

Nov. 2, 1965

D. PETERSON

3,215,009

OPEN-END WRENCH WITH MAGNETIZED MOVEABLE TONGUE

Filed July 2, 1964

2 Sheets-Sheet 1

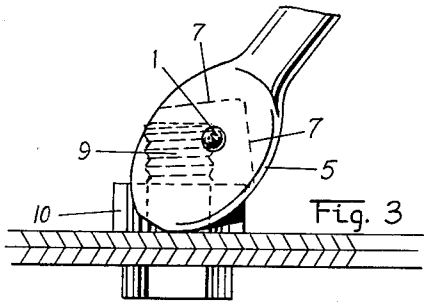


Fig. 3

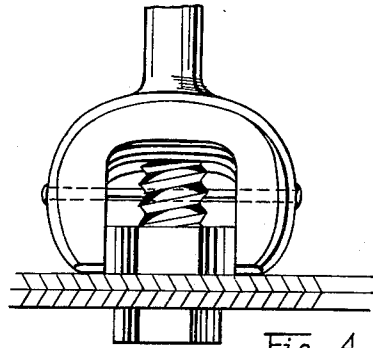


Fig. 4

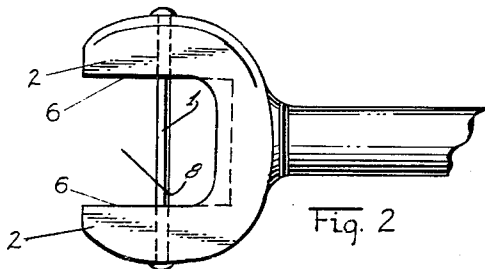


Fig. 2

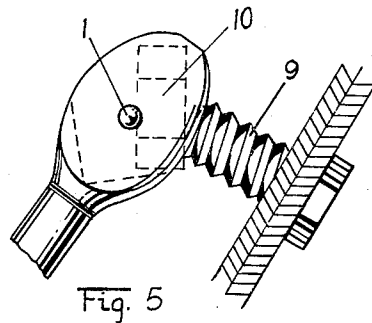


Fig. 5

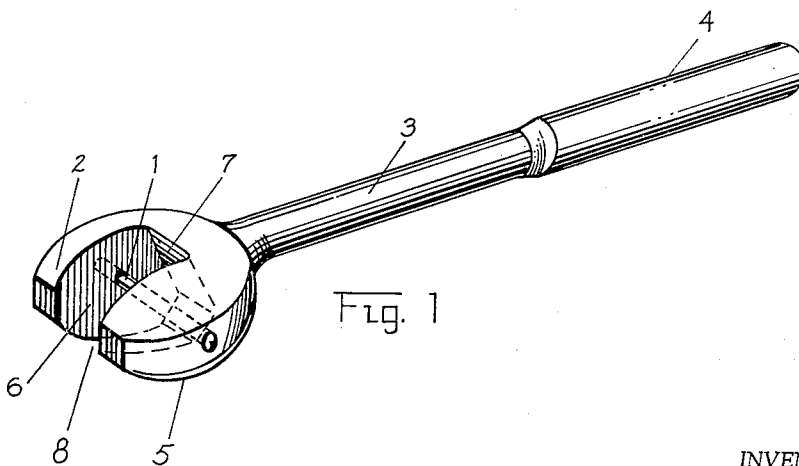


Fig. 1

INVENTOR.
Dana Peterson
BY Dana Peterson

Nov. 2, 1965

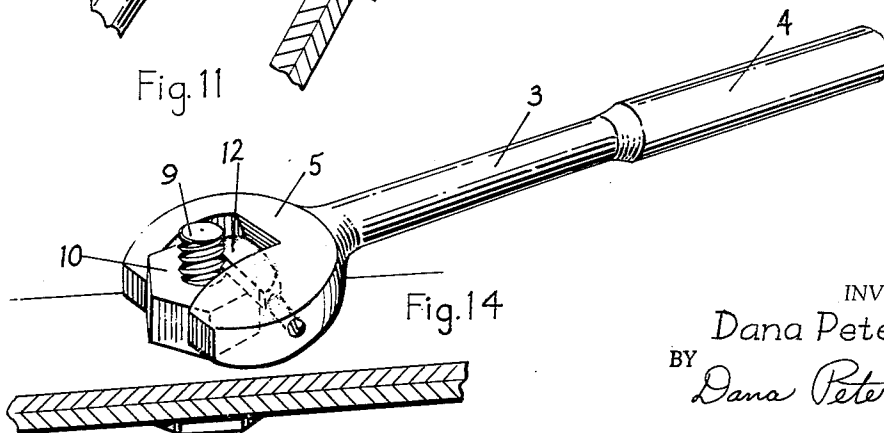
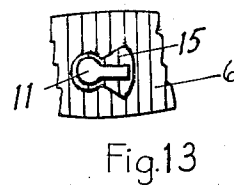
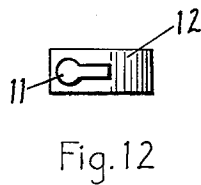
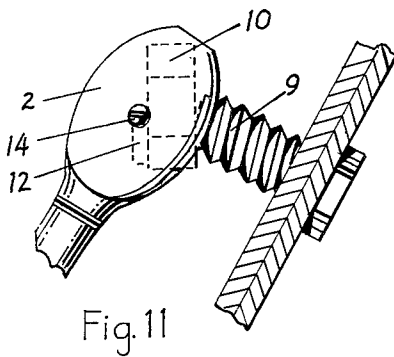
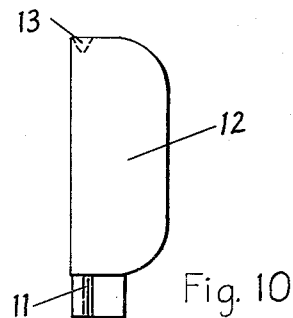
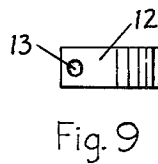
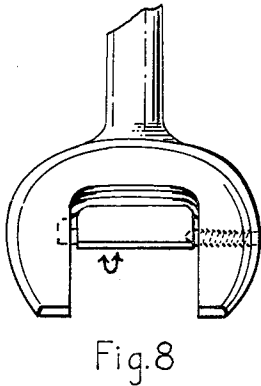
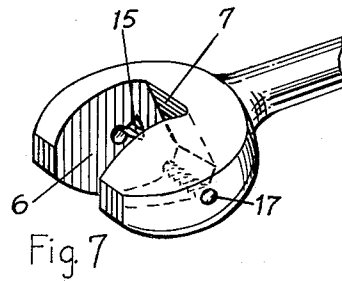
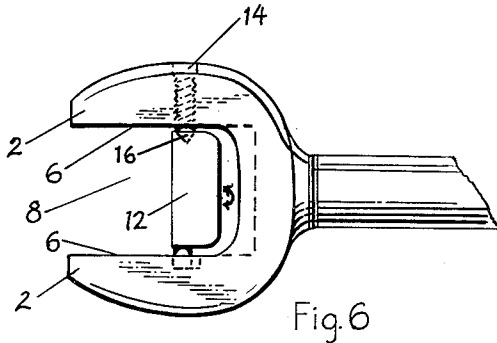
D. PETERSON

3,215,009

OPEN-END WRENCH WITH MAGNETIZED MOVEABLE TONGUE

Filed July 2, 1964

2 Sheets-Sheet 2



INVENTOR
Dana Peterson
BY Dana Peterson

1

3,215,009

OPEN-END WRENCH WITH MAGNETIZED MOVABLE TONGUE

Dana Peterson, San Diego, Calif.

(% New Products, P.O. Box 412, Coronado, Calif.)

Filed July 2, 1964, Ser. No. 379,892

4 Claims. (Cl. 81-125)

This application is a continuation-in-part of my co-pending application Serial Number 254,112, filed January 28, 1963, now abandoned.

This invention relates to improvements in hand-held type open-end wrenches.

Hand-held type open-end wrenches now in common use generally require finger aid to hold nuts in jaw openings. These same wrenches lose side gripping surface areas and often slip when used at angles other than designed for which in most cases are limited to two.

