March 28, 1950 G. A. CAGLE 2,501,757

COMBINATION HAND TOOL

Filed March 26, 1948

Fig. 1.

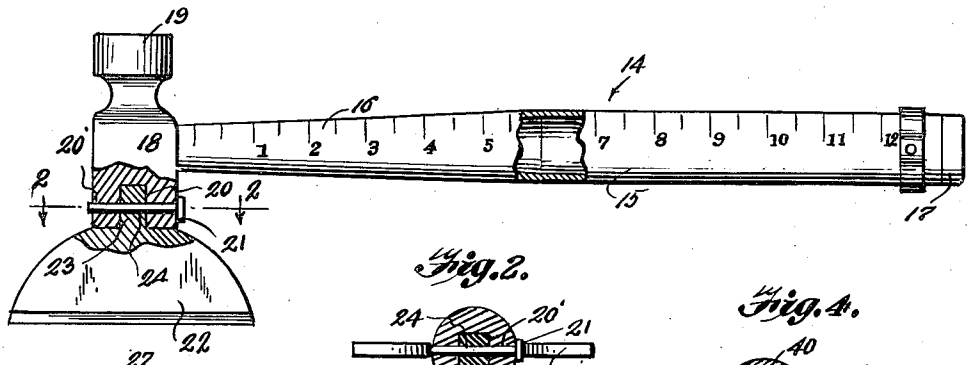


Fig. 2.

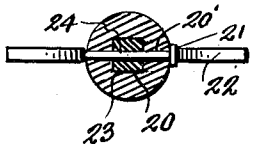


Fig. 4.

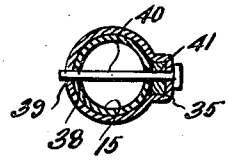


Fig. 6.

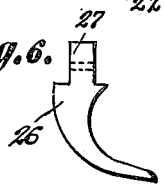


Fig. 3.

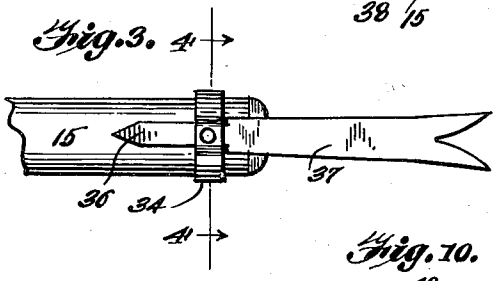


Fig. 7.

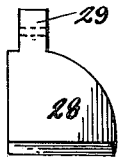


Fig. 10.

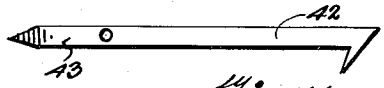


Fig. 8.

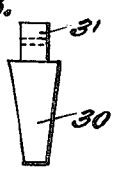


Fig. 11.

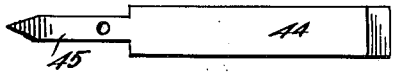


Fig. 12.

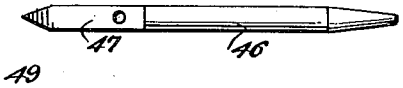


Fig. 9.

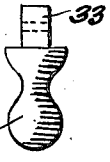
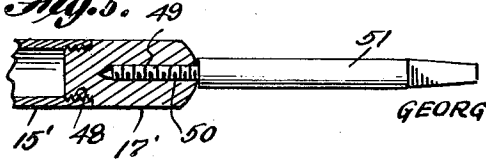


Fig. 5.



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COMBINATION HAND TOOL

George A. Cagle, Mineola, Tex.

Application March 26, 1948, Serial No. 17,162

1 Claim. (Cl. 306—1)

1

This invention relates to a combination hand tool and more particularly to a tool having a body provided with means for demountably supporting a plurality of tool blades or work engaging elements whereby the tool readily lends itself for a plurality of uses eliminating the need for a separate tool for each of the various operations of which the combination tool is intended.

Still a further object of the invention is to provide a combination tool and including a body constructed similar to a section of a hammer and which is readily adapted for demountably supporting the numerous blades or work engaging elements capable of being demountably attached thereto.

Various other objects and advantages of the invention will hereinafter become more fully apparent from the following description of the drawing, illustrating preferred embodiments thereof, and wherein:

Figure 1 is a side elevational view, partly in section showing the tool with an ax blade detachably connected thereto;

Figure 2 is a sectional view through the tool head taken substantially along a plane as indicated by the line 2—2 of Figure 1;

Figure 3 is a fragmentary plan view of the shank end of the tool handle and showing a tool blade demountably attached thereto;

Figure 4 is a cross sectional view thereof taken substantially along a plane as indicated by the line 4—4 of Figure 3;

Figure 5 is a fragmentary longitudinal sectional view of a slightly modified form of the tool handle for demountably supporting a screw driver blade;

Figures 6, 7, 8 and 9 are side elevational views of work engaging implements adapted to be demountably supported on the tool head of Figure 1, and

Figures 10, 11 and 12 are plan views of work engaging implements adapted to be demountably supported on the handle of the tool in the manner as illustrated in Figure 3.

