July 1, 1969 J. T. VOSBIKIAN ET AL 3,452,373

COMBINED SCREWDRIVER AND SOCKET WRENCH

Filed Aug. 30, 1967

Fig. 1.

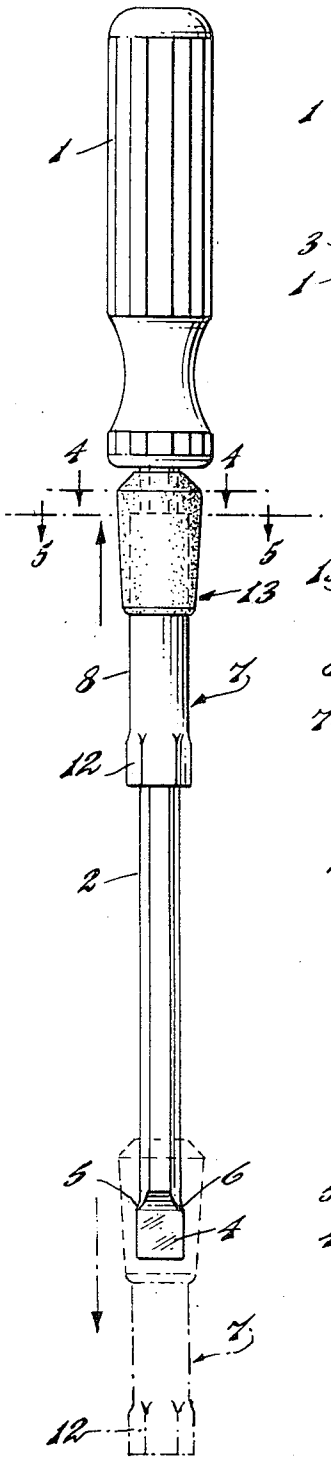


Fig. 2.

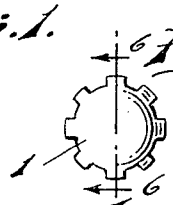


Fig. 3.

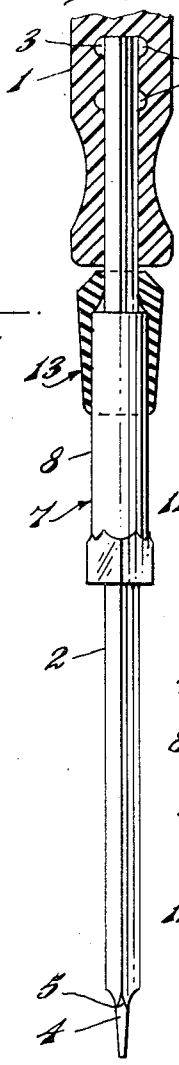


Fig. 4.

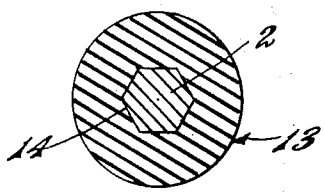


Fig. 5.

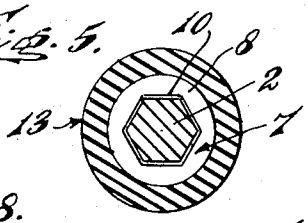


Fig. 8.

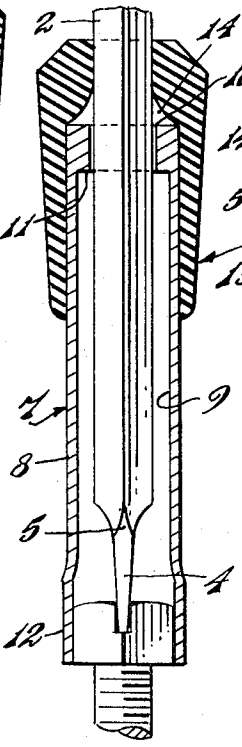


Fig. 6.

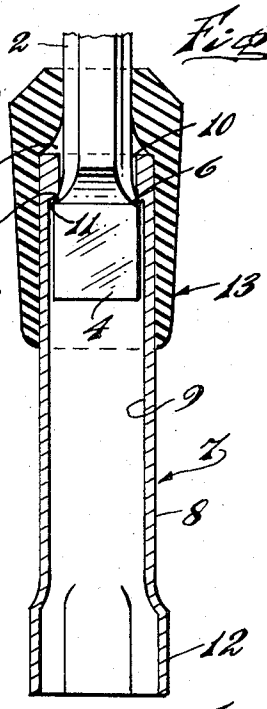
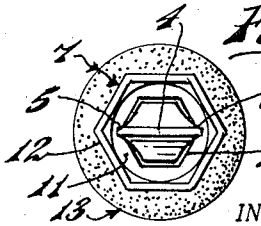


Fig. 7.



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3,452,373
COMBINED SCREWDRIVER AND SOCKET WRENCH

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U.S. Cl. 7—1 1 Claim

ABSTRACT OF THE DISCLOSURE

A single tool including screwdriver and a socket which may be used separately or together to effect the turning of a screw, bolt or similar device The socket is longitudinally adjustable on the shank of the screwdriver from an inoperative position to operate positions, wherein the socket and screwdriver may be simultaneously used.

