No. 854,891. PATENTED MAY 28, 1907.

D. B. HUFFMAN.

COMBINATION TOOL.

APPLICATION FILED MAY 16, 1906.

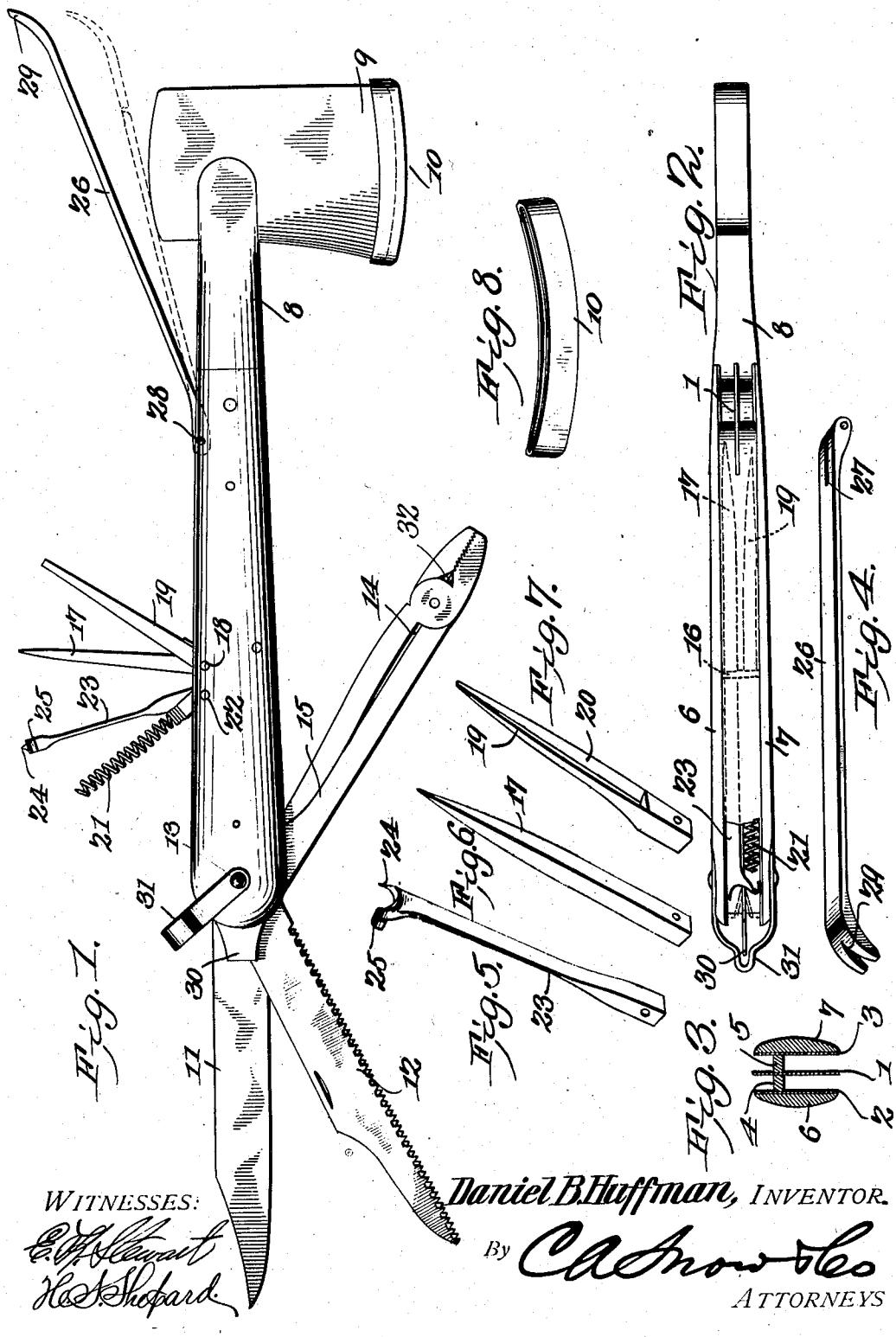

Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

Fig. 6.

Fig. 7.

Fig. 8.

WITNESSES:

E. F. Clement

H. S. Shepard.

Daniel B. Huffman, INVENTOR.

By C. A. Snow & Co

ATTORNEYS

UNITED STATES PATENT OFFICE.

DANIEL B. HUFFMAN, OF WHITE, IDAHO.

COMBINATION-TOOL.

No. 854,891. Specification of Letters Patent. Patented May 28, 1907.

Application filed May 16, 1906. Serial No. 317,185.

To all whom it may concern:

Be it known that I, DANIEL B. HUFFMAN, a citizen of the United States, residing at White, in the county of Kootenai and State of Idaho, have invented a new and useful Combination-Tool, of which the following is a specification.

This invention relates to combination tools, and has for its object to provide for housing a plurality of tools within the main handle of the device, and to have certain of the tools covered and guarded by a tool which is mounted upon the exterior of the handle. In this connection, it is proposed to provide for holding said tool in its closed position when not in use and thereby to prevent interference with the use of the other tools.

