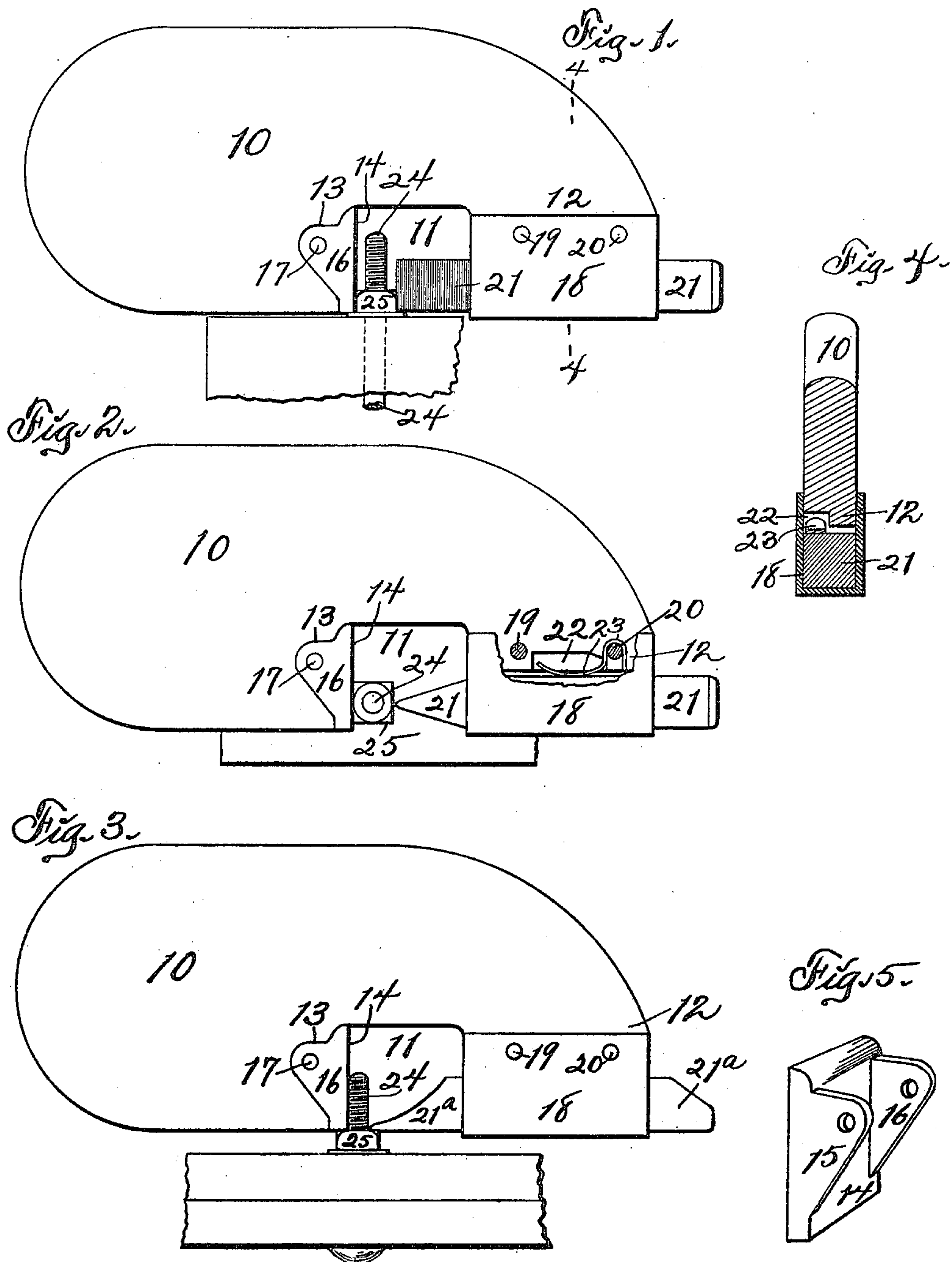


J. WHISLER.
NUT SPLITTING AND BOLT NIPPING TOOL.
APPLICATION FILED JULY 8, 1909.

962,483.

