J. A. ALLEY.

BOLT CLIPPER.

APPLICATION FILED MAY 6, 1908.

914,910. Patented Mar. 9, 1909.

Fig. 1.

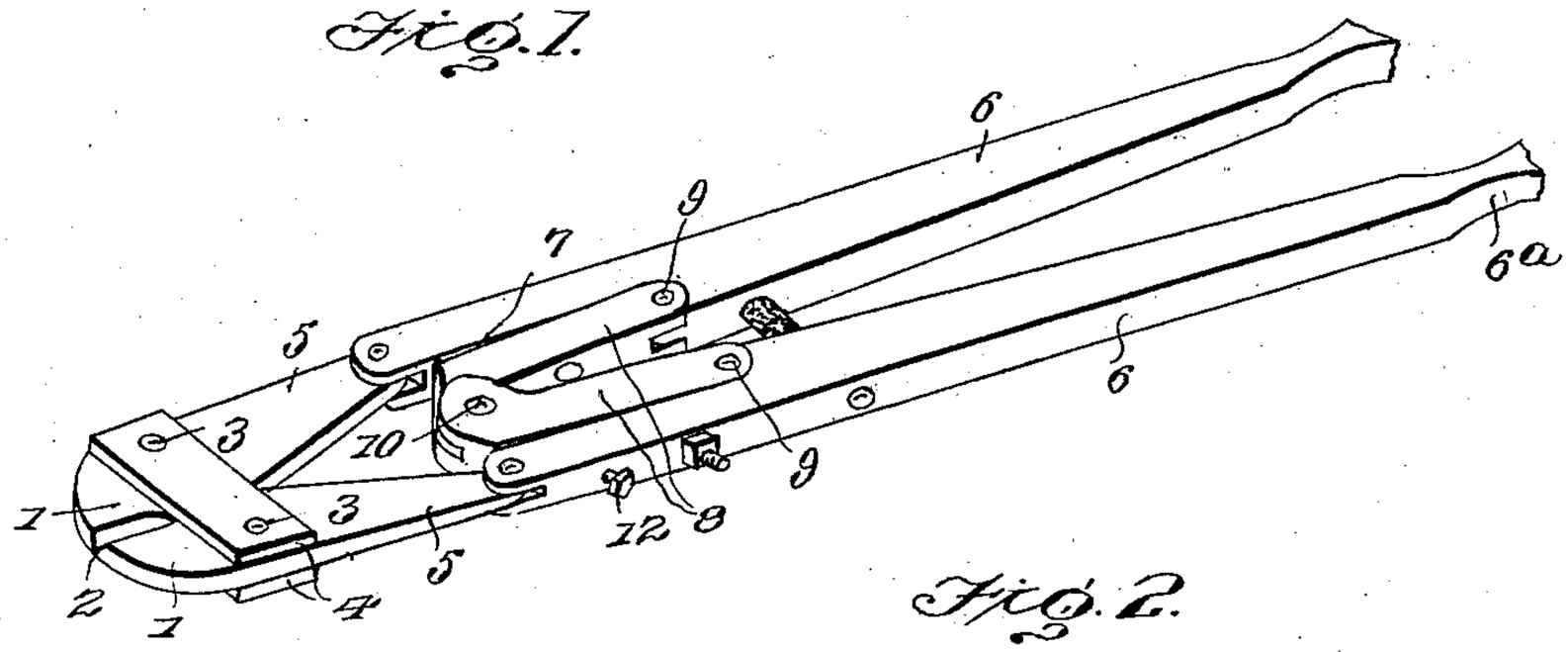


Fig. 2.