With these and other objects in view, the present invention consists in the combination and arrangement of parts as will be hereinafter more fully described, shown in the accompanying drawing and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size and minor details may be made, within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawing: Figure 1 is a side elevation of a combination tool embodying the features of the present invention, the several tool members being shown in open position or projecting from the handle. Fig. 2 is a top plan view of the device, a portion of the claw or tack lifter being broken away. Fig. 3 is a cross sectional view of the handle. Fig. 4 is a detail perspective view of the tack lifter. Figs. 5, 6 and 7, are detail perspective views of certain of the tool members removed. Fig. 8 is a detail perspective view of the sheath for the hatchet blade.

Like characters of reference designate corresponding parts in all of the figures of the drawing.

The handle of the present tool is made up of spaced metallic plates 1, 2 and 3, between which are spacing strips 4 and 5 which are considerably narrower than the plates and define therewith longitudinal compartments. Convexed facing strips 6 and 7 are secured to the outer sides of the respective plates 2 and 3 so as to give the desired shape to the handle. A shank member 8 is suitably secured to the forward end of the handle and carries an ax blade 9, upon the cutting edge of which is a removable sheath 10 to protect the user of the device when the ax blade is not in use.

Within one of the longitudinal compartments of the handle, at what will be termed the inner edge thereof, is a knife blade 11, and a saw blade 12 mounted upon a common pivot pin 13 transversely piercing the rear extremity of the handle. In the adjacent compartment there is a pair of pincers 14, one handle member 15 of which, is pivoted upon the pin 13. Normally, the blades and the pincers are folded into their respective compartments so as to lie within and be housed by the handle, it of course being possible to draw out these individual tools whenever desired for use.

The compartments in the outer edge of the handle are subdivided by a transverse partition 16, as best shown in Fig. 2. Situated in one of these sub-divisions is a reamer 17 shown in detail in Fig. 6 of the drawing, the point of the reamer being directed toward the ax blade and its butt end being pivoted upon a pin 18 passing transversely through the handle, whereby the reamer is capable of being drawn out to the position shown in Fig. 1. Within the adjacent compartment there is a punch 19 pivoted upon the pin 18 and having a longitudinal groove or channel 20 in its outer face. A cork screw 21 is disposed in another compartment and pivoted upon a pin 22. In the remaining compartment, there is a tool made up of a shank 23 having one end pivoted upon the pin 22, and its other end provided with a pointed projection 24 lying at one side of the shank and designed for use as a center when cutting marks into a wooden post or the like by means of the hooked blade 25 carried by the other side of the shank. This tool is particularly useful for surveyors and the like for cutting numbers or other marks into stakes.

A tack lifter 26 is applied to the outer edge of the handle so as to close the adjacent compartments and thereby cover the tools 17, 19, 21 and 23, when the latter are folded in the handle. The forward end of the tack lifter is provided with a bifurcation 27 to receive the adjacent end of the middle plate 1 and is pivoted upon a pin 28 extending transversely through the handle. The free end of the tack lifter is provided with a claw 29 which conforms to the rounded terminal of the handle when folded thereagainst. When the tack lifter is in use, it is swung out from the handle so as to expose its claw in position

for engagement with a tack. After a tack has been partially drawn, the tack lifter may be manipulated by means of the main handle using the ax head or blade as a fulcrum with the tack lifter engaging the rear end of the blade, as indicated by dotted lines in Fig. 1 of the drawing, whereby a strong purchase may be obtained, and strain is removed from the pivotal connection between the tack lifter and the handle.

The rear end of the intermediate plate 1 is projected at the rear end of the handle and formed into a screw-driver bit 30.

For convenience in suspending the tool when not in use, a swinging bail 31 is placed astraddle the rear end of the handle and is mounted upon the pivot pin 13. It is of course necessary to swing the bail to one side, when the screw-driver bit is in use, and when the bail is moved to embrace the free end of the tack lifter, said tack lifter will be positively held against the handle and thereby prevented from swinging outward and interfering with the use of the other tools.

The spacing strips 4 and 5 are free at their outer ends which are engaged by the knife blade 11 and the saw blade 12 so as to form springs for holding these blades open and closed.

The pincers 14 preferably are provided with any suitable form of wire cutting means as indicated at 32.

Having thus described the invention, what is claimed is:

1. A tool holder comprising a handle having a longitudinal compartment formed at its edge and extending into its end, a bail pivoted at the end of the handle and adapted to swing over the end of said compartment, a shank pivoted in the opposite end of said compartment and adapted to close the same, the shape of said shank in side elevation conforming generally to the contour of the edge of the handle containing the compartment, tool bits pivoted in said compartment at points intermediate of the ends thereof and arranged to lie within the same with their ends disposed in opposite directions, said shank being adapted to close down over the said tool bits and said bail being adapted to retain the free end of the shank in closed position.

2. A tool holder comprising a handle having at its edges longitudinally extending compartments, a bail pivoted at the end of the handle and adapted to swing over the said compartments, tool elements mounted upon the pivot of the bail and adapted to swing in one of the said compartments, a shank pivoted in the opposite compartment and adapted to close the same, the shape of said shank in side elevation conforming generally to the contour of the edge of the handle, tool bits pivoted in the same compartment with the shank and being located at points intermediate of the ends thereof, and arranged to lie within the compartment with their ends disposed in opposite directions, said shank being adapted to close down over the said tool bits and said bail being adapted to retain the free end of the shank in closed position.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses:

DANIEL B. HUFFMAN.

Witnesses:

SIDNEY W. ROGERS,

T. J. KELLY.