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MULTIPLE POCKET TOOL

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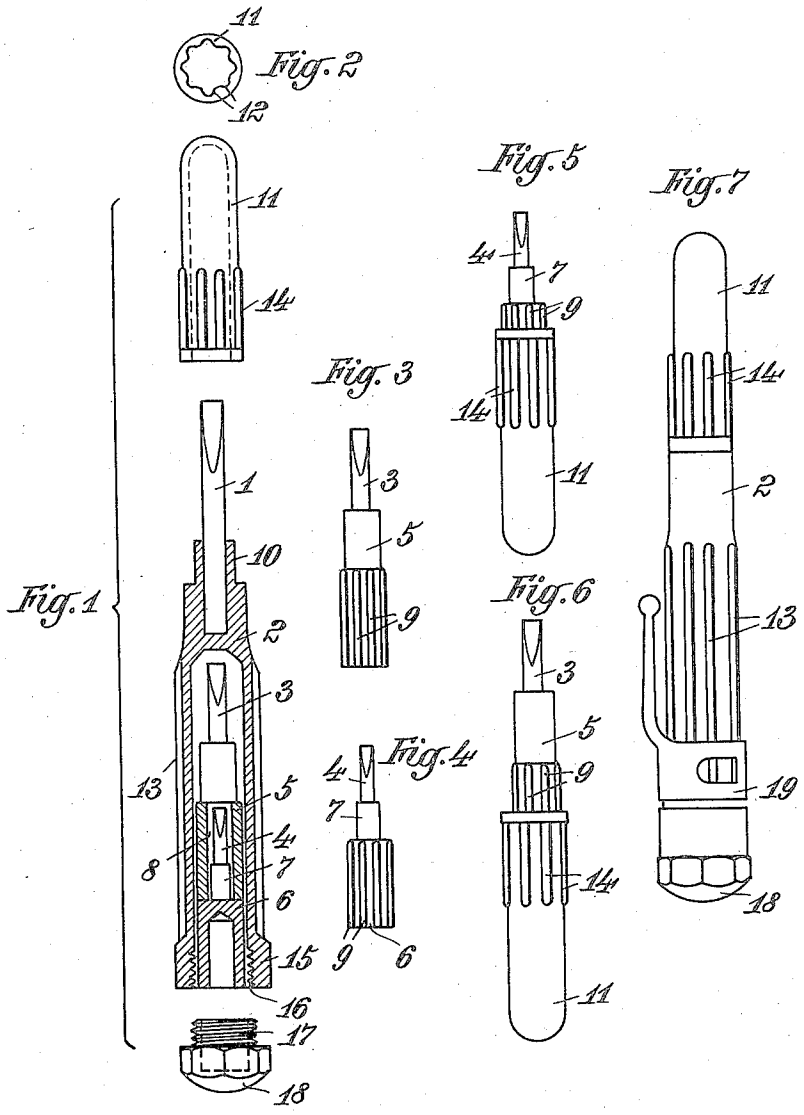

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MULTIPLE POCKET TOOL

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3 Claims. (Cl. 145—62)

Multiple pocket tools are known, comprising several separate tools for example two or more screw drivers, in which the handles of the smaller screw drivers are accommodated in the hollow handle of the next larger screw driver, the whole system being finally fitted together to form a pocket tool. These multiple tools are open to the objection that the hollow handles are small and weak so that reliable work cannot be carried out therewith. If it were desired to extend and strengthen these hollow handles, the whole tool would become too large and heavy.

Pocket tools with several separate tools provided with a protecting cap are also known, this cap, when the tool is in use, being screwed on to a screw threaded portion of the handle to form an extension thereof. A protecting cap with screw thread is, however, open to the objection that the thread only allows the tool to be turned in one direction. If the tool is turned in the other direction, the cap will unscrew from the tool.