The object of the invention is to provide a single tool, a screwdriver and a socket, longitudinally adjustable on the shank of the screwdriver, into positions to operate independently or simultaneously with the bit of the screwdriver.

The socket is provided with means to fix it in position on the shank to which it has been moved.

Other novel features of construction and advantage will hereinafter more clearly appear in the detailed description and the appended claim.

For the purpose of illustrating the invention, we have shown in the accompanying drawings a preferred embodiment of it, which we have found in practice to give satisfactory and reliable results. It is, however, to be understood that the various instrumentalities of which the invention consists can be variously arranged and organized, and the invention is not limited to the exact arrangement and organization of these instrumentalities as herein set forth.

FIGURE 1 is a front elevation of a combination screwdriver and socket embodying the invention.

FIGURE 2 is a top plan view.

FIGURE 3 is a side elevation partly broken away.

FIGURE 4 is an enlarged section taken on line 4—4 of FIGURE 1.

FIGURE 5 is an enlarged section taken on line 5—5 of FIGURE 1.

FIGURE 6 is an enlarged section taken on line 6—6 of FIGURE 2, showing the internal shoulder of the socket engaging the projections on the screwdriver bit portion.

FIGURE 7 is a bottom plan view of FIGURE 6.

FIGURE 8 is an enlarged section showing the bit portion of the screwdriver engaging the slot of a nut, with the socket portion engaging the sides of the nut.

Similar numerals of reference indicate corresponding parts.

Referring to the drawings:

The combination screwdriver and socket comprises a handle **1**, adapted to receive and retain the shank **2** of a screwdriver which may be of a standard design, a cross section of which may be of hexagonal shape as shown, said shank being held in fixed position in said handle by projections **3** on the shank. The lower end of said shank terminates in a screwdriver bit **4**, said bit having lateral projections **5** and **6** which form stops to abut against the shoulder of a socket **7**. The socket **7** comprises a tubular portion **8**, a bore **9** of sufficient diameter to permit it to slide freely over the shank and bit portion of the screwdriver and having its top portion formed with a hexagonal opening **10** to engage and slide freely on the shank of the

screwdriver, the inside portion of said opening **10**, forming a shoulder **11** to engage the projections **5** and **6** on the bit **4** to limit the forward movement of the socket on the shank, as best seen in FIGURES 6, 7 and 8. The lower portion of the tubular portion **8** terminates in a socket portion **12** which may be of any desired shape, but is shown as hexagonal to conform to the shape of a standard bolt or screw head. The upper end of the tubular portion **8** is provided with a grasping portion **13** in the form of a tapered elastic sleeve, which may be formed from rubber or plastic or any desired material and is provided with a bore **14** of sufficient diameter to cause it to firmly grip the tubular portion of the socket and move in unison with it and to be in frictional engagement against the shank **2** of the screwdriver to permit the socket to be positioned in any desired portion of the shank.

It will be apparent from the foregoing that we provide in a single tool, a screwdriver and a socket wrench, the grasping handle of the screwdriver serving as a handle for the socket wrench. The socket is of special construction, having its internal bore at its rear end provided with a plurality of sides cooperating with a plurality of sides on the screwdriver shank, so that the socket is longitudinally adjustable on the shank but prevented from relative rotation therewith. The extent of rearward movement of the socket is limited by the screwdriver handle and the limit of forward movement is limited by the projections on the bit of the screwdriver. The forward portion of the internal bore of the socket is provided with a plurality of sides to contact and engage the head of a screw or fastening device. The position of the socket is adjustable for independent use or for simultaneous use with the screwdriver.

Having thus described our invention, what we claim as new and desire to secure by Letters Patent is:

1. A combined screwdriver and socket wrench comprising a screwdriver having a shank provided with a plurality of sides in cross section, a bit having lateral projections at its rear portion and a handle secured to the rear end of the shank, a socket on the shank, the internal bore of said socket having a plurality of sides to cooperate with the sides of the shank so that the socket is longitudinally slidable on the shank but prevented from relative rotation thereon, the forward portion of the bore of the socket being of greater diameter than the bit and its projections and having a plurality of sides to contact and engage the head of a fastening device, said socket having an internal shoulder in its bore to contact the bit projections and limit the forward movement of the socket, the rearward movement of the socket being limited by said handle, said socket being adjustable to provide for the independent use of the socket or bit, or their simultaneous use and means carried by said socket to retain it in the position to which it has been adjusted, said means comprising an elastic sleeve contacting the shank of the screwdriver.

References Cited

UNITED STATES PATENTS

1,677,473	7/1928	Gast.	
3,298,410	1/1967	Morifuji	145—52
3,396,765	8/1968	Ridenour	145—51 X

FOREIGN PATENTS

672,898	5/1952	Great Britain.
1,145,069	4/1957	France.

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U.S. Cl. X.R.
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