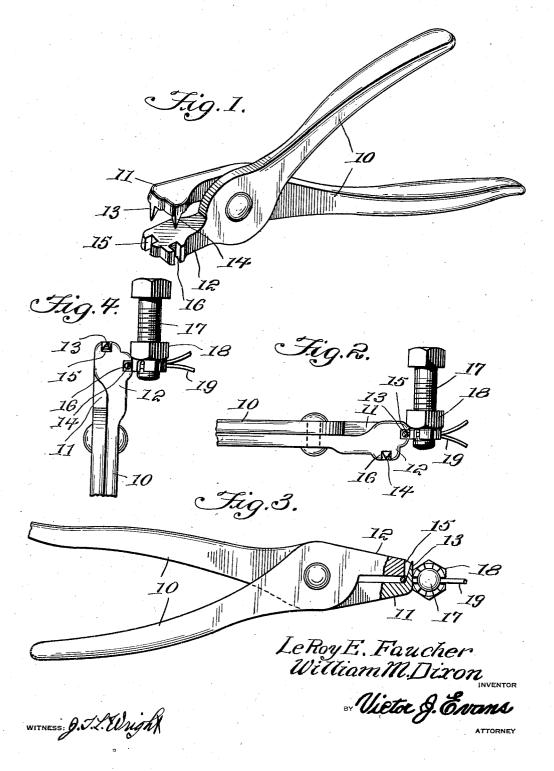
## LE ROY E. FAUCHER ET AL

PIN TOOL

Filed July 25, 1924



## UNITED STATES PATENT OFFICE.

LE ROY E. FAUCHER AND WILLIAM M. DIXON, OF RICHMOND, CALIFORNIA.

PIN TOOL.

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Ta all whom it may concern:

Be it known that we, LE ROY E. FAUCHER and WILLIAM M. DIXON, citizens of the United States, residing at Richmond, in the county of Contra Costa and State of California, have invented new and useful Improvements in Pin Tools, of which the following is a specification.

This invention contemplates the provision 10 of a tool designed to facilitate the extraction of cotter pins from bolts, particularly when the head of the pin is well seated in the slot of the nut associated with the bolt under which circumstances it is often times 15 a matter of great difficulty in obtaining a proper purchase upon the pin to remove it of

said parts.

In carrying out the invention, we contemplate the provision of a tool which resembles 20 a pair of pliers, wherein the jaws of the tool are relatively broad, one jaw being formed with a pair of tapered prongs which slightly protrude from said jaw in the direction of the other jaw, the latter mentioned jaw be-25 ing formed with notches to receive said prongs when the jaws are moved toward each other for the purpose of gripping a cotter pin to remove it from the object with which it is attached.

Another object of importance resides in the provision of a tool of the above mentioned character, wherein the prongs are arranged to permit the tool to be used either at a right angle to the bolt from which the cotter pin is to be extracted, or used in a posi-

tion parallel with said bolt.

The nature and advantages of the invention will be better understood when the following detailed description is read in connection with the accompanying drawings, the invention residing in the construction, combination and arrangement of parts as claimed.

In the drawings forming part of this ap-15 plication, like numerals of reference indicate similar parts in the several views, and

wherein:

Figure 1 is a perspective view of the tool forming the subject matter of this inven-

Figure 2 is a view showing how the tool is used when arranged at a right angle to the bolt.

Figure 3 is a plan view of Figure 2 part-

is used when arranged parallel with the

The tool forming the subject matter of this invention includes a pair of crossed piv- 60 oted handles 10, each of which is formed with a jaw, the jaws being relatively broad and arranged in confronting relation, and indicated at 11 and 12 respectively. The indicated at 11 and 12 respectively. tool in its entirety resembles a pair of pli- 65 ers, and is adapted to be handled and manipulated in a somewhat similar manner. Projecting inwardly from the jaw 11 is a pair of tapered prongs 13 and 14 respectively, the prong 13 being arranged adjacent the 70 forward edge of the jaw, while the prong 14 is arranged adjacent one side edge there-In other words these prongs are arranged at substantially a right angle to each other and each prong is adapted to be re- 75 ceived by a notch formed in the other jaw. The notch for the prong 13 is indicated at 15 and opens at the forward edge of the jaw 12, while the notch for the other prong is indicated at 16 and opens at one side of the 80 jaw 12. In addition to the prongs being tapered, they slightly protrude forwardly as shown in Figure 3 to facilitate the insertion of the prong through the head of the cotter pin, and its subsequent removal from 85 the bolt and nut indicated at 17 and 18.

When it is necessary or desirable to use the tool in a position at a right angle to the bolt 17, the prong 13 is used to extract the cotter pin 19, this use of the tool being 90 clearly shown in Figures 2 and 3. The jaws are opened and the tool arranged with the prong 13 arranged at one side of the head of the pin 19, and when the handles are moved together, the prong enters the head of the 95 pin and the slot 15 of the jaw 12. By reason of the fact that the prong has a protruding effect, it can more easily and positively be passed through the head of the pin, and during the continued closing movements 100 of the jaw, the prong 13 being tapered has a wedging effect so as to partly extract the pin from the bolt while the pin is being engaged by the tool. After the jaws have been completely closed, a firm hold is ob- 105 tained so that the pin can be subsequently extracted without any danger of the tool slipping from the pin. When it is necessary or desirable to use the tool in position parallel with the bolt 17, the other prong 14 110 and notch 16 are used in connection with the Figure 4 is a view showing how the tool pin 19, this use of the tool being shown in

Figure 4. The tool is very simple in con- prong being tapered and slightly protruding 20 struction, and very meritorious for the pur-

pose intended.

While it is believed that from the fore-5 going description the nature and advantages of the invention will be readily apparent, we desire to have it understood that we do not limit ourselves to what is herein shown and described, and that such changes 10 may be resorted to when desired as fall within the scope of what is claimed.

What we claim is:

1. A tool of the character described including a pair of jaws adapted to be moved toward and away from each other, one of said jaws having notches in two of its adjacent edges, and a pair of prongs adapted to be received by said notches when the jaws are moved toward each other, each

forwardly of said jaw for the purpose specified.

2. A tool of the character described comprising a pair of crossed pivoted handles, jaws carried by corresponding ends of said 25 handles, one of said jaws having notches in two of its adjacent edges, and a pair of prongs projecting inwardly from the other jaw, and arranged in right angular relation to each other to be received by said notches 30 when the jaws are moved toward each other, each prong being tapered and slightly inclined with relation to its jaw.

In testimony whereof we affix our signa-

tures.

LE ROY E. FAUCHER. WILLIAM M. DIXON.