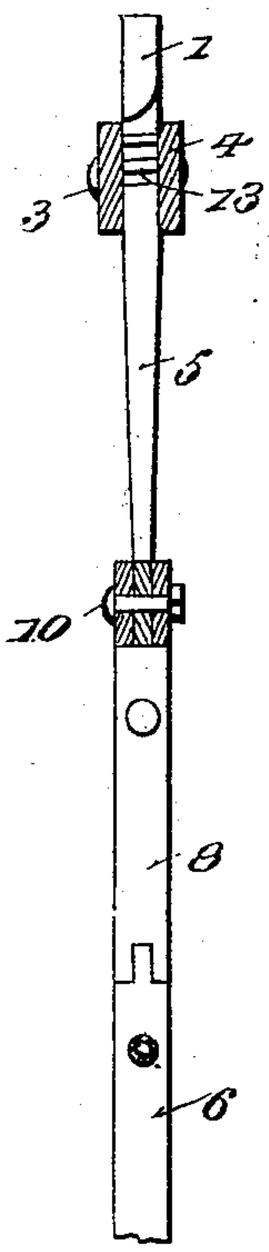
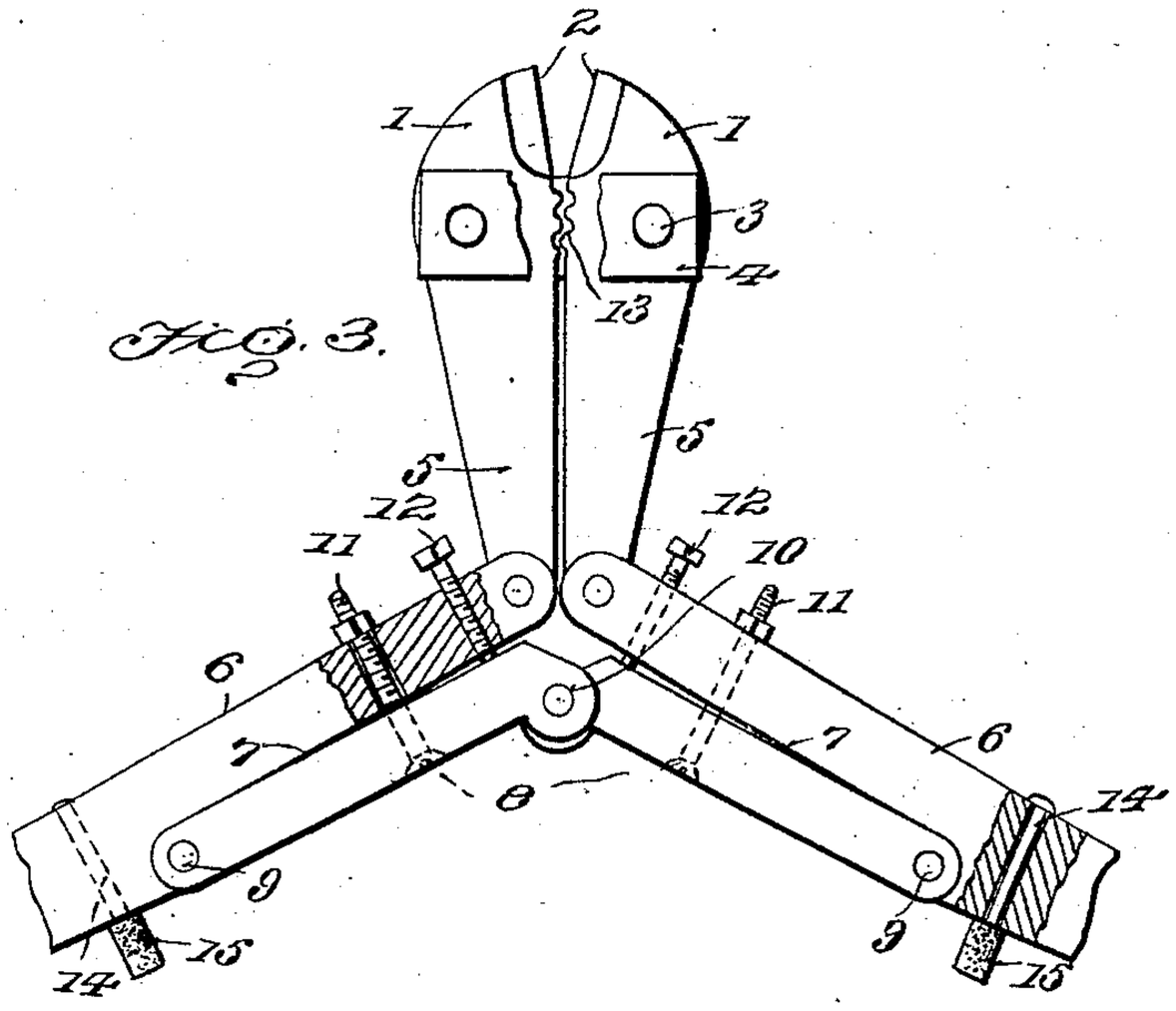


Fig. 3.