These drawbacks of the known pocket tools in which several separate tools are accommodated in a hollow handle, are overcome by the invention which consists in that the protecting cap of the pocket tool, in which several separate tools fitted one in the other are accommodated, has recesses, apertures or the like and the handles of the individual tools have correspondingly shaped grooves, notches or the like so that the cap has merely to be slipped on to the handle of the corresponding smaller tool. No screws or screw threads are provided for connecting the cap with the handles of the invidiual tools, the connection between the cap and the handles of the individual tools being effected by the sectional shape of the protecting cap and the correspondingly shaped handles of the individual tools. Thus, the handles of the individual tools are extended and strengthened, and it is possible to turn the tools in both directions without the protecting cap becoming detached from the tool.

An embodiment of the invention is illustrated by way of example in the accompanying drawing in which:—

Fig. 1 is a part longitudinal section of the multiple pocket tool fitted together, the protecting cap and end plug being removed.

Fg. 2 shows the cap in bottom plan view.

Figs. 3 and 4 show in elevation the two smaller tools accommodated in the large tool in Fig. 1.

Figs. 5 and 6 show in elevation the tools of Figs. 4 and 3 respectively with the cap fitted thereon.

Fig. 7 shows in elevation the tool in closed condition.

The multiple pocket tool comprises a large tool 1 fixed in one end of a hollow handle 2 in which smaller tools 3 and 4 fixed in handles 5 and 6 are accommodated. The handles 5 and 6 are of the same external diameter and have uniformly spaced longitudinal ribs 9 on the outer surface. The handle 5 has an axial bore 8 in its end remote from the tool 3 and the end 7 of the handle 6 is of a diameter corresponding to that of the bore 8 in the handle 5 and consequently fits tightly therein.

The handle 2 also has a cylindrical extension 10 at its end carrying the tool 1 and a protecting cap 11 fits on this extension 10. This cap 11 has internal longitudinal grooves 12 spaced and shaped to correspond with the ribs 9 on the handles 5 and 7 so that this cap 11 can be slipped on these handles 5 and 7 to form an extension to facilitate the turning of the tools 3 and 4 carried therein. As the ribs on the handles 5 and 7 engage in the grooves 12 in the cap 11, the handles and therefore the tools 4 and 3 fixed therein can be turned in both directions by the cap without the cap becoming detached from the handles.

To facilitate the turning of the large tool 1, its hollow handle 2 is preferably provided on its outer side with longitudinal ribs 13 and the cap 11 is also provided with longitudinal ribs 14 to facilitate the turning of the smaller tools 3 and 4. The end of the hollow handle 2 has a thickened end portion 15 with an internal screw thread 16 into which a screw threaded portion 17 of a plug 18 can be screwed to secure the tools 3 and 4 in the handle 2 the plug 18 having in its inner end a bore adapted to fit over the ribs 9 and accommodate the end of the handle 6 of the tool 4 when the plug is screwed into the end of the handle 2.

A clip 19 of known construction may be fitted on the handle 2 for securing the multiple tool in the pocket.

I claim:

1. A multiple pocket tool, comprising in combination a large tool, an outer hollow handle carrying said large tool, at least one small tool, a handle of said small tool adapted to be accommodated in said outer handle when not in use, a cap having internal grooves adapted to fit on the top end of said handle to cover said large tool when the multiple tool is not in use, ribs, on the outer side of the handle of said small tool shaped and spaced to correspond with the grooves in said cap and adapted to engage in said grooves so that said cap forms an extension of said small tool handle to facilitate the turning of said small tool

in both directions, and a plug adapted to be screwed into the bottom end of said large tool handle.

2. A multiple pocket tool, comprising in combination a plurality of small tools of different sizes, handles each carrying one of said smaller tools and adapted to accommodate the tool of next smaller size, a large tool, a hollow handle carrying said large tool and adapted to accommodate said small tools and their handles when fitted together and not required for use, a cap adapted to fit on the end of said large tool handle and to cover said large tool when the multiple tool is not required for use, said cap having internal uniformly spaced longitudinal grooves, ribs on the outer side of the handles of said small tools shaped and spaced to correspond with said grooves adapted to engage in said grooves so that said cap forms an extension of any one of said small tool handles to facilitate the turning of said tools in both directions, and a plug adapted to be screwed into the bottom end of said large tool handle.

3. A multiple pocket tool as specified in claim 1, in which the grooves in the cap and the ribs on the small tool handle are parallel.

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