April 8, 1924. 1,489,612

E. A. SCHADE

HAMMER WEDGE

Filed July 1, 1922

Fig. 1.

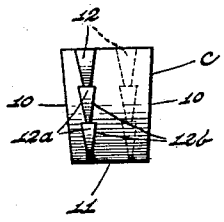


Fig. 2.

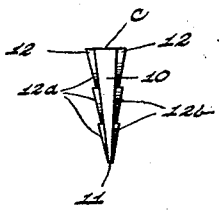
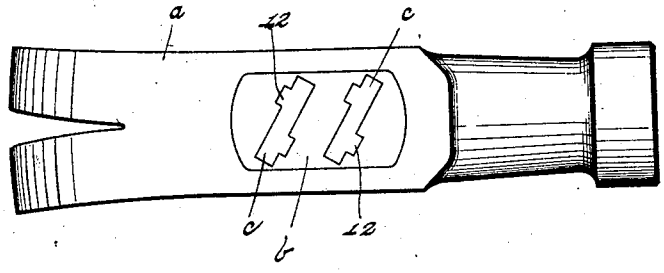


Fig. 3.



Inventor

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By J. Clay Lindsey

His Attorney

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UNITED STATES PATENT OFFICE.

EDMUND A. SCHADE, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO THE STANLEY WORKS, OF NEW BRITAIN, CONNECTICUT, A CORPORATION OF CONNECTICUT.

HAMMER WEDGE.

Application filed July 1, 1922. Serial No. 572,348.

To all whom it may concern:

Be it known that I, EDMUND A. SCHADE, a citizen of the United States, and a resident of New Britain, county of Hartford, State of Connecticut, have invented certain new and useful Improvements in a Hammer Wedge, of which the following is a specification.

This invention relates to wedges adapted, for instance, to be driven into the ends of tool handles for preventing the tool heads thereon from becoming loose and flying off. The aim of the invention is to provide a wedge of this sort of improved construction whereby the tool heads are more securely fastened on their handles, and the wedges are effectively prevented from becoming loose or working out of the handle.

In the accompanying drawing, wherein I have shown, for illustrative purposes, one embodiment which the present invention may take,

Fig. 1 is a view looking at one of the wide or flat faces of the wedge;

Fig. 2 is an edge view thereof, and

Fig. 3 is a view looking down on the top of a hammer to which wedges of the present invention are applied for securing the hammer head to the handle.

Referring to the drawing in detail, *a* denotes a tool head, this head in the present instance being in the form of a hammer; *b* is a handle having a close fit in the usual handle receiving opening of the hammer head, and *c* denotes wedges constructed in accordance with the present invention.

Each of the wedges *c* comprises a piece of metal tapering down towards one of its edges. If desired, the wedges, in addition to being tapered flat-wise, may be tapered widthwise, that is its side edges 10 may be inclined towards each other in the direction of the thin or cutting edge 11 of the wedge. In the present illustrative disclosure, there is provided on each of the flat faces of the wedge a series or vertical row of teeth 12 which taper down to a point towards the thin edge 11 of the wedge, that is to say the outer faces 12^a of these teeth are inclined inwardly towards the flat face of the wedge, and the side faces 12^b of the teeth are inclined towards each other. The number of teeth and their disposition on either or both flat faces of the wedge may, of course, be varied, but by preference each face is provided with a single series or row of teeth vertically disposed, and the teeth on one face will be offset relative to those of the other face.

With the arrangement described, it will be found that when the wedges have been driven into the end of the handle, the teeth become embedded in and are surrounded by the wood of the handle, with the result that they are very securely locked in place. Owing to the offset relation of the teeth on the opposite faces of the wedge, the wedge is given a turning effect when it is driven into the handle so that the teeth are crowded, so to speak, into the wood. It will be clear that as the wedge is driven into place the fibres of the wood, owing to the tapered shape of the teeth 12, are crowded or compacted in the space over the top of the teeth so that there is no danger of the wedge becoming disengaged and flying out of place. One difficulty experienced with wedges as previously constructed has been that the wood of the handle swells when moisture is present as, for instance, in damp weather, and then during a period of dry weather will shrink, and as these old wedges were not provided with means for locking them in the wood, the wedges would fly out of place. With wedges constructed in accordance with the present invention, this cannot take place for, owing to the action of the teeth 12 as the wedge is driven into the handle and to the inherent resiliency or elasticity of the wood fibres, the teeth become embedded into and are surrounded by the wood so that there is a positive interlock between the wedge and the wood handle.

I claim as my invention:—

1. A device of the character described including a wedge having projecting teeth on opposite side faces, said teeth being disposed so as to cause a transverse turning of the wedge on being forcibly inserted in a resistant material.

2. A device of the character described including a straight wedge having projecting teeth on opposite side faces, said teeth being disposed so as to cause a transverse turning of the wedge on being forcibly inserted in a resistant material.

3. A device of the character described in-

cluding a wedge having projecting teeth on opposite side faces and arranged in rows lengthwise of the wedge, said teeth being opposed by plain faces of the wedge whereby the wedge is turned transversely on being forcibly inserted in a resistant material.

4. A device of the character described, including a wedge having teeth projecting from opposite side faces and arranged in rows lengthwise of the wedge and spaced from the side edges of the wedge, said rows being offset with respect to each other to cause a transverse turning of the wedge on being forcibly inserted in a resistant material.

5. A wedge of the character described having its opposite faces inclined towards each other to a thin edge, a row of teeth on each face disposed at right angles to said thin edge, each of said teeth tapering down in thickness and width towards said thin edge, and the row of teeth on one face being offset relative to the row of teeth on the other face.

EDMUND A. SCHADE.