

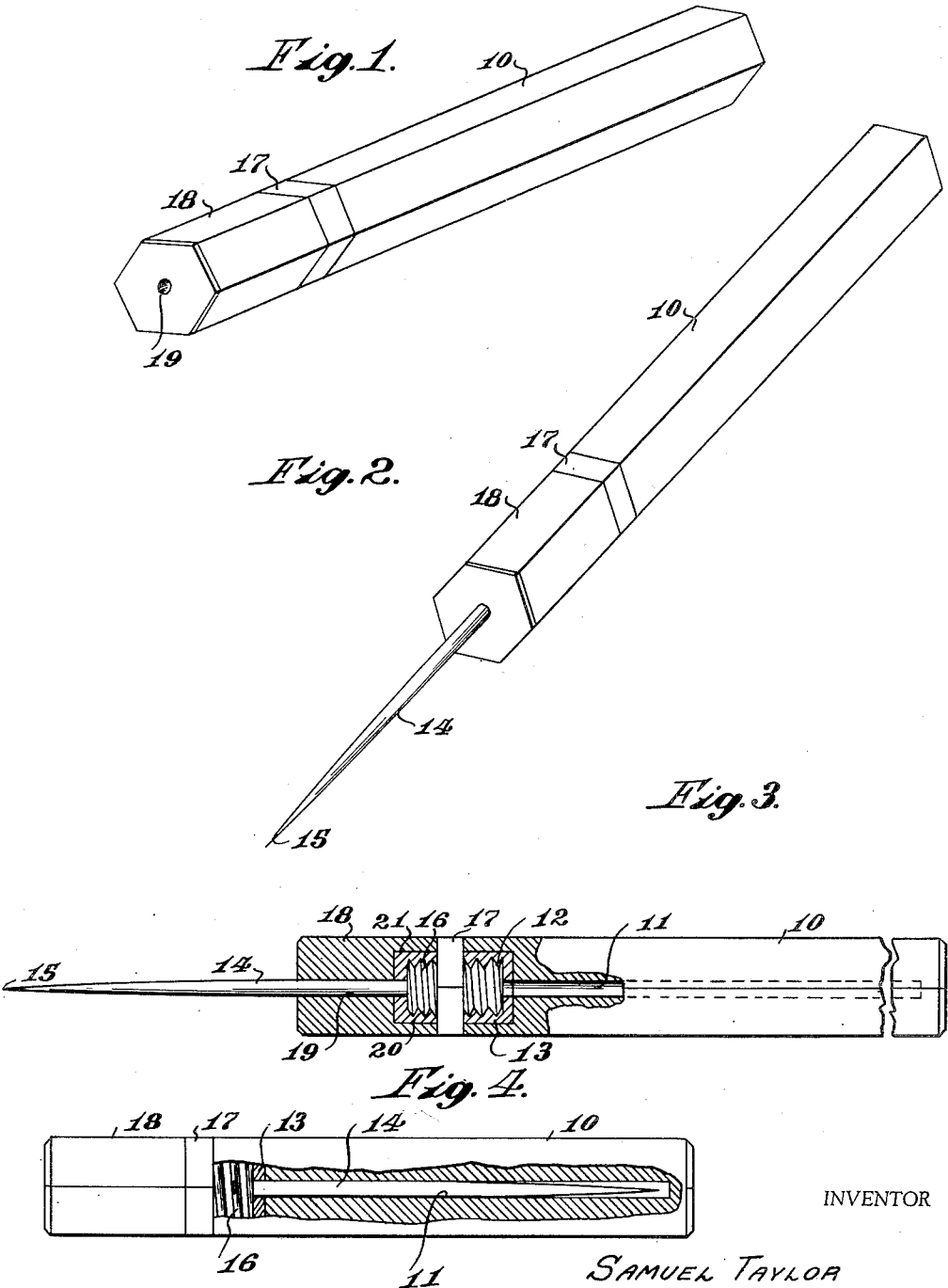
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S. TAYLOR

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POINTED TOOL

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BY
McMorrow, Berman + Davidson
ATTORNEY

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POINTED TOOL

Samuel Taylor, Santa Monica, Calif.

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1 Claim. (Cl. 30—151)

1 This invention relates to pointed tools and more particularly to a tool, such as an ice pick having a handle and a separate shank receivable in the handle to condition the tool for safe transportation or storage.

It is among the objects of the invention to provide an improved tool having a handle and a pointed shank detachably secured to the handle in either of two positions in one of which it projects outwardly from one end of the shank for use as an ice pick or similar device, and in the other of which it is received in the handle with its pointed end guarded for convenience and safety in transportation and storage; which is easy to change from one condition to the other; which provides a solid connection between the shank and the handle; which has screw threaded portions which are fully protected at all times; and which is simple and durable in construction, economical to manufacture and neat and attractive in appearance.

Other objects and advantages will become apparent from a consideration of the following description and the appended claim in conjunction with the accompanying drawing wherein:

Figure 1 is a perspective view of the improved tool shown in condition for transportation or storage;

Figure 2 is a perspective view of the tool shown in condition for use;

Figure 3 is a side elevational view of the tool when in condition for use with portions broken away and shown in cross section to better illustrate the construction thereof; and

Figure 4 is an elevational view of the tool when in condition for transportation or storage with portions broken away and shown in cross section to better illustrate the construction thereof.

With continued reference to the drawing, the tool comprises a handle 10 in the shape of an elongated hexagonal prism having a blind bore 11 extending coaxially thereof from one end to a location adjacent the other end of the handle and having a screw threaded counterbore 12 in the bore 11 at the open end of the latter.

