

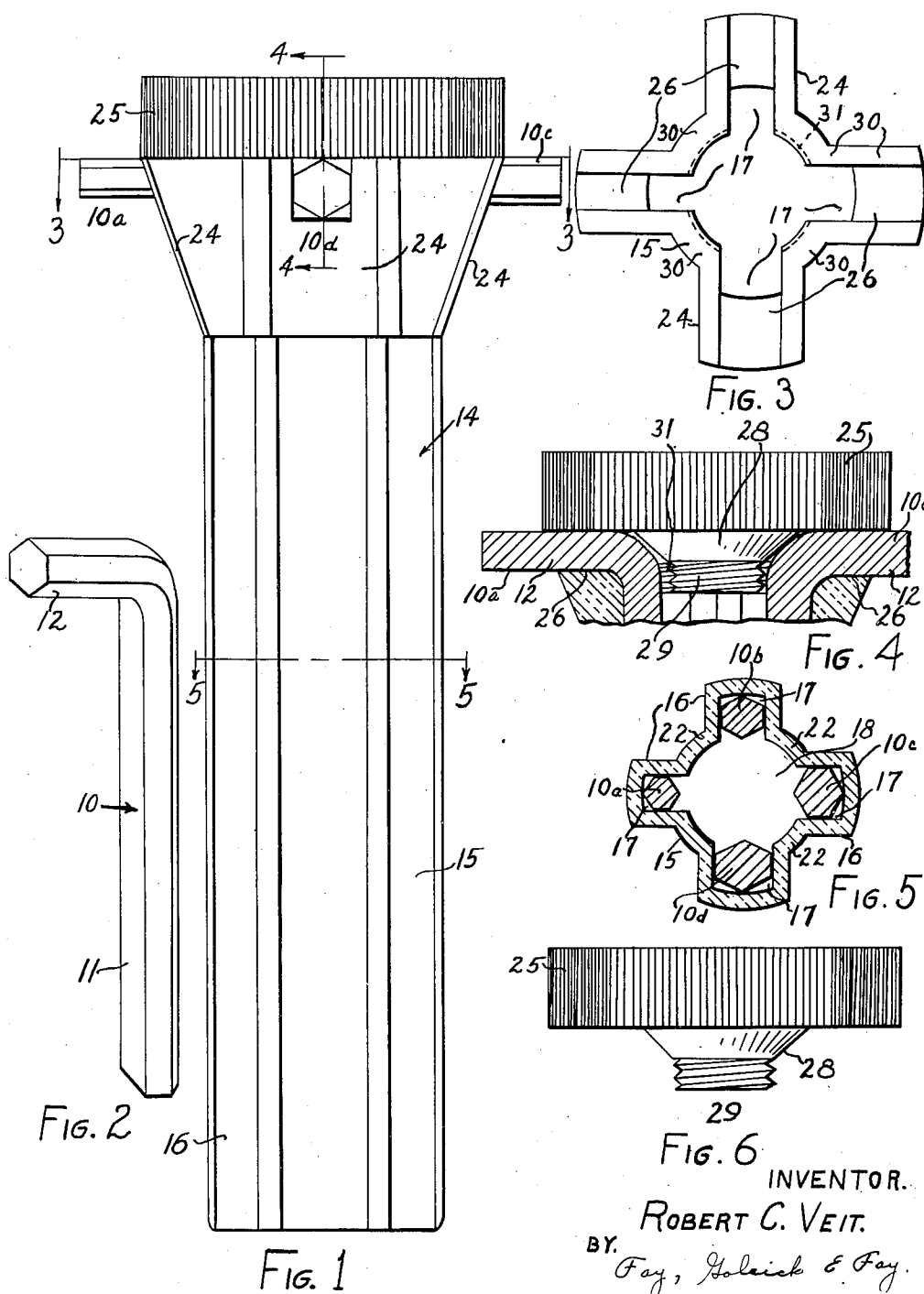
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WRENCH KIT

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WRENCH KIT

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1 Claim. (Cl. 306—32)

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The present invention relates to a kit for a plurality of wrenches or similar tools, each wrench being the type that comprises a shank for a hand grip and a work engaging part extending laterally from one end of the shank.

An object of the invention is to provide a kit of the character referred to in which a plurality of the wrenches are secured in the kit with the shanks thereof clustered in the form of a handle and the work engaging parts of the wrenches extending radially outwardly from the axis of the kit and maintained angularly spaced relative to one another so that the work piece engaging parts of the wrenches may be selectively associated with a work piece without removal of the wrench from the kit and the wrench may be manipulated by the handle portion of the kit.

Other objects and advantages of the invention will be apparent from the following description of a preferred form of the invention, reference being made to the accompanying drawings wherein

Fig. 1 is a view in elevation of a tool kit with wrenches therein;

Fig. 2 is a view of a wrench adapted to be carried in the kit;

Fig. 3 is a view taken on line 3—3 of Fig. 1, the wrenches not being shown;

Fig. 4 is a view, partly in section, taken substantially on line 4—4 of Fig. 1;

Fig. 5 is a view in section taken on line 5—5 of Fig. 1; and,

Fig. 6 is a view in elevation of the cap for the body of the kit.