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Witnesses

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UNITED STATES PATENT OFFICE.

JAMES A. ALLEY, OF STONEVILLE, NORTH CAROLINA.

BOLT-CLIPPER.

No. 914,910. Specification of Letters Patent. Patented March 9, 1909.

Application filed May 6, 1908. Serial No. 431,184.

To all whom it may concern:

Be it known that I, JAMES A. ALLEY, a citizen of the United States, residing at Stoneville, in the county of Rockingham and State of North Carolina, have invented certain new and useful Improvements in Bolt-Clippers, of which the following is a specification.

The present invention relates to an improved device for clipping bolts or like purposes, and has for its object the provision of a tool of this character which is simple and durable in its construction and by means of which a powerful leverage can be obtained.

The invention further contemplates a bolt clipper having a compound leverage and embodying a novel construction which admits of the leverage being adjusted as desired.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction and the means for effecting the result, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a perspective view of a bolt clipping tool embodying the invention; Fig. 2 is a longitudinal sectional view, the handles being removed. Fig. 3 is a plan view of the tool, portions being removed and shown in section.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Referring to the drawing, the numerals 1—1 designate the jaws of the device which are formed with the coöperating cutting edges 2 and are pivotally mounted upon the pins 3 connecting opposite end portions of fulcrum members or bars 4 which are fitted against opposite sides of the jaws. Each of the jaws 1 terminates in an extension 5 which projects rearwardly, and these extensions diverge from each other when the jaws of the tool are closed. Pivotally connected to the extremities of the extensions 5 are the operating levers 6, the said levers terminating in the handles 6^a. The pivot ends of the levers 6 are formed upon their inner and adjacent faces with the cut away portions 7 receiving the fulcrum arms 8. One end of each of the fulcrum arms abuts against the shoulder at the termination of the cut away portion 7 of the corresponding lever and is pivotally connected to the said lever at 9, while the opposite ends of the fulcrum arms are pivotally connected to each other as indicated at 10. With this construction it will be obvious that by moving the fulcrum arms 8 toward or away from the corresponding levers 6 the leverage of the tool can be adjusted as required. Each of the fulcrum arms 8 carries a bolt 11 passing loosely through the adjacent lever 6 and serving to prevent separation of the members after adjustment thereof. It will also be observed that a set screw 12 is threaded within each of the levers 6 and bears against the corresponding fulcrum arm 8 to hold the same properly spaced from the lever. In this manner it will be obvious that the two fulcrum arms can be securely locked in an adjusted position and that the leverage of the tool can be varied within certain limits as found desirable. When the levers 6 are spread apart the extensions 5 are forced together and the cutting edges 2 of the jaws 1 separated. In a reverse manner it will be obvious that by bringing the levers 6 together the cutting edges 2 will be forced together with a compound leverage resulting from the coöperation of the levers 6 and the extensions 5. For the purpose of causing the two jaws 1—1 to operate in unison they are provided at the inner ends of the cutting edges 2 with the intermeshing teeth 13, and these teeth are normally shielded by the bars or fulcrum members 4. The invention also contemplates the provision of buffers between the levers 6 and for this purpose pins 14 pass loosely through openings in the said levers and are provided with heads which are designed to abut against each other, collars 15 of resilient material being interposed between the heads and the respective levers.

Having thus described the invention, what is claimed as new is:

1. In a tool of the character described, the combination of a pair of levers, fulcrum arms pivotally connected to each other and also to the respective levers, means for holding the fulcrum arms in an adjusted position with respect to the levers, and a pair of pivotally connected and coacting jaws, the said jaws being formed with extensions which are loosely connected to the levers.

2. In a tool of the character described, the combination of a pair of levers, fulcrum arms pivotally connected to each other and extending along the levers, the said fulcrum arms being also pivotally connected to the levers

at an intermediate point in their length, a bolt carried by each of the fulcrum arms and passing loosely through the adjacent lever to prevent separation of the members, a set screw threaded within each of the levers and engaging the fulcrum arm to hold the members properly spaced, and a pair of pivotally connected and coacting jaws provided with extensions which are loosely connected to the levers.

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

JAMES A. ALLEY. [L. S.]

Witnesses:

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