Referring more specifically to the drawing, the combination tool in its entirety is designated generally 14 and includes an elongated handle 15 which is preferably hollow or tubular and which is preferably inscribed with a linear measure 16 including one-half inch and inch graduations and inch markings. The handle 15 preferably is provided at its outer end with a detachable cap 17 affording access to the interior thereof and the inner end of said handle is suitably secured rigidly to a head 18 which is disposed

2

transversely of the axis of the handle 15 and which is provided at one end thereof with a hammer head 19.

The opposite end of the head 18 is recessed to provide an outwardly opening socket 20 preferably of non-circular cross section and has a bore 20' extending transversely therethrough and through the socket 20.

An ax blade 22 is shown demountably supported on the last mentioned end of the tool head 18 by means of a shank portion 23 which projects from the intermediate portion of the back edge thereof and which snugly fits the recess 20, as seen in Figure 2 and which is detachably retained therein by a retaining pin 21 which extends through the bore 20' and through a bore 24 of the shank 23 which aligns therewith so that when the blade 22 is demountably supported on the tool head 18 the tool 14 readily adapts itself for use as a hand ax.

Figure 6 illustrates a claw head adapted to be substituted on the tool head 18 for the ax blade 22 and having a shank 27, corresponding to the shank 25 which is adapted to be detachably secured in the socket 20 by the retaining pin 21. Figure 7 illustrates a hatchet blade 28 having a shank 29 which is adapted to be demountably secured in the socket 20; Figure 8 discloses a tack hammer head 30 with a similar shank 31 for the same purpose and Figure 9 illustrates a ball pin hammer head 32 having a shank 33 likewise adapted to be demountably supported in the socket 20.

As seen in Figures 3 and 4, a band or strap 34 is detachably disposed around the handle 15 adjacent its shank end and is provided with an outwardly offset portion 35 which combines with the adjacent portion of the handle 15 to form a socket for receiving the restricted shank end 36 of a claw bar and wire puller blade 37 which projects longitudinally from said end of the handle. The handle 15 and the strap or band 34 are provided with aligned, diametrical openings 38 and 39, respectively, for receiving a retaining pin 40 which extends therethrough and through an aperture 41 of the shank 36 to demountably secure the blade 37 to the handle 15 and it will be readily apparent that said pin 40 also detachably fastens the band 34 to the handle. Figure 10 discloses a staple puller and pinch bar 42 one end of which defines the shank 43 corresponding to the shank 36 and which is adapted to be similarly secured by a fastening 40 and band 34 to the handle 15; Figure 11 illustrates a chisel 44 having a restricted shank 45 also adapted to be re-

ceived in the offset portion **35** of the strap or band **34** and secured thereto and to the handle **15** by the retaining pin **40** and a punch **46** is illustrated in Figure 12 having a shank **47** for the same purpose as the shank **36**.

Figure 5 illustrates a slightly modified form of the tool handle, designated generally **15'** and wherein the cap **17'** thereof is elongated and threadedly connected as at **48** detachably thereto. The handle end or cap **17'** has a longitudinally extending outwardly opening threaded bore **49** for receiving the restricted threaded shank **50** of a screw driver blade **51** which is thereby demountably attached thereto.

The caps **17** and **17'** are detachable to afford access to the hollow bore or interior of the handle **15** or **15'** so that certain of the blades or work engaging elements as illustrated may be stored therein.

Various modifications and changes are contemplated which may obviously be resorted to, without departing from the spirit or scope of the invention as hereinafter defined by the appended claim.

I claim as my invention:

A combination tool comprising a body portion including an elongated handle having a transversely disposed head secured to one end thereof, said body portion constituting a portion of a conventional hammer-like tool, and means for demountably attaching a blade or work engaging implement thereto, said means comprising a band disposed around the handle adjacent its outer end and including an outwardly offset portion, said outwardly offset portion combining with the adjacent portion of the handle to form a socket having an opening therethrough, said band having diametrically aligned openings one of which is formed in said outwardly offset portion, said handle having diametrically aligned openings to align with said openings of the band, said work engaging implement or blade having a restricted shank for detachably fitting the socket formed by the outwardly offset portion of the band and handle and having an aperture therein to align with the handle and band, and a retaining pin extending through said openings and aperture for detachably connecting the work engaging element or blade and band to the handle.

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