Patented June 28, 1910.



Attest:
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UNITED STATES PATENT OFFICE.

JOHN WHISLER, OF GIBSON, IOWA.

NUT-SPLITTING AND BOLT-NIPPING TOOL.

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Specification of Letters Patent. Patented June 28, 1910.

Application filed July 8, 1909. Serial No. 507,027.

To all whom it may concern:

Be it known that I, JOHN WHISLER, a citizen of the United States of America, and resident of Gibson, Keokuk county, Iowa, have invented a new and useful Nut-Splitting and Bolt-Nipping Tool, of which the following is a specification.

The object of this invention is to provide improved means for removing nuts from bolts.

A further object of this invention is to provide improved means for cutting or nipping bolts.

A further object of this invention is to provide means for supporting and guiding a chisel in desired relation to an object to be cut thereby.

A further object of this invention is to provide an improved tool, in which a chisel is removably and replaceably mounted for reciprocation, said tool supplying an anvil toward which the chisel may be operated in acting upon an object.

My invention consists in the construction, arrangement and combination of elements hereinafter set forth, pointed out in my claims and illustrated by the accompanying drawing, in which—

Figure 1 is a side elevation showing my improved tool in one position for splitting a nut. Fig. 2 is a face view showing my improved tool in another position relative to a nut and the chisel of the tool turned into a different position relative thereto. Fig. 3 is a view similar to Fig. 1 showing the chisel arranged for use in cutting off a bolt. Fig. 4 is a cross-section on the indicated line 4—4 of Fig. 1. Fig. 5 is a perspective of the anvil member removed from the tool.

In the construction of the device as shown the numeral 10 designates a body member or plate, preferably flat, of considerable weight and of convenient size to be handled by one hand of the user. The body 10 of the tool preferably is made of iron by molding and may be made malleable if desired. The plate 10 preferably is formed with a notch 11 centrally of one of its margins and the arm 12, formed by said notch on one end of the body, is foreshortened (Fig. 2) so that its uppermost margin is in a plane parallel with the uppermost margin of the body 10. Recesses 13, one of which is shown in Figs. 1, 2 and 3, are formed in opposite end faces of the body 10 and open to the notch 11. An anvil member or block 14 is formed with

parallel wings 15, 16, adapted to enter the recesses 13 and embrace the body 10. The anvil member 14 extends across one end of the notch 11, seats against the body member 10 and is held in place by a rivet 17 passing through registering apertures in the wings 15, 16 and body member. The anvil member 14 preferably is made of steel by forging or molding and may be removed and replaced or substituted by a similar member when it becomes worn or damaged. A keeper or guide 18, of channel form, is mounted on and embraces the extremity of the arm 12 of the body member 10 and is secured thereto by rivets 19, 20 extending through registering apertures in the keeper and arm. The central portion of the keeper 18 is parallel with and spaced from the outermost margin of the arm 12 and forms a guide or slideway adapted to receive a cold chisel 21 for reciprocation therein. A notch 22 is formed in the outer margin of the arm 12 and opens to one side thereof (Figs. 2 and 4). A leaf spring 23 is mounted in the notch 22 and extends partially around the rivet 20. It is the function of the leaf spring 23 to engage frictionally with one or another face of the cold chisel 21 and hold said chisel against accidental removal from the keeper 18.