My open-end wrench with a magnetized pin or with a magnetized moveable tongue will hold, without finger aid, nuts of magnetic material. Nuts of non-magnetic material have a limited use due to their high cost, therefore this condition should not depreciate the need for my invention. My wrench can be used at several angles and maintain approximately the same side gripping surface areas. Slippage is appreciably reduced because my invention can be steadied against bolt threads of all materials when turning a nut on said bolt when the bolt extends sufficiently which happens in most cases.

Because of the foregoing advantages and other objects which may be made more easily apparent from a consideration of several embodiments of the invention, it is felt that my invention is a noteworthy improvement in hand-held type open-end wrenches.

Referring to the drawings:

FIG. 1 is a perspective view of my open-end wrench with a magnetized pin.

FIG. 2 is a top or bottom plan view of the head of the open-end wrench with a magnetized pin.

FIGS. 3, 4, and 5 are diagrammatic elevations showing uses of the magnetized pin open-end wrench invention.

FIG. 6 is a top plan view of my open-end wrench with a magnetized moveable tongue.

FIG. 7 is a perspective view of my open-end wrench of the type with a magnetized moveable tongue less said moveable tongue.

FIG. 8 is a perspective view of the open-end wrench having a magnetized moveable tongue.

FIGS. 9, 10, and 12 are end and top plan views of the magnetized moveable tongue.

FIGS. 11 and 14 are diagrammatic elevations showing uses of the open-end wrench with a magnetized moveable tongue.

FIG. 13 is a sectional view showing one end of the moveable magnetized tongue positioned in one side of the inner jaws of the head of the open-end type hand-held wrench with a moveable magnetized tongue.

