

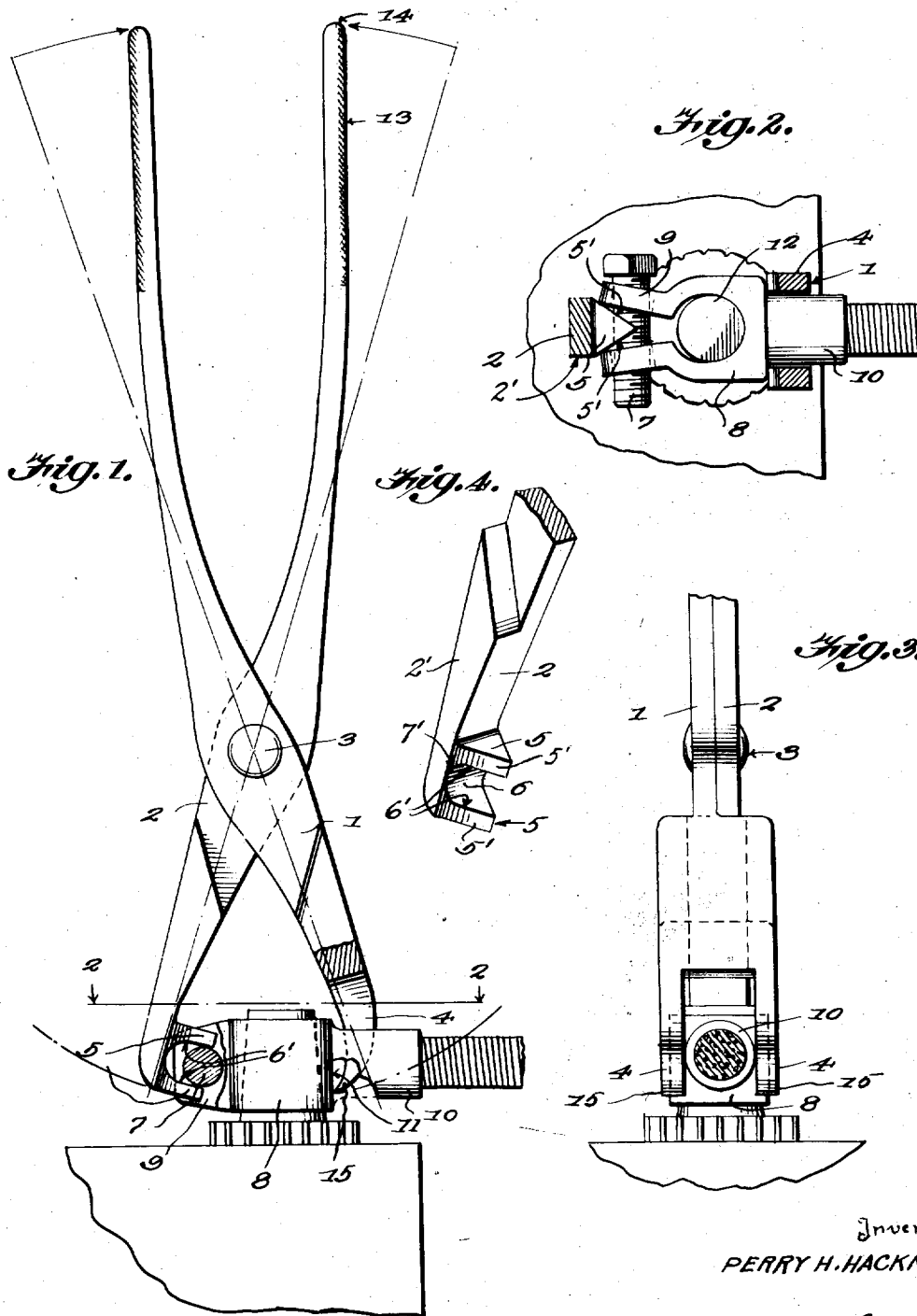
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BATTERY CABLE TERMINAL TONGS

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BATTERY CABLE TERMINAL TONGS

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2 Claims. (Cl. 29—85)

This invention relates to battery cable terminal tongs, and has for its object the production of a simple and efficient device in the nature of a tool which will efficiently lift a battery terminal from the terminal post without fear of injuring the terminal post itself.

Another object of this invention is the production of a simple and efficient cable terminal lifting tool which is provided with means for straddling a portion of the terminal and also is provided with means for wedging in between the slotted end of the terminal to force the terminal apart or spread the same, and at the same time efficiently grip the terminal so as to permit the terminal to be removed from the post.

A still further object of this invention is the production of a simple and efficient tool in the nature of cable terminal tongs wherein one jaw is provided with slotted ends adapted to straddle a portion of the terminal, and the other jaw is provided with a pair of inturned spaced tapering points which are adapted to straddle the terminal bolt and fit between the clamping jaws of the terminal in such a manner as to spread the jaws apart for facilitating the removal of the terminal.

Other objects and advantages of the present invention will appear throughout the following specification and claims.

