May 11, 1943. W. C. STANLEY 2,318,975

HANDLE

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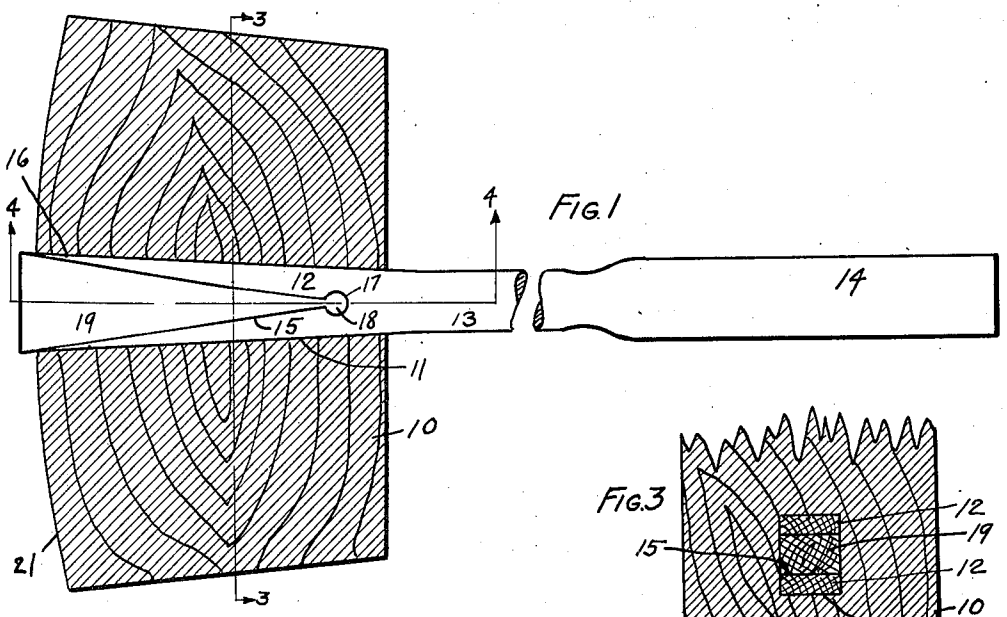


FIG. 1

FIG. 3

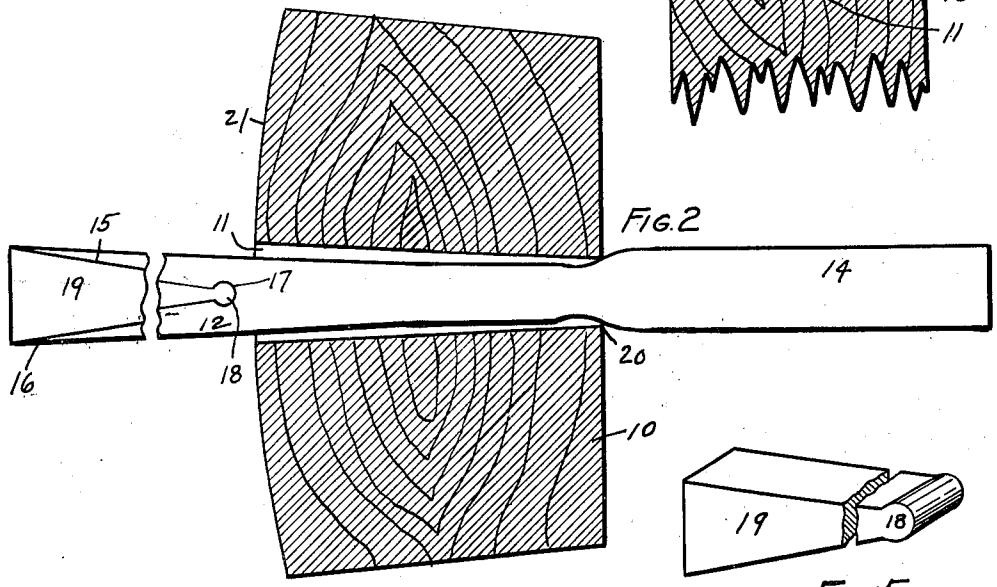


FIG. 2

FIG. 5.

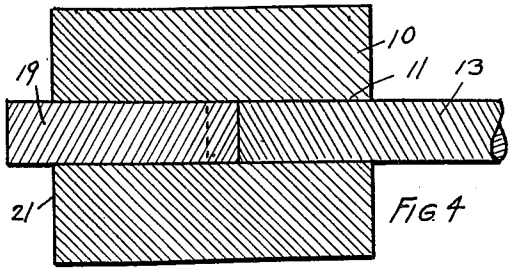


FIG. 4

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HANDLE

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4 Claims. (Cl. 306—32)

This invention relates generally to handles and particularly to a means for fastening a handle to a tool.

