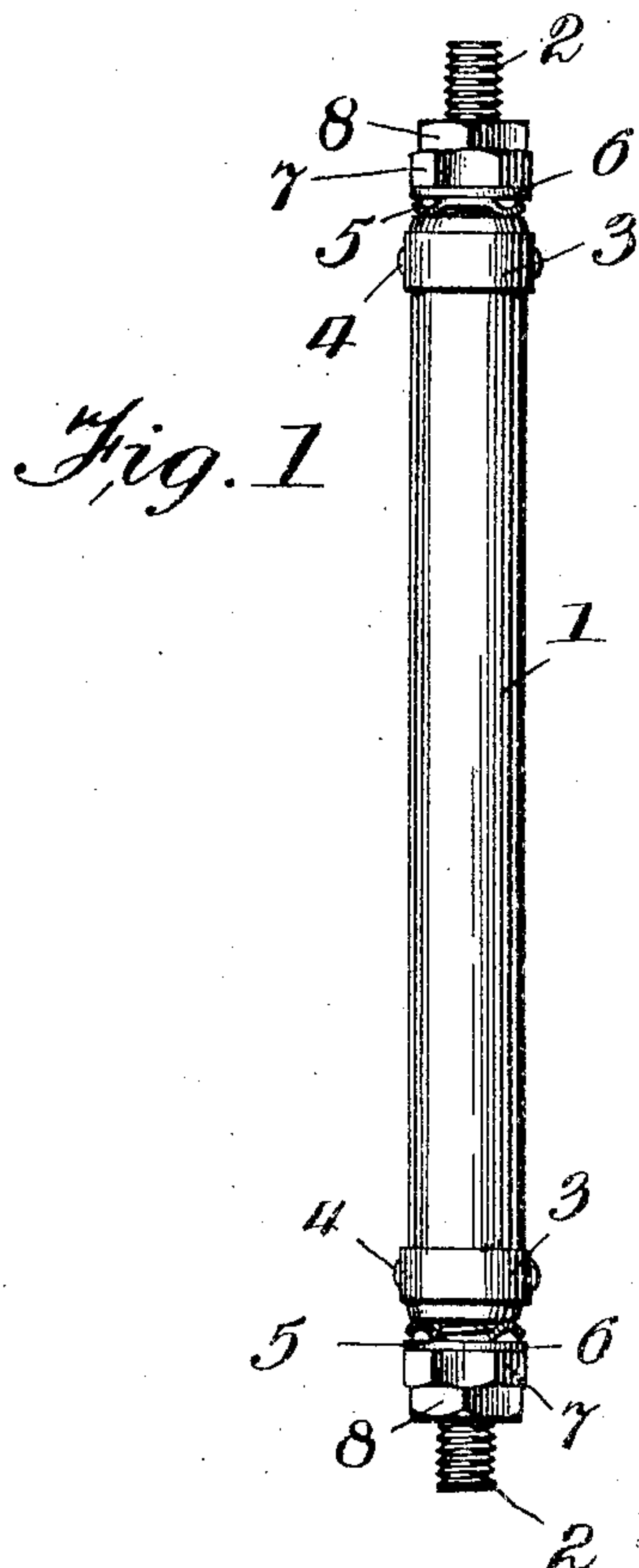


Fig. 1

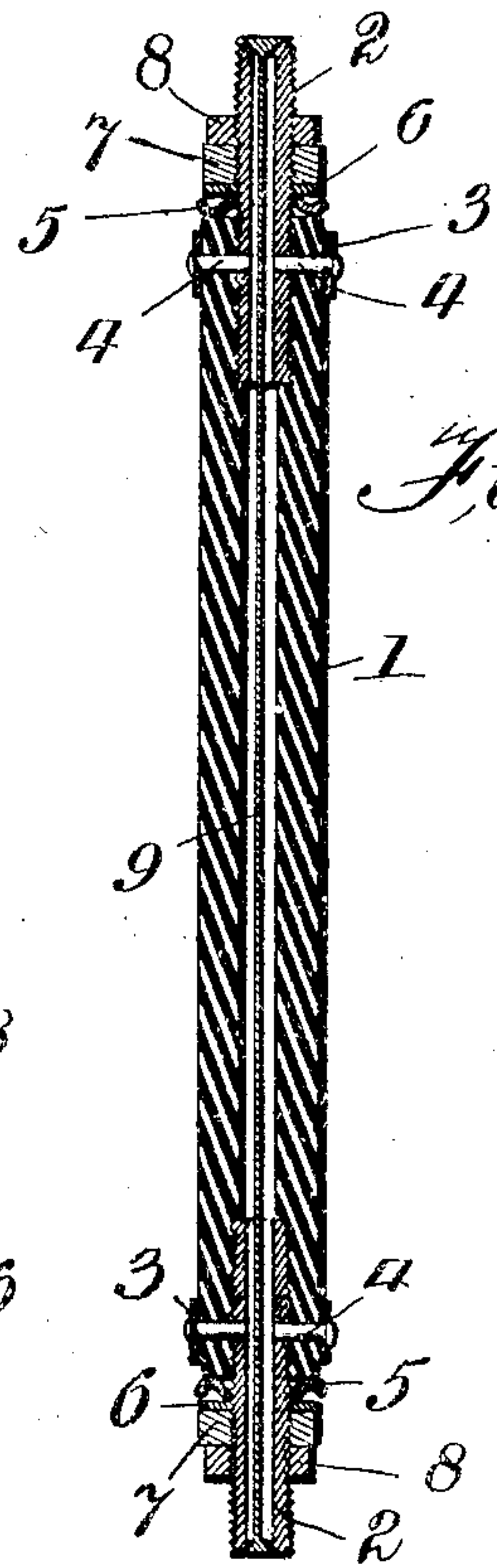
