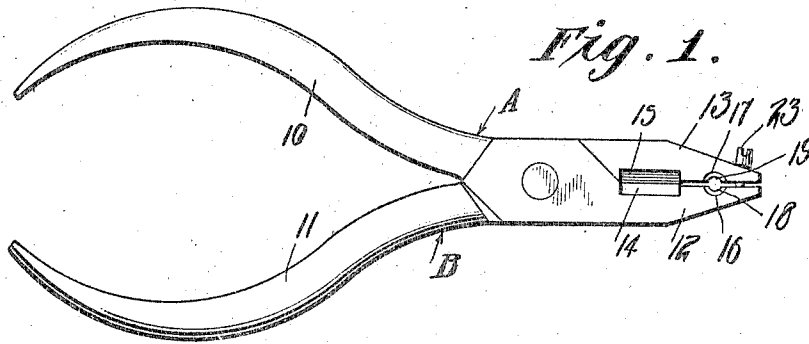
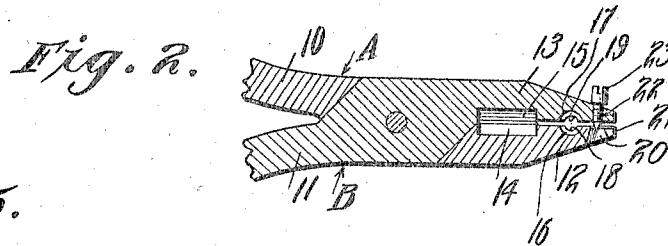
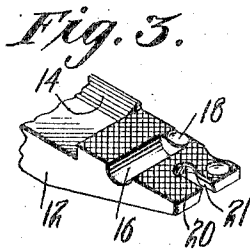
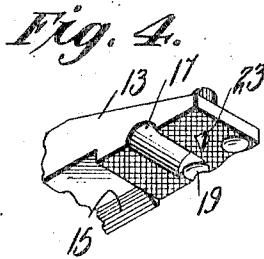
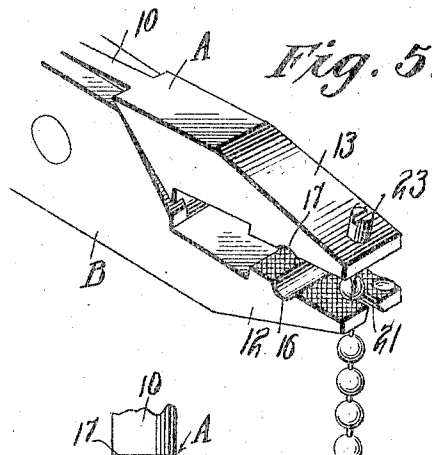
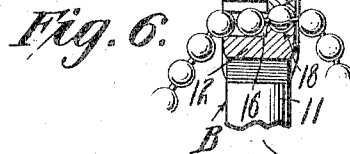


A. E. PARTLOW.
CHAIN REPAIRING PLIERS.

APPLICATION FILED MAY 18, 1915. RENEWED MAY 3, 1918.

1,290,331.

Patented Jan. 7, 1919.



Witnesses

W. C. Fielding
Henry T. Wright

Inventor

A. E. Partlow,

By

Charles Chandler

Attorneys

UNITED STATES PATENT OFFICE.

ANDREW E. PARTLOW, OF JOHNSON, VERMONT.

CHAIN-REPAIRING PLIERS.

1,290,331.

Specification of Letters Patent.

Patented Jan. 7, 1919.

Application filed May 18, 1915, Serial No. 28,926. Renewed May 3, 1918. Serial No. 232,383.

To all whom it may concern:

Be it known that I, ANDREW E. PARTLOW, a citizen of the United States, residing at Johnson, in the county of Lamoille, State of Vermont, have invented certain new and useful Improvements in Chain-Repairing Pliers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to chain repairing pliers.

The object of the invention resides in the provision of pliers embodying an improved construction whereby same are rendered particularly effective in repairing chains of the ball and stem type such as are used in operating switches of incandescent electric lamps, it being possible through the instrumentality of the pliers to connect the separated sections of a broken chain of this type so that same will be restored to its original condition as respects both structure and appearance.

With the above and other objects in view the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully described and particularly pointed out in the appended claim.

In describing the invention in detail reference will be had to the accompanying drawings wherein like characters of reference denote corresponding parts in the several views, and in which—

Figure 1 is a side elevation of pliers constructed in accordance with the invention;

Fig. 2, a partial longitudinal section of the pliers;

Fig. 3, a perspective view of one of the jaws of the pliers;

Fig. 4, a perspective view of the other jaw of the pliers;

Fig. 5, a perspective view showing the manner of applying a section of a broken chain to the pliers for the purpose of removing one of the ball or shell links preparatory to splicing or joining the sections of the broken chain, and

Fig. 6, a transverse section through the jaws of the pliers showing the manner of applying a spread ball link between the jaws to compress the link and unite the sections of the chain.

Referring to the drawings the improved

tool is shown as comprising pivotally connected arms A and B corresponding ends of which form handles 10 and 11 respectively, while the remaining corresponding ends of said levers terminate in cooperating jaws 12 and 13 respectively. These jaws 12 and 13 have formed on their inner faces adjacent their inner ends cooperating cutters 14 and 15 respectively for the purpose of severing the stem links employed in the type of chains upon which the tool is adapted to operate. The inner faces of the jaws 12 and 13 are provided respectively with corresponding transversely disposed recesses 16 and 17, said recesses being relatively deep and opening through one side of said jaws only. The inner faces of the jaws 12 and 13 are further provided with relatively shallow recesses 18 and 19 disposed in line respectively with the recesses 16 and 17. The jaw 12 is provided with a recess 20 having a narrow mouth 21 opening through the outer end of said jaw. The outer face of the jaw 12 is countersunk around the recess 20 so as to provide a seat for one of the ball links of a chain for a purpose and in a manner that will hereinafter appear. The jaw 13 is provided with a threaded opening 22 which aligns with the recess 20 when the jaws of the tool are closed. Detachably engaged in this recess 22 is a spreader 23.

In the use of the tool it is first necessary to spread the ball link at one end of one of the sections of the broken chain. This is accomplished by passing the stem link between the end ball link and the adjacent ball link through the mouth 21 and into the recess 20. The jaws 12 and 13 are then closed and the end ball link spread sufficiently by the spreader 23 to permit the insertion of the terminal stem link of the other section of the chain. With the terminal stem link of the other section thus inserted in the spread ball link the latter is seated in the recesses 18 and 19 and pressed into its original shape by the operation of the jaws 12 and 13. During this operation a portion of the chain is disposed in the relatively deep recesses 16 and 17 and thus protected from injury during the compression and shaping of the spread ball link.

It will be noted that the ball links in a chain of the type disclosed are each formed of a hollow sphere split half way around so that when a given link is positioned as

shown in Fig. 5 between the jaws and the spreader 23 engaged in one end of the split the clamping action of the jaws 12 and 13 will serve to spread the link at the split so as to permit the cooperating stem links to be removed and inserted within the ball link as desired.

What is claimed is:—

A tool of the class described comprising 10 pivotally connected members having corresponding ends terminating in jaws, the inner faces of said jaws being provided with

corresponding relatively deep transverse recesses opening through one side thereof respectively and further provided with corresponding relatively shallow dished recesses disposed respectively in line with the relatively deep recesses. 15

In testimony whereof I affix my signature in the presence of two witnesses.

ANDREW E. PARTLOW.

Witnesses:

PERLEY A. SHATTUCK,
J. H. McLOUD.

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