No. 723,520. PATENTED MAR. 24, 1903.

J. FISCHLER.

FUSE SPLITTER AND CAP CRIMPER.

APPLICATION FILED OCT. 16, 1902.

NO MODEL.

Fig. 1.

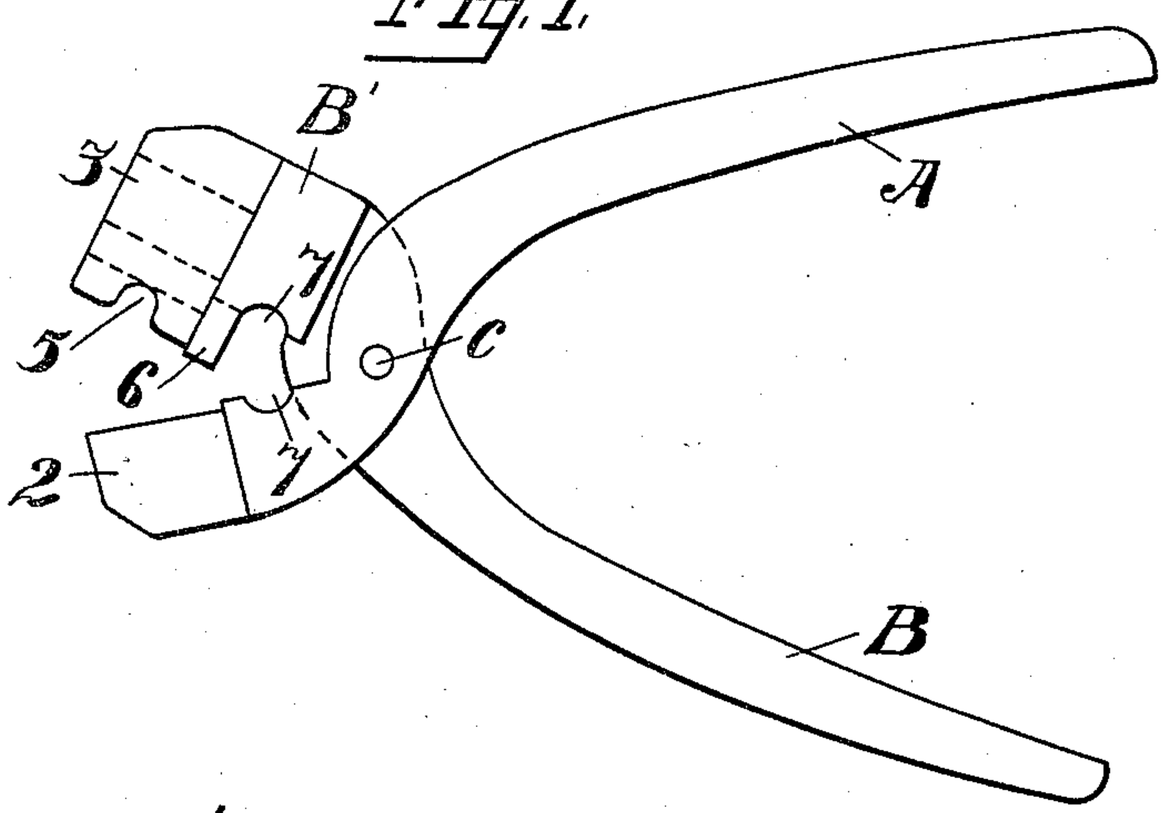


Fig. 2.

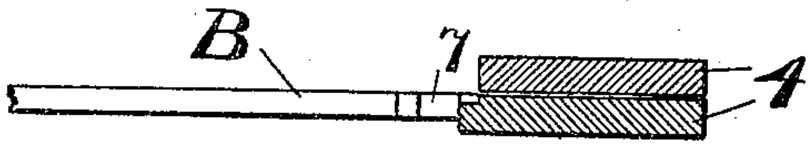


Fig. 3.