The main object of this invention is to provide a convenient, inexpensive, and positive means for attaching a handle to a tool, such as a mallet, hammer, ax, or other striking or cutting implement.

The second object of this invention is to construct a fastening device for handles in which the hand engaging end of the handle is larger than the smallest portion of the hole through which the handle is inserted.

I accomplish these and other objects in the manner set forth in the following specification, as illustrated in the accompanying drawing, in which:

Fig. 1 is a section taken through a mallet head along the line 1—1 in Fig. 3, showing the handle end fastener in side elevation and showing the handle secured to the mallet.

Fig. 2 is a view similar to Fig. 1, showing the preliminary position for attaching the handle, with the mallet head in position for inserting or withdrawing the fastener.

Fig. 3 is a fragmentary section taken along the line 3—3 in Fig. 1.

Fig. 4 is a fragmentary transverse section taken along the line 4—4 in Fig. 1.

Fig. 5 is a perspective view of the fastening element.

Similar numerals refer to similar parts throughout the several views.

Referring in detail to the drawing there is shown, for example only, a mallet head 10 having a tapering hole 11 formed therein, adapted to receive the tapering handle end 12 which extends from the shank 13 of the enlarged handle 14. The handle may be round, oval, or any other desired shape without departing from the spirit of the invention. The portion 12 may also be of any desired shape, but it is preferably rectangular, or substantially so.

The portion 12 of the handle 14 is provided with a wedge shaped slot 15 across its end 16 having the enlarged circular portion 17 adapted to receive the circular point 18 of the wedge shaped element 19 adapted to be inserted into the slot 15 laterally.

It will be understood that the end 16 is sufficiently flexible to permit it to be inserted into the small end 20 of the tapering hole 11 for the purpose of inserting or withdrawing the handle from the member 10.

The application of the handle 14 to the head 10 is as follows:

With the wedge shaped element 19 removed, the ends 16 are inserted through the opening 20 until they reach the position shown in Fig. 2. That is, with the slot 15 fully exposed from the hammer end 21. The element 19 is now inserted laterally and the entire handle 14 is driven to the position shown in Fig. 1.

Since the member 19 cannot be withdrawn on account of its enlarged head 18, and since the ends 16 cannot be compressed or collapsed due to the presence of the member 19, it follows that the head 10 cannot escape from the handle portion 12.

Obviously, the member 19 can be made of any suitable material such as plastic or metal. It is also obvious that the taper of the member 19 is of minor importance. In some instances it may be omitted partially or entirely. It is important, however, that the end 18 be enlarged to prevent the withdrawal of the member 19.

I am aware that numerous forms of handle fastening devices have been made in the past, including wedges having barbed or toothed sides, and kindred other devices. I therefore, do not intend to cover handle fastening devices broadly, but I do intend to cover all such forms and modifications thereof as fall fairly within the appended claims.

I claim:

1. A handle having its tool supporting end tapering with its wider end outermost and having a wedge shaped slot formed across said end with its point innermost, the point of said wedge shaped slot terminating in an enlarged recess, the sides of the tapering handle end being flexible enabling same to pass through the narrow end of a tool socket, and a filler for said wedge shaped slot and its enlarged recess adapted to be inserted readily when the handle is in an unflexed position.

2. A handle having an enlarged hand engaging portion, a tapering tool supporting end having reduced intermediate portion, the tapering end having its larger portion outermost, said tapering end having a wedge shaped slot formed therein with its point innermost, the side portions merging with the widest portion of said tool engaging end, said wedge shaped slot having an enlarged cylindrical recess at its pointed end, and a filler for said slot and its cylindrical recess, the distance from said recess to the nearest portion of said enlarged hand engaging portion being more

than the length of the socket of the tool mounted on said handle.

3. A handle having the tool engaging end bifurcated to form a pair of flexible outwardly flaring pointed ends separated by a wedge shaped slot, said slot having an enlarged point, and a filler for said slot having an enlarged portion adapted to be readily inserted therein, the portion of said handle between its tool and hand engaging portions being reduced to the smallest diameter of the tool opening.

4. A handle for tools having a tapering handle socket consisting of an elongated wooden handle having reduced intermediate portion and having one end tapering with its wider portion outermost, said wider portion consisting of two pointed flexible arms having a filler for the space between same, and having means for holding said filler in position longitudinally and permitting its insertion or withdrawal readily when the tool is moved to a position along the reduced portion of the handle.

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