In the drawing:

Figure 1 is a side elevation of a pair of the improved tongs, a portion thereof being shown in section, the tongs being shown in position for lifting the terminal from the post;

Figure 2 is a section taken on line 2—2 of Figure 1;

Figure 3 is a rear elevation of the tongs showing the construction of the bifurcated jaw; and

Figure 4 is a detail perspective of the lower end of the opposite jaw to that shown in Figure 3, showing the spaced beveled inwardly turned points which are adapted to straddle the clamping bolt of the terminal.

By referring to the drawing, it will be seen that 1 designates the primary jaw, and 2 designates the auxiliary jaw of the tongs, the jaws being pivotally connected by means of the pivot pin or rivet 3 of suitable material. Each of the jaws is provided with an elongated handle, as illustrated.

The primary jaw is provided with a bifurcated lower end to produce the parallel spaced inwardly curved hooks 4 shown clearly in Figures 1 and 3. The auxiliary jaw 2 is provided at its lower end with a pair of spaced inwardly turned tapering or wedge-like points 5, these points 5 being

spaced as shown clearly in Figures 1 and 2, thereby providing a bolt-receiving pocket 6 intermediate the points 5. The points 5 are adapted to straddle the bolt 7 of the terminal 8, as shown in Figure 1 of the drawing, and the tapering wedge-like points 5, as shown in Figure 2 are adapted to fit between the jaws 9 of the terminal and spread these jaws apart as the primary and auxiliary jaws 1 and 2 of the tongs are brought together for the purpose of gripping firmly the terminal 8. The side walls 5' of the points 5 merge into the side walls 2' of the jaw 2. The inner faces of the points 5, which faces are indicated by the numeral 6', are arranged to extend in parallel relation and are of a sufficient distance apart to straddle the bolt 7 throughout their length, and the inner faces 6' terminate in a curved rear wall 7' which conforms to the contour of the bolt 7. Due to this structure, the points 5 will snugly fit over the bolt in such a manner as to not only spread the jaws 9 apart, but also straddle the bolt in such a manner as to prevent the points 5 from accidentally slipping out of engagement with the bolt when lifting the terminal from the post 12. This structure will be obvious by considering Figures 1, 2 and 4 of the drawing.

In actual practice, the bolt 7 is first loosened in any suitable or desired manner, and the tongs are then placed over the terminal 8, such for instance as is shown in a typical case in Figure 1, thereby causing the spaced fingers or arms 4 to straddle the tubular portion 10 of the terminal 8, and engage the shoulder 11 of the terminal. The spaced tapering wedge-like points 5 will then be brought to a position to straddle the bolt 7, and by drawing the jaws together, these wedge-like points 5, one fitting upon the bolt 7, and the other fitting below, will spread the jaws 9 apart, thereby loosening or spreading the terminal 8 from engagement with the post 12 and permit the terminal to be easily lifted from the post.

The tool described may be provided with suitable knurled or roughened grip portions 13 near the upper ends 14 of the handles, and the handles of the tongs may be formed in any suitable or desired manner without departing from the spirit of the invention. It should be understood that these tongs may be used for removing terminals from any type of battery, although the spaced fingers or arms 4 of the primary jaw 1 will greatly facilitate the use of the tool in removing terminals from the well-known Ford-type of battery, and particularly those terminals wherein the tubular portion 10 extends in alignment with the longitudinal axis of the terminal. The

spaced fingers or arms 4, however, will constitute an efficient fulcrum for gripping a portion of the terminal 8 and the inwardly turned points 15 of the arms or fingers 4 will firmly bite into or grip the terminal 8 and permit the tapering wedge-like points 5 of the auxiliary jaw 2 to be clamped over and straddle the bolt 7 between the jaws 9 of the terminal for the purpose of spreading the terminal apart.

10 It should be understood that certain detail changes in the mechanical construction may be employed without departing from the spirit of the invention so long as these changes fall within the scope of the appended claims.

15 Having described the invention, what is claimed as new is:—

1. A terminal lifting tool comprising a primary and an auxiliary jaw, means for pivotally securing the jaws together, one of the jaws being provided with a pair of spaced inwardly turned tapering points adapted to fit between the spaced jaws of a battery terminal, said points being formed substantially wedge-shaped and having inclined side walls merging into the side walls of the jaw which carries the points, the inner faces

of the points being arranged in substantially parallel relation and terminating at their inner ends in a curved wall to facilitate the straddling of the bolt of a terminal and to facilitate the lifting of a terminal from a battery post without the accidental slipping of the terminal from between the points, and terminal gripping means carried by the other jaw.

2. As a new article of manufacture, a terminal lifting tool comprising a pair of pivotally secured jaws, one of the jaws having at its lower end a pair of substantially right-angularly extending tapering points having the side walls thereof merging into the side walls of the last-mentioned jaw, said points being of material length sufficient to straddle the entire transverse width of a battery terminal bolt, the inner faces of the points being substantially parallel to efficiently straddle the terminal bolt and prevent the accidental slipping of the points from engagement with the bolt when lifting the terminal from a post, and the other jaw being provided with inwardly curved sharpened spaced points which are adapted to engage the opposite face of a battery terminal.

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