Referring to the drawings (FIGS. 1 to 5 inclusive) the magnetized pin is indicated by 1 and is formed of steel, tungsten steel, or a commonly used alloy containing aluminum, nickel, and cobalt which produces an exceptionally powerful magnet, although other alloys of steel may be used.

Referring to the drawings (FIGS. 6 to 14 inclusive) the magnetized moveable tongue is indicated by 12 and is formed of steel, tungsten steel, or a commonly used alloy containing aluminum, nickel, and cobalt which produces an exceptionally powerful magnet, although other alloys of steel may be used.

In FIG. 1, the magnetized pin 1 extends across opening 8 and thru jaws 2 in the head 5 of my open-end

2

wrench with a magnetized pin. Numeral 6 indicates a side gripping surface area. Numeral 7 is a recess in the head providing clearance for a nut when the wrench is used at various angles. Numeral 3 indicates a section of the handle between the head 5 and the hand-hold area 4.

In FIG. 2, numeral 1 is a magnetized pin, numerals 2 indicate the two jaws, numerals 6 show two side gripping surface areas, and 8 is the opening at the head end of the wrench.

In FIG. 3, numeral 1 shows the magnetized pin in position against the threaded section 9 of the bolt, numerals 7 show recesses in the wrench head 5 and numeral 10 indicates a nut around which the wrench head 5 is positioned.

In FIG. 5, 1 is the magnetized pin adjacent to magnetic material nut 10 being positioned onto bolt threads 9.

In FIG. 6, numerals 2 indicate the two jaws, 6 shows two side gripping surface areas, 8 is the opening at the head end of the wrench, 12 is the moveable magnetized tongue, the double arrow indicates up and down movement of the tongue, 14 shows a pointed machine screw, 16 is the tip or point of said screw.

In FIG. 7, 6 shows inner side of jaw, 7 indicates recessed inner back of jaw, 15 shows recess in inner side 6 to accommodate end 11 of magnetized tongue 12, and 17 shows threaded aperture in jaw to accommodate pointed machine screw 14.

In FIG. 8, double arrow shows direction of up and down movement of magnetized tongue.

In FIG. 9, 13 is an aperture to accommodate the point 16 of machine screw 14 into magnetized tongue 12.

In FIG. 10, top plan view, numeral 11 shows the end of magnetized tongue 12 said end will fit into recess 15 of the wrench head of FIG. 7.

In FIG. 11, 2 shows a jaw, 9 indicates a bolt thread, 10 shows a nut being held by magnetized tongue 12, and 14 indicates head of machine bolt.

In FIG. 12, numeral 11 shows an end view of magnetized tongue 12, said 11 designed to fit into recess 15 of wrench head.

In FIG. 13, 6 indicates section of inner side gripping surface area of jaw, 15 is a recess in said surface area and 11 shows end of magnetized tongue 12 designed for said recess.

In FIG. 14, the moveable magnetized tongue 12 extends across opening of jaw head 5 on top surface of nut 10 in rear of bolt 9, the forward straight thin edge of tongue 12 abutting said bolt, 3 indicates a section of the handle between the head 5 and the hand hold area 4.

I claim:

1. In a hand-held type open-end wrench, an open-end wrench and a handle therefor, said open-end wrench having a straight magnetized pin connected to the wrench head, the pin extremities being mounted in the center area of a cheek of one jaw of said wrench head and in the center area of a cheek of the other jaw of said wrench head, said magnetized pin traversing the aperture in the head of the open-end wrench.

2. In a device, an open-end wrench head and a handle therefor, said wrench head having elliptically shaped jaw cheeks, said open-end wrench having a straight magnetized pin connected to the wrench head, the pin extremities being mounted in the center area of a cheek of one jaw of said wrench head and in the center area of a cheek of the other jaw of said wrench head, said magnetized pin traversing the aperture in the head of the open-end wrench.

3. In a hand-held type open-end wrench, an open-end wrench and a handle therefor, said open-end wrench having a flat, magnetized tongue with adjustable pivotal

3

means at each extremity connected to the wrench head, the tongue extremities being mounted in the center area of a cheek of one jaw of said wrench head and in the center area of a cheek of the other jaw of said wrench head, said magnetized tongue traversing the aperture in the head of the open-end wrench.

4. In a device, an open-end wrench head and a handle therefor, said wrench having elliptically shaped jaw cheeks, said open-end wrench having a flat magnetized tongue with adjustable pivotal means at each extremity connected to the wrench head, the tongue extremities being mounted in the center area of a cheek of one jaw of said wrench and in the center area of a cheek of the other jaw of

4

said wrench head, said magnetized tongue traversing the aperture in the head of the open-end wrench.

References Cited by the Examiner

UNITED STATES PATENTS

2,697,371 12/54 Bowman ----- 81—125 X
3,121,356 2/64 Davis ----- 81—119

FOREIGN PATENTS

818,530 8/59 Great Britain.

WILLIAM FELDMAN, *Primary Examiner.*

MILTON S. MEHR, *Examiner.*