

(No Model.)

H. A. BRINTON.
LOCKING MEANS FOR HAMMER HANDLES.

No. 468,784.

Patented Feb. 16, 1892.

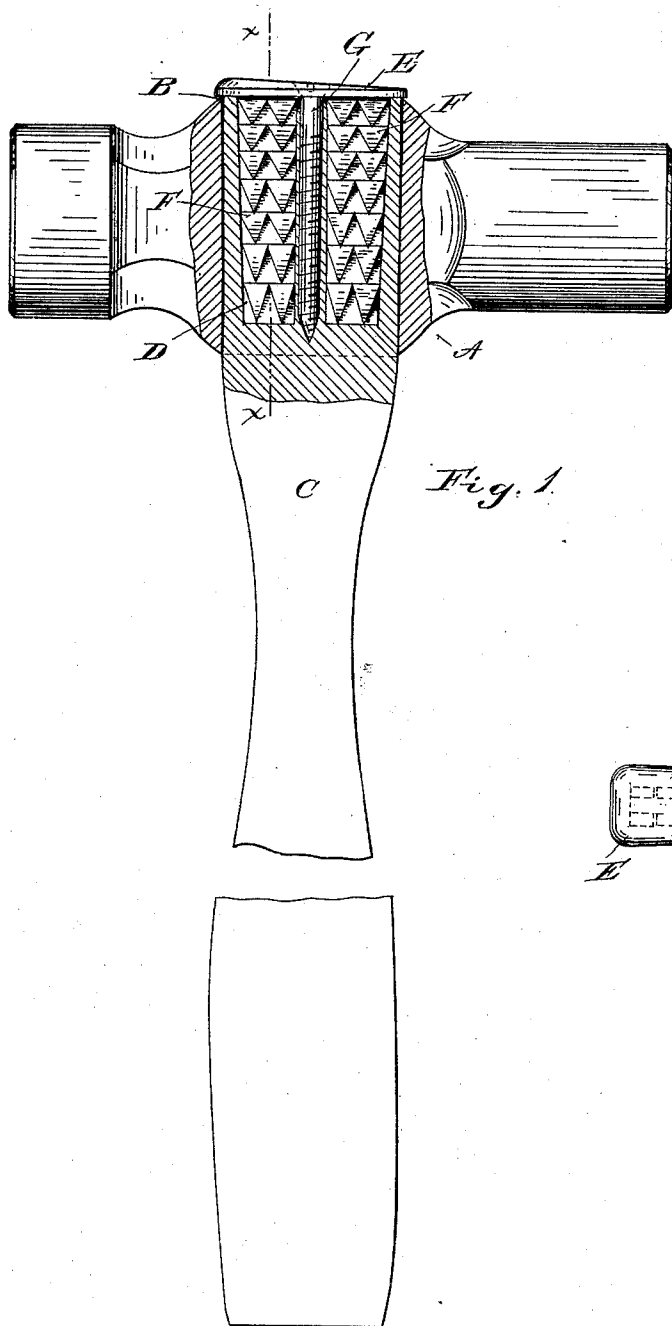


Fig. 1.

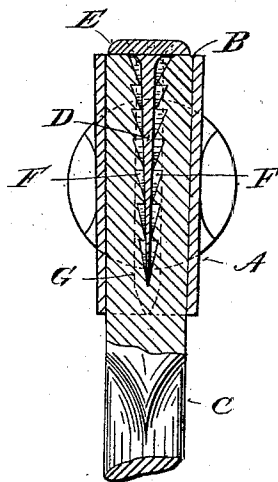


Fig. 2.

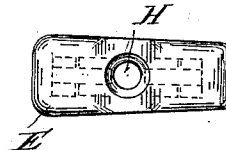


Fig. 3.

WITNESSES
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UNITED STATES PATENT OFFICE.

HENRY A. BRINTON, OF HARRISBURG, PENNSYLVANIA.

LOCKING MEANS FOR HAMMER-HANDLES.

SPECIFICATION forming part of Letters Patent No. 468,784, dated February 16, 1892.

Application filed July 20, 1891. Serial No. 400,086. (No model.)