If the handle is formed of a hard material in which the screw threads can be directly provided, the counterbore 12 will be provided in the material of the handle itself, but if the handle is formed of a soft material a metal insert 13 is secured in a well provided in the corresponding end of the handle and includes the screw threaded counterbore 12 communicating with the bore 11.

The tool further comprises a shank 14 which tapers to a point, as indicated at 15, at one end

2 and has at its other end a screw threaded stud formation 16 which is threadable into the screw threaded counterbore 12 in the handle. An enlargement 17 is provided intermediate the length of the stud 16 and preferably substantially at the mid-length location of the stud and this enlargement provides at its opposite ends annular shoulders disposed in parallel planes substantially perpendicular to the longitudinal center line of the shank. This enlargement preferably has a polygonal outer surface of the same size and shape as the surface of the handle 10 and the screw threads are so constructed that when the portion of the stud at either side of the enlargement 17 is threaded into the counterbore in the handle the peripheral faces on the enlargement 17 will match and be flush with corresponding surface faces on the handle 10.

A cap 18 is provided in the form of a hexagonal prism of the same cross sectional size and shape as the handle 10 but having a length materially less than the length of the handle. This cap has a bore 19 extending coaxially therethrough and has a screw threaded counterbore 20 at one end thereof. As in the case of the handle, if the cap is formed of a hard material the screw threaded counterbore may be provided directly in the material of the cap, but if the cap is formed of a softer material a metal insert 21 will be secured in a well provided in the corresponding end of the cap and the screw threads of the counterbore 20 will be provided in the material of this insert with the counterbore communicating through the end wall of the insert with the bore 19 in the cap.

When the tool is conditioned for use the portion of the stud 16 at the side of the enlargement 17 remote from the pointed end of the shank 14 is threaded into the counterbore 12 in the handle until the corresponding end of the handle is brought to bear against the adjacent shoulder provided by the enlargement 17 and the surface faces of the enlargement are in alignment with corresponding surface faces of the handle. The shank 14 is then inserted through the bore of the cap 18 and the cap is threaded onto the portion of the shank 16 at the side of the enlargement 17 adjacent the pointed end of the shank until the corresponding end of the cap is brought to bear against the adjacent shoulder provided by the enlargement 17 and the surface faces of the cap are in alignment with corresponding surface faces of the handle 10 and the enlargement 17. The threads are so formed that when this condition is satisfied the stud is threaded tightly into

3

the counterbore or socket in the handle and the cap is threaded tightly onto the stud with its counterbore or socket receiving the corresponding end portion of the stud.

In order to condition the device for safe transportation or storage, the cap is threaded off of the stud and the stud is threaded out of the handle. The shank is then inserted into the bore 11 of the handle and the portion of the stud adjacent the pointed end of the shank is threaded into the counterbore 12 of the handle. The cap is then threaded onto the portion of the stud at the side of the enlargement 17 remote from the pointed end of the handle and the parts are tightly threaded together until corresponding surface faces of the handle, the enlargement and the cap are in longitudinal alignment. The shank is now received in the blind bore of the handle and its point is completely guarded. At the same time, both of the screw threaded portions of the stud are enclosed in the socket formations in the handle and the cap so that the threads will not be damaged. It is to be noted that when the tool is in operative condition both of the screw threaded portions of the stud are also completely enclosed, so that the threads cannot be damaged in either condition of the tool.

It is also to be noted that the shank has a length less than the length of the handle so that the entire length of the shank is receivable in the blind bore in the handle and that the cap has a length materially less than the length of the shank so that the pointed end portion of the shank will project outwardly of the cap when the device is in its operative condition.

The invention may be embodied in other specific forms without departing from the spirit or essential characteristics thereof. The present embodiment is, therefore, to be considered in all respects as illustrative and not restrictive, the scope of the invention being indicated by the appended claim rather than by the foregoing description, and all changes which come within the meaning and range of equivalency of the claim are, therefore, intended to be embraced therein.

4

What is claimed is:

A pointed tool comprising an elongated handle having a blind bore disposed coaxially and opening to one end thereof and having a screw threaded counterbore at the end thereof opening to said one end of the handle, a tool shank tapering to a point at one end and having at its other end a screw threaded stud of greater diameter than said shank and a coaxial enlargement intermediate the length of said stud providing annular shoulders one at each end of said enlargement and screw threaded stud portions extending one from each of said annular shoulders, the portions of said stud at opposite ends of said enlargement being selectively receivable in said counterbore to dispose said shank in said bore or in a position in which it extends longitudinally from said one end of said handle, and a cap having a bore extending coaxially therethrough and a screw threaded counterbore at one end thereof receiving the portion of said stud disposed outside of said handle, said cap having a length materially less than the length of said shank so that when said shank is secured to said handle in position to project longitudinally from said one end of the handle and the counterbore in said cap receives the portion of said stud disposed outside of said handle with said shank extending through the bore in said cap, said shank extends beyond the end of said cap remote from said handle and the bore in said handle having a length at least as great as the length of said shank.

SAMUEL TAYLOR.

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
1,176,583	McPhee -----	Mar. 21, 1916
1,268,930	Cook -----	June 11, 1918
1,988,807	Pierson -----	Jan. 22, 1935
2,435,225	Kolodner et al. -----	Feb. 3, 1948
2,516,618	Crowl et al. -----	July 25, 1950