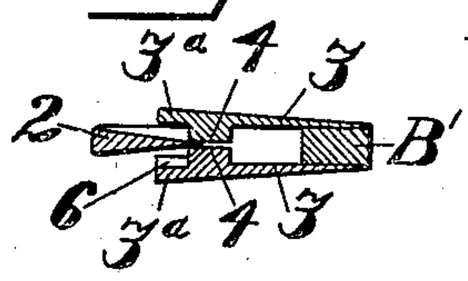
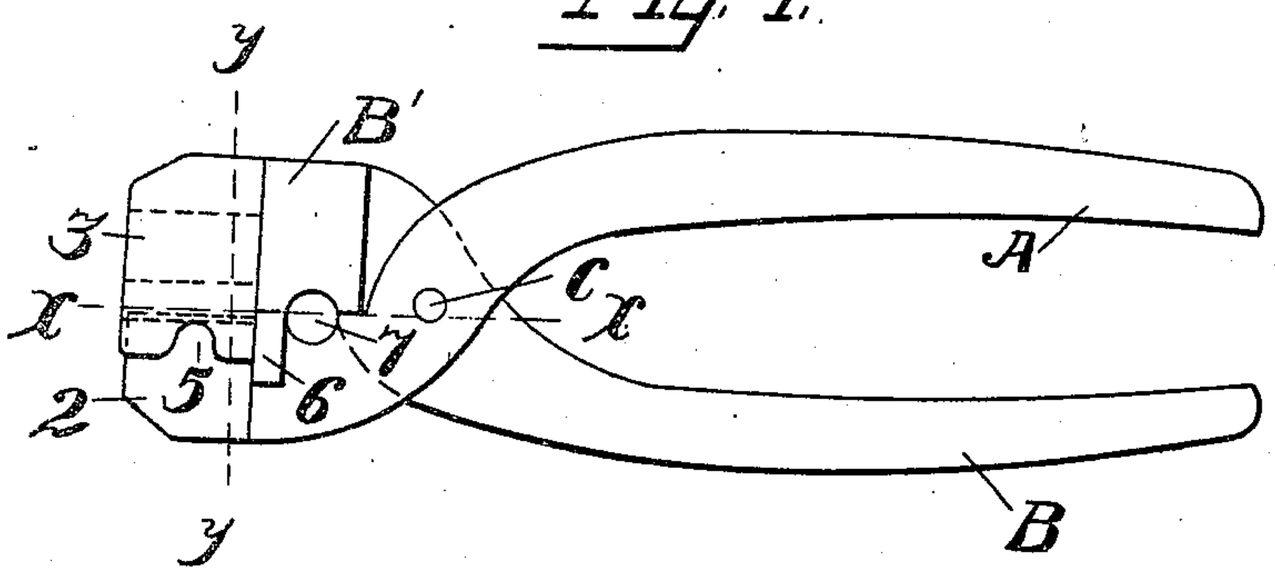


Fig. 4.



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UNITED STATES PATENT OFFICE.

JOSEPH FISCHLER, OF SILVERTON, COLORADO.

FUSE-SPLITTER AND CAP-CRIMPER.

SPECIFICATION forming part of Letters Patent No. 723,520, dated March 24, 1903.

Application filed October 16, 1902. Serial No. 127,516. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH FISCHLER, a citizen of the United States, residing at Silverton, county of San Juan, State of Colorado, have invented an Improvement in Fuse-Splitters and Cap-Crimpers; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to a device which is especially designed for splitting fuse and crimping caps upon the ends thereof in readiness for use.

It consists of a pair of handles pivoted together, the operating end of one consisting of a fuse-splitting blade and one-half of the crimping-segment, and the operating end of the other handle carrying the elastically-mounted splitting-blocks in conjunction with which the blade operates and also carrying the other half of the crimper. The side walls of the splitting-blocks may also be formed to receive the fuse transversely, so that the same blade will serve to cut it into desired lengths.

Referring to the accompanying drawings, Figure 1 is a side view showing the device open. Fig. 2 is a section on $x\,x$ of Fig. 4. Fig. 3 is a cross-section on the line $y\,y$ of Fig. 4, showing the splitting-blocks with their spring sides or extensions and attachment to the jaw. Fig. 4 is a side view with jaws closed.

It is the object of this invention to provide a convenient tool by which all the work of preparing fuse and affixing the explosion-caps thereon may be easily effected.

