

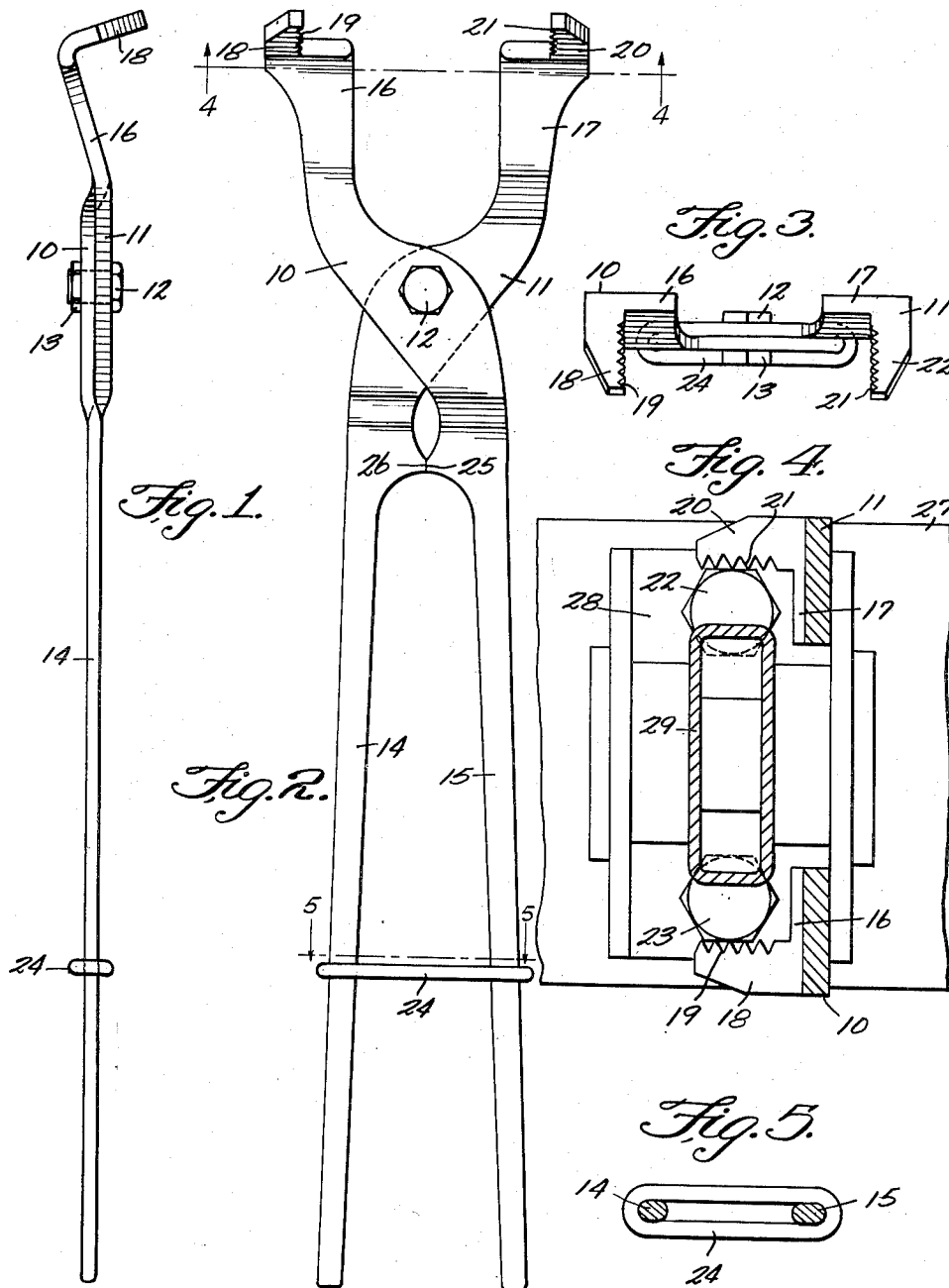
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CAMBER CLAMP

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CAMBER CLAMP

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4 Claims. (Cl. 81-13)

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This invention relates to a tool, and more particularly to a tool for holding bolts while the nuts are being screwed on or off.

The object of the invention is to provide a tool which is particularly adapted for holding the frame bracket bolts of a vehicle while making camber adjustments on the vehicle.

Another object of the invention is to provide a tool for holding vehicle frame bracket bolts which are extremely simple and inexpensive to manufacture.

Other objects and advantages will be apparent during the course of the following description.

In the accompanying drawings forming a part of this application, and in which like numerals are employed to designate like parts throughout the same:

Figure 1 is a side elevational view of the tool, according to the present invention;

Figure 2 is a top plan view of the tool;

Figure 3 is an end elevational view of the tool;

Figure 4 is an enlarged transverse sectional view of the tool on the line 4-4 of Fig. 1, showing the relative position of same with reference to the proximate parts of the machine (Studebaker automobile), on which the tool is applied;

Figure 5 is a transverse sectional view of the tool handles on the line 5-5 of Fig. 1.

