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1,509,680

J. H. MEEK

WRENCH

Filed Feb. 1, 1924

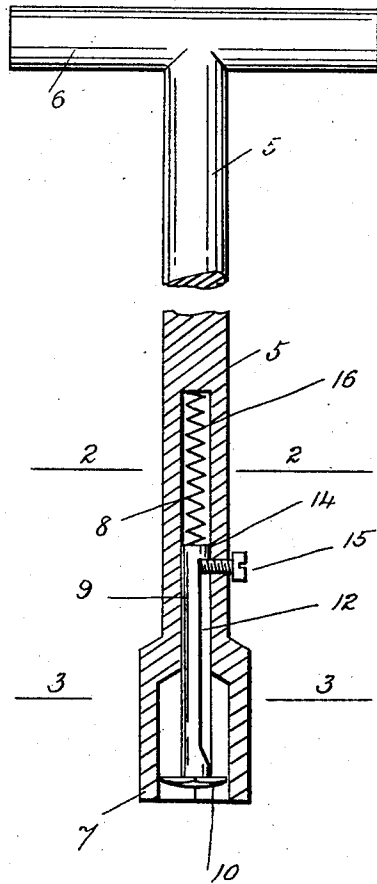


FIG. 1-

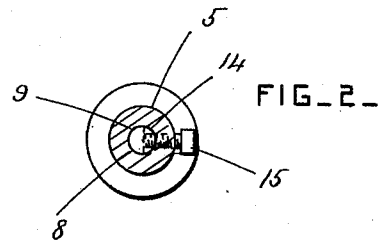


FIG. 2-

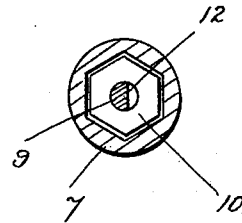


FIG. 3-

Inventor:
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UNITED STATES PATENT OFFICE.

JAMES H. MEEK, OF ARGOS, INDIANA, ASSIGNOR OF ONE-HALF TO WILLIAM D. SMILEY, OF ARGOS, INDIANA.

WRENCH.

Application filed February 1, 1924. Serial No. 689,874.

To all whom it may concern:

Be it known that I, JAMES H. MEEK, a citizen of the United States, residing at Argos, in the county of Marshall and State of Indiana, have invented certain new and useful Improvements in Wrenches, of which the following is a specification.

This invention relates to box wrenches; and it consists in providing the box which engages with the nut with an ejector for the nut, as hereinafter fully described and claimed.

In the drawings, Figure 1 is a side view, partially in vertical section, of a wrench constructed according to this invention. Fig. 2 is a cross-section through the stem, taken on the line 2—2 in Fig. 1. Fig. 3 is a cross-section through the box, taken on the line 3—3 in Fig. 1.

The wrench is provided with a stem having a handle 6 of any convenient sort at one end. A box 7 for the nut is formed on the other end of the stem, and is hexagonal or square internally so as to fit over the nuts according to their shape and size.

A single cylindrical spring chamber 8 is drilled in the stem 5 upon the axis of the box 7, and the shank 9 of the ejector is slidable in the chamber 8. The shank 9 has a head 10 which fits loosely in the box 7, and the shank is cut away on one side to form a flat surface 12 for the greater part of its length, and a stop 14 at its end.

A screw 15 is screwed into a hole in the

side of the stem so that its inner end portion projects into the path of the stop 14. A helical spring 16 is arranged in the spring chamber beyond the end of the shank 9, and it operates to hold the stop against the screw 15, with the head of the ejector in the middle part of the box. The box is slipped over the nut, and is pressed axially on it so that the whole of the nut is engaged.

The nut is then unscrewed or screwed onto the bolt as occasion requires. When the nut is removed from the bolt, the ejector forces it part way out of engagement with the box of the wrench, so that its complete removal is easily effected.

What I claim is:

A wrench, comprising a stem having a box at one end for engaging with a nut, said stem having also a spring chamber of less width than the box arranged axially in line with it and having a screwthreaded hole in one side, an ejector for the nut having a head at its outer end which slides in the said box, said ejector having a shank which is slidable in the spring chamber and which is cut away on one side to form a stop at its inner end, a screw engaging with the said hole and operating to retain the head in the box, and an ejecting spring arranged between the inner end of the shank and the end of the spring chamber.

In testimony whereof I have affixed my signature.

JAMES H. MEEK.