As shown in the drawings, A and B are handles crossing each other and pivoted together, as shown at C. The extension of one of these handles A beyond the pivot-point is formed into a sufficiently-thin sharp blade 2. The extension of the other handle B carries the jaw, in conjunction with which the blade 2 may operate, first, to cut off the fuse and make a clean square cut to fit the cap and after loading the hole to split the fuse a short distance from the end, and thus prepare it for ignition. The splitting-block consists of two elastic blades 3, the lower ends of which are riveted or otherwise secured to the lower end of the extension B′ of the handle B. These sides 3 3 extend upward and have formed near the upper ends the inwardly-projecting blocks or surfaces 4, which nearly or quite meet each other centrally between the sides 3, leaving a space into which the blade 2 may descend, the sides 3 3 being sufficiently elastic to allow the blocks to separate as the blade passes between them and to again close together when the blade is removed by opening the jaws. Above the blocks 4 the sides 3 extend, as at 3^a, forming guides between which the fuse is held centrally when the end is inserted for the purpose of being split. These sides 3^a also have formed in them the semicircular grooves 5, which are transversely in line with each other and the bottoms of which are flush with the surfaces of the blocks 4. This allows the fuse to be laid into the grooves 5 transversely of the blade 2 and supporting-blocks 4, and when the handles are closed together the blade will cut the fuse squarely across, because it lies solid on both the blocks 4, and being equally supported the blade passes squarely across and into the space between the blocks, which are slightly separated by the movement. This square end of the fuse is then ready to be inserted and secured within the cap as follows: Behind the blade 2 and the opposing jaw 4 the semicircular transverse grooves 7 are made in the two jaws opposing each other, so that when closed together they will form an essentially circular hole transversely through the two jaws. Within these jaws the cap is placed, the fuse fitted into the end of the cap, and by closing the handles the cap will be crimped firmly upon the end of the fuse and the connection will be waterproof. After the hole has been loaded the projecting end of the fuse is split, so that it may be quickly ignited, which is necessary when a number of holes are to be fired at once. To do this, it is laid lengthwise between the upwardly-projecting sides 3^a, and is thus held centrally in place. The blade 2 being then forced down by closing the handles passes through the fuse and into the space between the blocks 4 as the handles are closed, thus splitting the fuse cleanly and evenly. As soon as the blade is withdrawn by opening the handles the blocks close together again.

In order to limit the rearward movement of the fuse, and thus prevent its going beyond the splitting-block, I have shown a block or stop 6, which projects upwardly at the rear end of the blocks 4 and in line with the open

space between the sides 3^a, so that the end of the fuse when inserted upon the splitting-jaw abuts against this block and is prevented from being pushed in too far.

When the blade is withdrawn after being closed, the fuse may adhere to the blade and may be lifted out of the channel between the sides 3^a. Then by twisting the blade a little to right or left while the fuse is held in the other hand the end of the fuse will be spread and it is ready for igniting.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A fuse-splitting tool consisting of handles pivoted together, a blade formed upon the extension of one of the handles and supporting, separable blocks mounted upon the opposite extension, said blocks meeting in the plane of movement of the blade.

2. A fuse-splitting tool consisting of handles pivoted together, a blade formed upon the extension of one of said handles, blocks meeting each other in the plane of movement of the blade and having elastic sides by which they are connected with the jaw opposing the blade.

3. A fuse-splitting tool consisting of pivoted handles, a blade carried by one, and blocks carried in opposition thereto by the other handle, elastic continuations below the blocks by which they are attached to the jaw opposing the blade, and side extensions above the blocks to support and form a channel and centering-guide for the fuse.

4. A fuse-splitting device consisting of pivoted handles, a blade carried by the extension of one of said handles, a jaw carried by the other, elastic plates fixed to said jaw, separable blocks carried by said plates and guides extending above the blocks, and a stop at the inner end of the splitting-block against which the fuse abuts when being split.

5. A fuse-splitting device consisting of pivoted handles, a blade carried by one of said handles, an opposing jaw carried by the other, opposing side plates fixed to said jaw, blocks meeting centrally between said plates and separable when the blade is closed to pass between them, upwardly-extending sides forming a channel to receive the fuse, said sides having segmental transversely-disposed grooves with the bottoms upon the plane of the upper surface of the splitting-blocks whereby said blocks form a support for the fuse when the blade is closed thereon.

6. The combination in a fuse-preparing tool of handles pivoted together, one of said handles having a blade upon its forward extension, the other having an opposing jaw, elastic side plates fixed to said jaw, blocks carried by said plates meeting centrally in the plane of movement of the blade and having upward extensions forming a guide-channel for the fuse, said extensions having transverse grooves to receive the fuse when being cut into lengths and segmental crimping-jaws located between the cutting and splitting jaws and the pivot about which they are movable.

In witness whereof I have hereunto set my hand.

JOSEPH FISCHLER.

Witnesses:
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