There is now in common use work pieces such as threaded bolts, screws, nuts and the like, which are adapted to be rotated about their axes by a wrench similar to the wrench shown at 10 in the drawings. The wrench comprises a shank 11 by which it may be grasped and one end of the shank has a laterally extending part 12. The wrench 10 is formed of a hexagonal rod, and the part 12 is adapted to be inserted into a hexagonal recess formed in the work piece whereby rotation of the work piece may be effected by swinging the shank about the axis of the work piece. There are a variety of sizes of work pieces, all having different sizes of recesses so that for each different size, a different size wrench is required. Thus, usually a number of wrenches must be kept on hand and it is a problem to select the proper size wrench from an array of similar appearing wrenches. In fact, considerable time may be expended in making the proper selection

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and the wrenches are apt to become scattered and lost.

By my invention I provide a kit in which a number of wrenches may be substantially enclosed, the kit forming a handle for the wrenches and the work engaging parts of the wrenches protruding radially from the kit and fixedly spaced from one another so that by merely rotating the kit axially the proper size wrench to be used for a particular work piece can be quickly selected. When the proper size wrench has been applied to the screw, or other work piece, the kit is used as a handle for rotating the screw.

Referring to the drawings, I have shown a wrench kit 14, which kit is shown on a larger scale than the wrench 10. Also, for purposes of clarity, the drawing is larger than actual size. The kit 14 may be formed of any suitable material, but I prefer to make it of a thermoplastic material that can be formed in a mold. The kit comprises a tubular body 15 closed at the lower end by a wall 18, which may be formed integral with the body. Extending longitudinally of the body and spaced 90° from one another are four elongated rib portions 16, all of which are hollow to form recesses 17 substantially rectangular in cross section. The recesses receive the shanks 11 of the wrenches and the cross sectional dimensions of the recesses vary from one another so that four different size wrenches 10^a, 10^b, 10^c and 10^d may be received in snug fitting relation therein. As may be seen in the drawings, the recesses all open into a central portion of the kit and adjacent recesses are interconnected by walls 22 which are in the form of segments of a cylinder and which close the sides of the kit.

The upper end portion of body 15 has four ribs 24 which extend in alignment with the ribs 16 and which taper upwardly and outwardly. The outer edges of the ribs 24 lie in a circle for receiving a cap 25, as will be more fully described hereinafter. The recesses 17 formed in the ribs 16 extend within the ribs 24 and open into transversely extending grooves 26, which latter grooves are of substantially the same cross sectional dimension as the respective recesses 16 opening therein. Thus, the parts 12 of the wrenches will lie within the grooves 26 and extend radially from the axis of the kit. The grooves 26 form guides for maintaining the parts 12 of the wrenches fixed at 90° to one another.

The open end of the kit is closed by the circular cap 25 which is the same diameter as the circle within which the outer edges of ribs 26 fall. The

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central portion of the bottom face of the cap has a boss 28 formed thereon and this boss is threaded as at 29. The boss is threaded into a female threaded opening formed by cylindrical walls 30 which interconnect the ribs 24. The walls have threads cut therein as indicated at 31. When the cap 25 is secured in place, it closes the open side of grooves 26 and clamps the wrenches firmly in the grooves 26.

The end portions 12 of the wrenches extend laterally from the kit, and it will be seen that they may be inserted into the socket of a screw head, or other work piece, and the screw rotated by swinging the kit in an arc as would be done with a wrench shank. The wrenches are held firmly in place in the recesses 17 and 26 so that the kit and wrenches act as an integral unit. By rotating the kit axially, the desired wrench may be readily selected for the particular work to be done. Thus, the kit not only affords storage for the wrenches but it also permits more convenient handling and usage of the wrenches than has been possible in the past.

Although I have described but one form of my invention, it is to be understood that other forms might be adapted, all falling within the scope of the claim as follows:

I claim:

A kit for tools, each tool having a shank and a work piece engaging part extending laterally from one end of the shank, said kit comprising an elongated hollow member suitable for a hand

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grip and having a plurality of longitudinally extending channels on the interior thereof, said channels opening into the interior of the member and each being of a different cross-sectional dimension whereby tool shanks of different cross-sectional dimensions corresponding to said dimensions of the respective channels may be received in said channels, said member being open at one end and having grooves leading from the ends of the respective recesses radially of said body for receiving said laterally extending parts of said tools for maintaining said parts rigidly spaced relative to one another, the walls of said member at said one end thereof and intermediate the channels being threaded; and a cap having a central protruding portion adapted to be threaded into the threaded end of said member for pressing the cap against the laterally extending parts of the tools and for retaining the shanks in the channels.

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