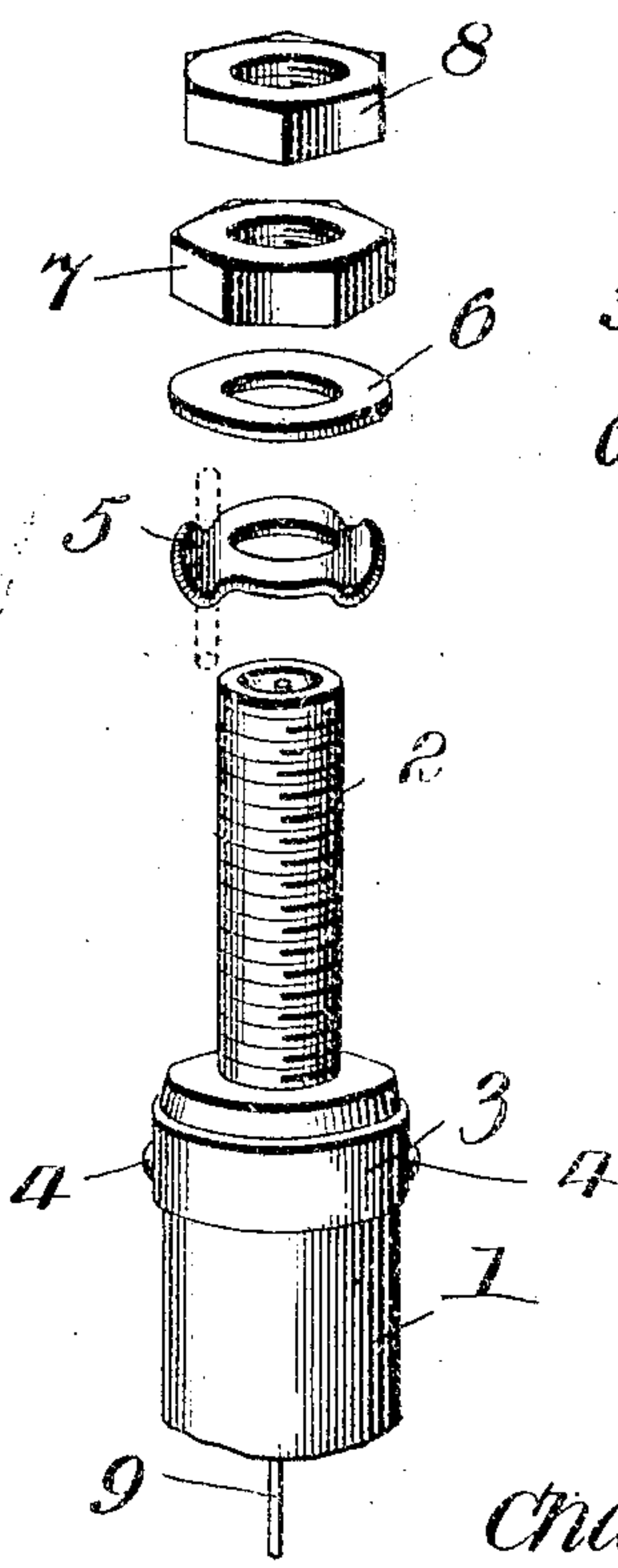


Fig. 2.

