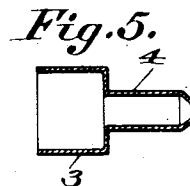
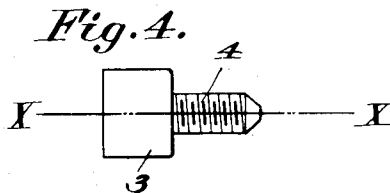
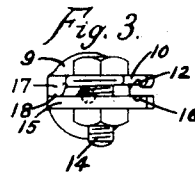
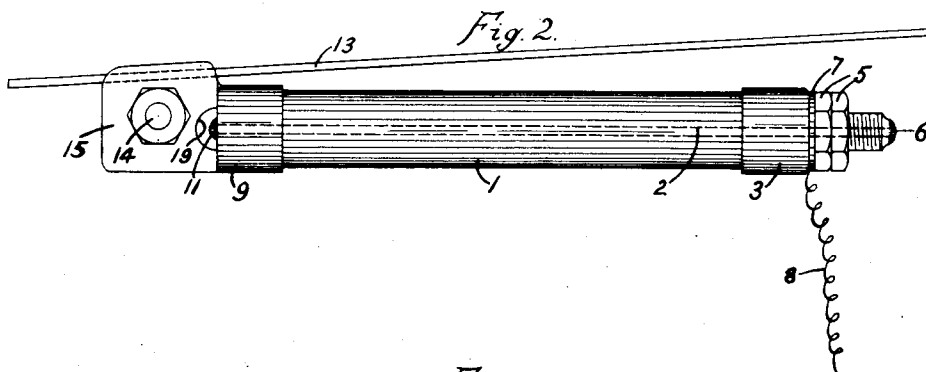
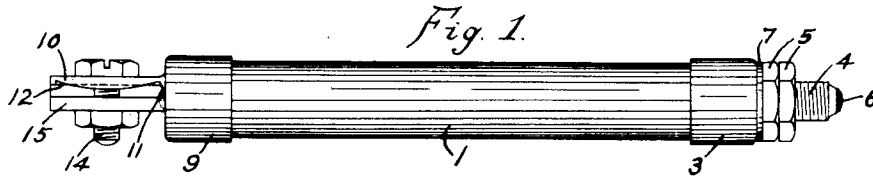


No. 869,060.

PATENTED OCT. 22, 1907.

F. B. COOK.
ELECTRIC LINE FUSE.
APPLICATION FILED OCT. 8, 1906.



WITNESSES:

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INVENTOR:

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UNITED STATES PATENT OFFICE.

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ELECTRIC-LINE FUSE.

No. 869,060.

Specification of Letters Patent.

Patented Oct. 22, 1907.

Application filed October 8, 1906. Serial No. 338,037.

To all whom it may concern:

Be it known that I, FRANK B. COOK, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Electric-Line Fuse, of which the following is a specification, reference being had to the accompanying drawings illustrating same.

My invention relates to fuses for electrical circuits and apparatus, and more particularly to such fuses of the inclosed type.

The principal objects of my invention are to provide improved terminals for such a fuse, which are made of sheet metal; and to construct one of the said terminals so that the fuse will lie substantially parallel with the line wire when in service on same. Other objects will be apparent from the following specification.

Figure 1 is a side elevation of the improved fuse of my invention; Fig. 2 is a bottom view of Fig. 1, showing the fuse in service on a line wire; Fig. 3 is a left end view of Fig. 1; Fig. 4 is a side elevation of terminal cap 3; and Fig. 5 is a cross-sectional view of terminal cap 3, taken on line X—X of Fig. 4.

Like characters refer to like parts in the several figures.

The casing 1 for the fuse wire is preferably made of porcelain, or some other suitable material, and is provided with a hole 2 therethrough through which the fuse wire extends. One end of tube 1 is provided with a terminal cap 3 preferably formed of sheet-metal and forced on the tube 1 under considerable pressure so that it cannot be readily pulled off. Terminal cap 3 is first formed as a plain thimble, out of a flat disk of sheet-metal, the spindle portion 4 thereon being then drawn down to size and threaded to accommodate nuts 5. This construction provides a hole through the portion 4 to accommodate the fuse wire extending from the tube 1, which is soldered to the portion 4 at 6, the solder completely closing the opening in 4. Between the inner nut 5 and the cap portion 3, is placed a washer 7, between which and the portion 3 is clamped line conductor 8. The other end of tube 1 is provided with a terminal cap 9 also formed of sheet-metal and placed upon tube 1 in a manner similar to cap 3. Terminal 9 is first formed as a plain thimble, out of a flat disk of sheet-metal, the plate-like portion 10 being then formed on cap 9 by simply pressing a portion of the thimble together. The portion 10 is preferably formed off of center so as to permit the fuse wire to extend through a hole in the center of the end of cap 9 and be soldered thereto at 11, the solder completely closing the hole in the end of cap 9.

The portion 10 is provided with a groove 12 along one edge thereof, substantially parallel with tube 1, to accommodate the line wire 13 when the fuse is put in service. A bolt 14 extends through the center of the

portion 10 and carries a washer 15 provided with a groove 16 near one edge thereof to coincide with groove 12, the washer 15 being preferably the same general form as the portion 10. The line wire 13 is clamped between the portion 10 and washer 15, in the grooves 12 and 16, the fuse as a whole preferably hanging underneath the line wire 13 when properly installed. The bottom edge of the portion 10 is provided with a rib 17 extending therealong, against which the washer 15 bears so as to enable it to more firmly bear against the line wire 13, the two places of bearing on the washer 15 being at 16 and 18. The washer 15 is preferably cut away at 19 to accommodate the solder fuse connection at 11.

The circuit through the fuse is from line wire 13 through terminal plate 10 and washer 15, fuse wire in opening 2, terminal 3 and line conductor 8, to any suitable instrument or circuit.

It will be readily seen that the fuse of this invention is very convenient to use, as it extends substantially along the line wire and hence does not interfere with other conductors or parts, as it would if it extended perpendicularly to the line wire 13 as is the usual practice.

Forming the fuse terminal 3 of sheet-metal, and threading the smaller portion 4 thereof, greatly simplifies the manufacture of such terminals and therefore cheapens their cost.

I do not wish to limit this invention to the exact details of construction as herein shown, as modifications may be made therein without departing from the scope of the invention.

What I claim as my invention and desire to secure by Letters Patent is:

A fuse of the character described, comprising a tube having a small bore therethrough for carrying the fusible conductor, a terminal cap for the tube formed as a thimble from a single piece of sheet-metal, a portion of the said thimble being flattened in a plane parallel with the longitudinal axis of the fuse and off of center of the fuse where by the fusible conductor may extend out of the center of the end of the thimble in line with the small bore in the tube, a groove along one edge of the flattened portion substantially parallel with the said axis, a bolt extending through the said flattened portion, a washer carried by the said bolt for clamping a conductor in the said groove and being in shape and size substantially the same as the said flattened portion, and a recess in the said washer to accommodate the said fusible conductor where it extends out through the end of the thimble, and allow it to be readily secured to the latter.

As inventor of the foregoing I hereunto subscribe my name in the presence of two subscribing witnesses, this 6th day of Oct. 1906.

FRANK B. COOK.

Witnesses:

JNO. F. TOMPKINS,
FREDERICK R. PARKER.