

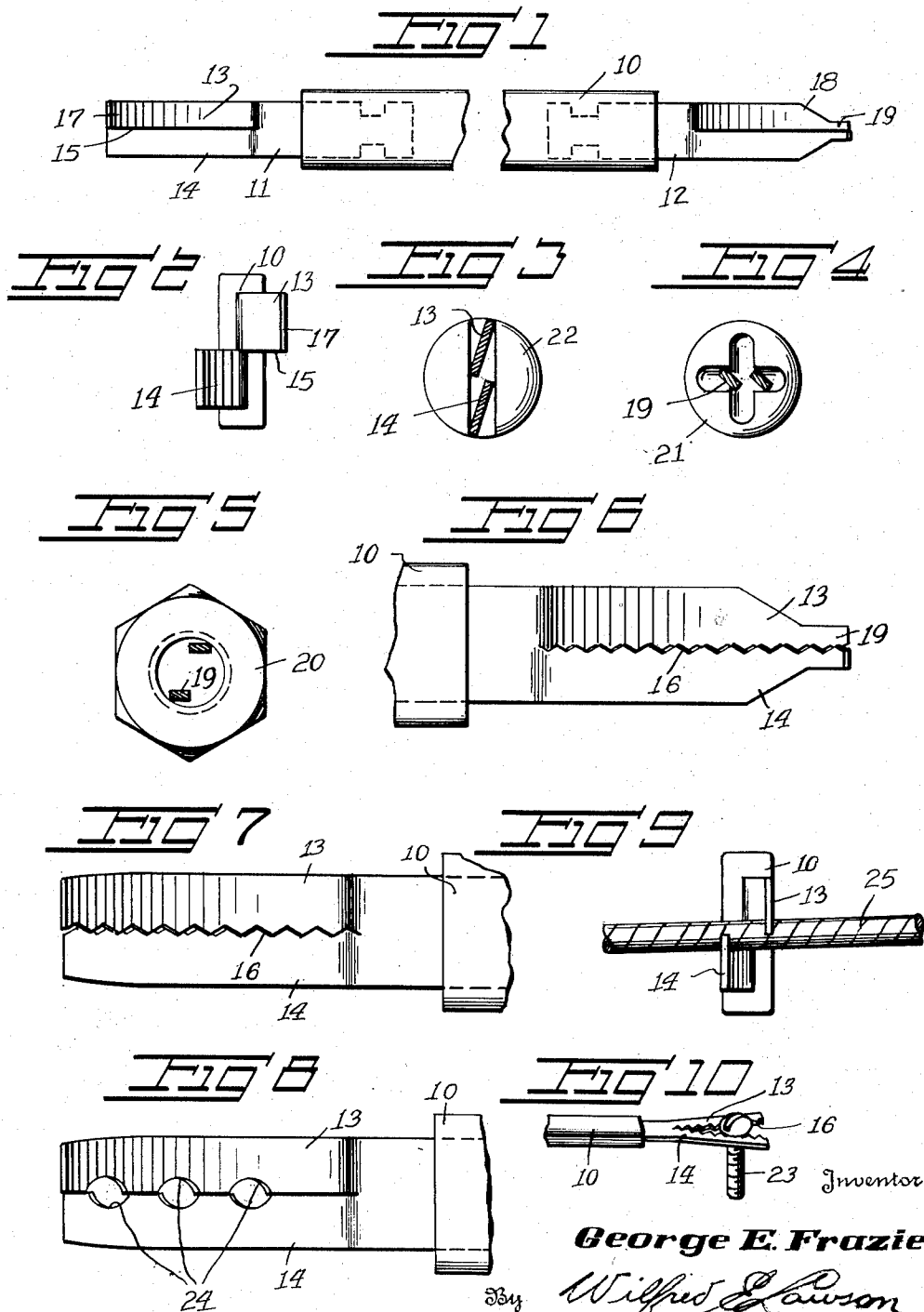
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GRIPPING AND HOLDING TOOL FOR SMALL ARTICLES

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GRIPPING AND HOLDING TOOL FOR SMALL ARTICLES

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2 Claims. (Cl. 81-44)

1

My invention relates to a handy tool for gripping, holding and manipulating small articles such as screws, nuts, washers, rings, wires etc. in narrow and restricted places, inaccessible to fingers.