To all whom it may concern:

Be it known that I, HENRY A. BRINTON, a citizen of the United States, residing at Harrisburg, in the county of Dauphin and State of Pennsylvania, have invented certain new and useful Improvements in Locking Means for Hammer-Handles, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to certain new and useful improvements in locking means for hammer-handles, the peculiarities of which will be hereinafter fully described and set forth.

In the accompanying drawings, on which like reference-letters indicate corresponding parts, Figure 1 represents a partial sectional view of a hammer, the inserted handle, and side view of my locking device in position; Fig. 2, a sectional view on the line *xx* of Fig. 1, and Fig. 3 a plan view of my device by itself.

The letter A designates the head of a hammer or other article provided with a socket or hole B, adapted to receive a handle C to be secured therein. This is ordinarily done by means of a wedge of wood or other material, adapted to spread the outer end of the handle after its insertion within the said hole B. This common means of fastening the handle in the head often results in annoyance and danger from the shrinkage of the handle and the loosening of the wedge in the use of the hammer. I propose to obviate these difficulties by a locking means herein illustrated, which consists, essentially, of a preferably bifurcated wedge D, having a connecting cap portion E to facilitate driving the wedge portions into the end of the handle. A series of projecting barbs or triangles F are formed or cast on the face of said wedge portions, the point of each triangulation or projection being downward or forward and tapering both sidewise and edgewise, as shown in Figs. 1 and 2, away from the wedge portions or central wedge D. These triangulations present a shoulder at their rear surfaces where they are widest, as shown in Fig. 2, which shoulder retards or prevents the withdrawal of the device from the handle. The peculiar form of projecting triangulations F when driven into

the handle forces the fibers of the wood outward and also edgewise, on account of the double-wedge shape of the same. Thus the handle is not only spread sidewise, but edgewise also, whereby the hole or socket is completely filled by the fibers of the wood under the action of the driven device. This is ordinarily sufficient to lock the handle and head completely; but for greater security I have provided an additional locking means for safety and preferably consisting of a screw G, inserted through a countersunk hole H in the said cap E and extending downward or inward between the said bifurcated wedge portions, whereby any loosening of the latter by shrinkage of the wood is completely prevented.

The shape of the projecting portions F is such as to guide the wedge portions as they are inserted into the handle, and it will be observed that a large amount of holding surface is provided; also, the ready insertion of the device is effected by a gradual increase in the amount of taper both sidewise and edgewise of said projections, as will be seen from Figs. 1 and 2. The projections in each series become more and more obtuse as they recede from the entering edge.

While I have spoken of the portion D as a wedge, it need not necessarily be wedge-shaped, but may constitute a web of other than wedge shape to support said projections F and be sharpened on its lower or entering edge, as in Fig. 2.

If desired, the entering web or wedge D may be formed without bifurcations and may be used without the safety-screw G. The central opening, however, provides space into which the fibers of the wood in the center may recede under the action of the entering wedge portions and also allow a firmer hold thereon when engaged by the screw G afterward inserted.

It will be observed that my device does not weaken the handle by its attachment thereto, since it preferably does not extend below or inside of the hammer-head. The full strength of the handle at the inner side of the head and shank is therefore preserved.

The device is readily inserted, is simple in construction, cheap in its manufacture, and its utility has been practically demonstrated.

The device is adapted to be used for axes, hammers, and other articles requiring the handle to be firmly locked within the head thereof.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a handle and a head to receive the same, of locking means consisting of a wedge web portion sharpened on its entering edge and provided with tapering projections adapted to force the fibers of the wood sidewise and edgewise therefrom, the said tapers being more acute in each series as they approach the entering end, whereby the device may be readily started in the wood and will increase its effect thereon as it is driven home.

2. As an improved article of manufacture, a locking device for hammer-handles, consisting of a plate portion having a head, the said plate portion being provided with projecting barbs each having inclined side edges adapted to push the fibers of the handle sidewise, and an inclined front face adapted to expand the front fibers away from the plate and each barb ending in a broad wide-faced shoulder at the rear end.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY A. BRINTON.

Witnesses:

EDGAR L. KING,
CHAS. M. SMITH.