It often occurs that tire bolts, and other bolts, are or become loose in their seats so that they turn on longitudinal axes and require to be held against such turning when it is desired to remove a nut therefrom. Under such circumstances the bolt may be held against turning when the nut is being removed by any of numerous devices for such purpose; but even then it sometimes occurs that the nut cannot be conveniently unscrewed from the bolt. In practical use of my device the threaded end portion of a bolt 24 and a nut 25 thereon may be received within the notch 11 of the body member 10, said nut being located in contact with the anvil member 16 and in line with the chisel 21. The tool may be arranged as shown in Fig. 1 or 2 and the edge of the chisel 21 should be parallel with the axis of the bolt 24. Thus if the bolt 24 is directed on the greater transverse dimension of the tool, the chisel would be arranged as shown in Fig. 1; and if it is more convenient to arrange the tool so that the bolt is directed on the shorter transverse dimension thereof, the chisel would be withdrawn, turned one quarter of a revolution and replaced in the posi-

tion shown in Fig. 2. Then the body member 10, is held by one hand and the chisel 21 is driven against the nut 25 by a hammer in the other hand, to the end of splitting said nut and expanding the same laterally relative to the bolt 24. Sometimes the chisel engages across the grain of the nut 25 and breaks out a segment, approximately one quarter, thereof, and in such event it is desirable to readjust the device and strike the nut again on a line at right angles to the first stroke.

Oftentimes it is advisable to cut off or nip the projecting threaded end portion of a bolt. Under such circumstances a chisel 21^a (Fig. 3) may be substituted for the chisel 21. The chisel 21^a is ground on a bevel or curve at its cutting end so that its cutting edge is coincident with or adjacent to one of its sides, and such side is mounted in sliding contact with the central portion of the keeper 18. When the parts are assembled as shown in Fig. 3 it will be observed that the keeper 18 projects slightly out of the plane of the outermost margin of the body member 10 so that the cutting edge of the chisel 21^a is flush with said outermost margin. Then the projecting threaded end portion of the bolt 24 may be received within the notch 11 and directed on the greater transverse dimension of the tool. If the tool is adjusted in respect of the direction of the bolt as shown in Fig. 2 the chisel 21^a is withdrawn, turned one quarter of a revolution and replaced. In either event the cutting edge of the chisel 21^a is transversely of the longitudinal axis of the bolt 24. Then the tool is held by one hand of the operator and the chisel 21 is driven against the bolt 24, adjacent the nut 25, by a hammer in the other hand of the operator, the anvil block 14 resisting the blow of the hammer by contact with the opposite face of the bolt.

The holding and guiding tool may be employed with a chisel or similar tool of any desired cutting or operating end portion.

In splitting nuts or nipping bolts with the cold chisel heretofore it has been customary to employ an assistant to hold a sledge or resisting weight to serve as an anvil behind the nut or bolt while the operator held the

chisel in one hand and drove the chisel with the other. The tool above described supplies the anvil and chisel holder in one convenient device adapted to be held in place by one hand of the operator while the hammer is driven by the other hand.

Attention is drawn to the possibility of adjusting the tool into various positions relative to a nut or bolt, rendering it possible to use this tool in practically all relations.

I do not desire to be understood as limiting myself to the use of this tool only on loose bolts or the nuts thereof.

I claim as my invention—

1. A tool having a body member formed with a notch in one margin, an anvil block mounted in said notch and formed with wings embracing and fixed to said body member, said body provided with a slideway in line with said anvil block and a chisel adjustably mounted for reciprocation in said slideway.

2. A tool having a body member formed with a notch in one margin, an anvil block removably and replaceably mounted in said notch, said body provided with a slideway in line with and spaced from said anvil block, and a chisel adjustably mounted for reciprocation in said slideway.

3. A tool comprising a body member formed with a notch in one margin and also formed with recesses opening to said notch, an anvil block mounted in the notch and formed with wings entering the recesses, said wings fixed to said body member, a keeper of channel form embracing and fixed to the body member and arranged in alignment with said anvil block, a spring mounted in the body member and extending within the keeper, and a chisel mounted adjustably for reciprocation in said keeper and engagement by said spring, the cutting end of said chisel extending within said notch in opposition to the anvil block.

Signed by me at Des Moines, Iowa, this twenty-ninth day of April, 1909.

JOHN WHISLER.

Witnesses:

W. W. FINK,
S. C. SWEET.