One object of my invention is to provide a tool which is simple in construction and can therefore be produced at low cost; it is strong, small and electrically non-conductive and is therefore especially suitable for use in the field of radio and electronics.

In the drawing the construction of the tool is clearly illustrated together with examples of its numerous uses and applications.

Like numerals denote the same details in the different views.

Figure 1 is a side elevation of an embodiment of the invention with plane faced blades or fingers;

Figure 2 is an end view of the tool as seen from the left of Figure 1;

Figure 3 shows a straight slotted screw head held by the tool blades or fingers of Figure 1 causing a twist of the fingers when the tool is turned;

Figure 4 shows a Phillips screw head, held by said tool blades;

Figure 5 shows a nut held by the same tool blades;

Figures 6 and 7 are side elevations of opposite ends of the tool with corrugated instead of plane adjacent surfaces;

Figure 8 is a side elevation of one end of the tool similar to Figure 2, showing the blades with opposite half round grooves or notches;

Figure 9 shows an end view of the tool in Figure 8 as gripping the end of a wire;

Figure 10 is a fragmentary side view of one end of the tool end, as in Figure 7, gripping the neck of a small machine screw.

The tool as embodied in Figures 1 and 2 consists of a flat middle portion 10 and two operating portions 11, 12 of which portion 10 is preferably made of plastic or similar non-conductive material and having a length to form a comfortable handle or grip for the operator. At its left end is inserted an operating member 11 of spring steel or other strong and resilient material, around the notched inner part of which the handle 10 is cast to form a rigid connection.

This member 11 has two blades or fingers 13 and 14 with straight top and bottom edges and which may also have straight inner edges at 15 in Figure 1 and 2 or else corrugated or serrated

2

adjacent edges 15 as in Figures 6 and 7. These blades or fingers 13, 14 have square ends 17 and are slightly sprung apart to engage in the slot of a screw head 21 or 22. The blades or fingers 13 and 14 are integral with the member 11 and the fingers or blades 18 are integral with the member 12, each set of such blades being provided by slitting each of the members 11 and 12 inwardly from the outer ends thereof and at substantially the transverse centers.

In the right end of the flat handle 10 in Figure 1, is similarly secured a second operating member 12 with flexible fingers or blades 18 which have narrow tips 19, in order to grip in the opening of a ring or a threaded nut 20 as shown in Figure 5; or in the slot of the Phillips screw head 21 of Figure 4.

When the tool is provided with corrugated fingers or blades as at 16 in Figures 6 and 7, and 10 it is intended for picking up either a wire or a machine screw 23 below its head to hold it sideways as seen in Figure 10, for placing it in a screw hole.

In Figures 8 and 9 is shown the construction and use of the tool when its fingers or blades 13, 14 have half-round notches or grooves 24 across their adjacent edges. The use of the tool illustrated in Figure 8, is shown in Figure 9 wherein a fish line, a dial cord or a wire 25 is held firmly in position for soldering or other purpose.

Some of the advantages of this invention are the following:

The fingers 13 and 14 being offset, one to the other, and spread apart, take up less space in the screw head slot, than other implements wherein differently formed and arranged fingers are employed. As a consequence heavier material, giving greater strength may be employed. Accordingly the tool has a very wide range or use as regards sizes of nuts, screws and width of slot.

On account of the spreading of the finger ends 17, they will engage at the bottom instead of at the top of the slot, thus providing a firm hold of the screw and preventing possible distortion of the top of the slot. This firm hold is increased by the fact that the finger ends become twisted around slightly when engaging in the screw head slot, as seen in Figure 3, this grip increasing from the resistance of the screw as the tool is turned clockwise in a right hand threaded hole, or turned counter clockwise in a left hand threaded hole.

It is to be understood that the invention as herein disclosed may be varied from the details

described and shown without departure from the spirit of the subjoined claim.

I claim:

1. A tool of the class described, comprising an elongated handle, and a flat length of flexible metal extending from one end of said handle and having its outer end portion split longitudinally to provide coating work engaging portions spread apart to grip and hold the work by the adjacent opposed edges thereof.

2. A tool as set forth in claim 1, wherein the fingers have their inner or opposed margins closely adjacent to each other, and serrated along the length thereof, the said serrations being normally interengaged.

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