Fig. 3.



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UNITED STATES PATENT OFFICE.

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FUSE DEVICE.

No. 800,825.

Specification of Letters Patent.

Patented Oct. 3, 1905.

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To all whom it may concern:

Be it known that I, CHARLES A. ROLFE, a citizen of the United States, residing at Adrian, in the county of Lenawee and State of Michigan, have invented a certain new and useful Improvement in Fuse Devices, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to fuse devices, and especially to such devices consisting of an insulating-tube with a fine fuse-wire inclosed therein, the tube being provided at its ends with devices by which it can be attached to conductors in the circuit.

The objects of the invention are to simplify the construction of fuse devices of this kind, to increase their efficiency, and to cheapen their cost.

In the accompanying drawings, Figure 1 is an elevation of a fuse device embodying my present invention. Fig. 2 is a longitudinal section of the same. Fig. 3 is a view in perspective of the upper part of the device with certain of the parts separated from one another.

The fuse device shown comprises a tube 1, of wood or similar insulating substance, conveniently coated on the outside with waterproof paint. At each end of the tube 1 is a threaded brass sleeve 2, which extends down for a portion of its length into the end of the tube 1, as well shown in Fig. 2. A metal ring or band 3 is arranged about the tube 1, near the end thereof, and pins 4 4 are passed through the band or ring 3, the tube 1, and into the threaded sleeve 2. This construction is conveniently formed by passing a rivet or pin through the ring and tube and then re boring the sleeve 2 to separate the rivet between its ends. A fluted washer 5 is fitted over the threaded sleeve 2 next the end of the tube 1, and a flat washer 6 is arranged on the sleeve 2 outside of the fluted washer 5. Lock-nuts 7 and 8 are arranged on the sleeve 2 outside of the flat washer 6. The arrangement just described is desirably the same at both ends of the device, and hence the above de-

scription answers for both. A fuse 9 is arranged within the tube 1 and sleeves 2 2. Its ends are conveniently soldered to the outer ends of the tubes 2 2.

The device thus described is connected in the line by arranging the conductors between the fluted and flat washers 5 and 6 and in the flutes of the former and then screwing set-nuts 7 and 8 down so as to lock the conductors securely in position. It will be seen that the fluted washer 5 provides convenient grooves or channels for the conductors, by which they are easily grasped and held against movement. The channels thus provided are adapted to accommodate different sizes of wire, thereby making possible the use of the device with many different sizes and kinds of wire. The flutes of the washer 5 press against the ends of the tube 1, thereby producing a firm and secure clamping action and at the same time tending strongly to prevent turning or twisting on the part of the washer.

It will be seen from the foregoing that the device is simple and practical and has certain specific advantages, among which are those mentioned.

What I claim as my invention is—

1. In a device of the class specified, the combination of an insulating-tube, a threaded sleeve having a portion of its length inserted into the end of said tube, a band or ring about the end of said tube, pins extending through said band and through the walls of the tube into the sleeve, and connecting devices arranged upon said sleeve, substantially as described.

2. In a device of the class specified, the combination of an insulating-tube, a threaded metallic sleeve having a portion of its length inserted into the end of said tube, a band arranged about the end of the tube, pins extending through the band and the walls of the tube and into said sleeve, fluted and flat washers arranged upon said sleeve, and lock-nuts also arranged upon said sleeve, substantially as described.

3. In a device of the class specified, the combination of an insulating-tube, a threaded

sleeve having a portion of its length inserted into the end of the tube, a band arranged about the tube near the end thereof, pins extended through the band and through the walls
5 of the tube and into the sleeve, a fluted washer arranged upon the threaded sleeve and adapted to fit against the end of the tube, and means for clamping the wire against said washer and

in the flutes or channels thereof, substantially as described. 10

In witness whereof I hereunto subscribe my name this 22d day of January, A. D. 1903.

CHARLES A. ROLFE.

Witnesses:

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I. C. LEE.