Referring in detail to the drawings, the tool is fabricated of suitable metal and comprises a pair of body portions 10 and 11 pivotally connected together at their juncture by means of a bolt 12, there being a nut 13 threaded on the bolt 12 for maintaining the tool in assembled relation. Projecting from one end of the body portion 10 is an elongated handle 14, there being a corresponding handle 15 projecting from the other body portion 11 and the handles are adapted to be gripped by the user for causing pivotal movement of the body portions.

The other end of the body portion 10 is shaped to define a jaw 16 which is arranged in angular relation with respect to the body portion, Figure 1. The other body portion 11 is also shaped to define a jaw 17 which is arranged in angular relation with respect to the body portion 11. Arranged at right angles with respect to the jaw 16 and secured thereto is a shoulder 18 provided with a plurality of spaced, bolt-engaging teeth 19. Arranged at right angles with respect to the jaw 17 and secured thereto is a shoulder 20 provided with a plurality of spaced, bolt-engaging teeth 21.

For releasably locking the teeth 19 and 21 onto the frame bracket bolts 22 and 23, Figure 4, a ring 24 is arranged in sliding embraceable rela-

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tion on the handles 14 and 15. For limiting opening movement of the jaws 16 and 17, a stop member 25 is formed on the body portion 10 and is adapted to abut a similar stop member 26 which is formed with body portions 11, Figure 2.

In use of the tool, Figure 4, there is shown a portion of a frame section 27 of a new model Studebaker automobile. The vehicle includes certain conventional parts including a frame bracket 28, an upper support arm 29 and the pair of frame bracket bolts 22 and 23. To adjust the camber of the vehicle wheel, it is necessary to securely grip the heads of the bolts 22 and 23 while the nuts (not shown) are loosened or tightened. To accomplish this, the tool of the present invention is arranged so that the teeth on the shoulders 18 and 20 are in engagement with the heads of the pair of bolts 22 and 23. The ring 24 is then moved along the handles 14 and 15 to lock the shoulders on the bolts and the nuts can then easily be rotated.

From the foregoing, it will be apparent that a tool has been provided for holding the frame bracket bolts in order to make camber adjustments on vehicles. The tool is simple in construction and has few parts. The stop members 25 and 26 insure against loss of sliding ring 24 when the tool is not in use, and the handles are of sufficient length to give extreme pressure at shoulders. By using this tool, one person can adjust the camber of the vehicle.

As many embodiments may be made of this inventive concept, and as many modifications may be made in the embodiment hereinbefore shown and described, it is to be understood that all matter herein is to be interpreted merely as illustrative and not in a limiting sense.

I claim:

1. In a tool adapted to be used in adjusting the camber of a vehicle, a pair of body portions pivotally connected together, a handle projecting from an end of each of said body portions for causing pivotal movement of the latter, a jaw arranged on the other end of each of said body portions in angular relation to the plane of the handles of said tool, and a bolt-engaging shoulder extending laterally at right angles with respect to each of said jaws and secured thereto and lying in a plane at an inclined angle with respect to the plane of the handles of the tool.

2. In a tool adapted to be used in adjusting the camber of a vehicle, a pair of body portions pivotally connected together, a handle projecting from an end of each of said body portions for causing pivotal movement of the latter, a jaw

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arranged on the other end of each of said body portions in angular relation to the plane of the handles of said tool, a bolt-engaging shoulder extending laterally at right angles with respect to each of said jaws and secured thereto and lying in a plane at an inclined angle with respect to the plane of the handles of the tool, and a ring slidably embracing said handles for releasably locking said shoulders on said bolt.

3. In a tool adapted to be used in adjusting the camber of a vehicle, a pair of body portions pivotally connected together, a handle projecting from an end of each of said body portions for causing pivotal movement of the latter, a jaw arranged on the other end of each of said body portions in angular relation to the plane of the handles of said tool, a bolt-engaging shoulder extending laterally at right angles with respect to each of said jaws and secured thereto and lying in a plane at an inclined angle with respect to the plane of the handles of the tool, a ring slidably embracing said handles for releasably locking said shoulders on said bolt, and a plurality of spaced teeth projecting from each of said shoulders.

4. In a tool adapted to be used in adjusting the camber of a vehicle, a pair of body portions pivotally connected together, a handle projecting from an end of each of said body portions for causing pivotal movement of the latter, a jaw

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arranged on the other end of each of said body portions in angular relation to the plane of the handles of said tool, a bolt-engaging shoulder extending laterally at right angles with respect to each of said jaws and secured thereto and lying in a plane at an inclined angle with respect to the plane of the handles of the tool, a ring slidably embracing said handles for releasably locking said shoulders on said bolt, a plurality of spaced teeth projecting from each of said shoulders, and stop means on said body portions for limiting the closing movement of said jaws beyond a predetermined position.

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