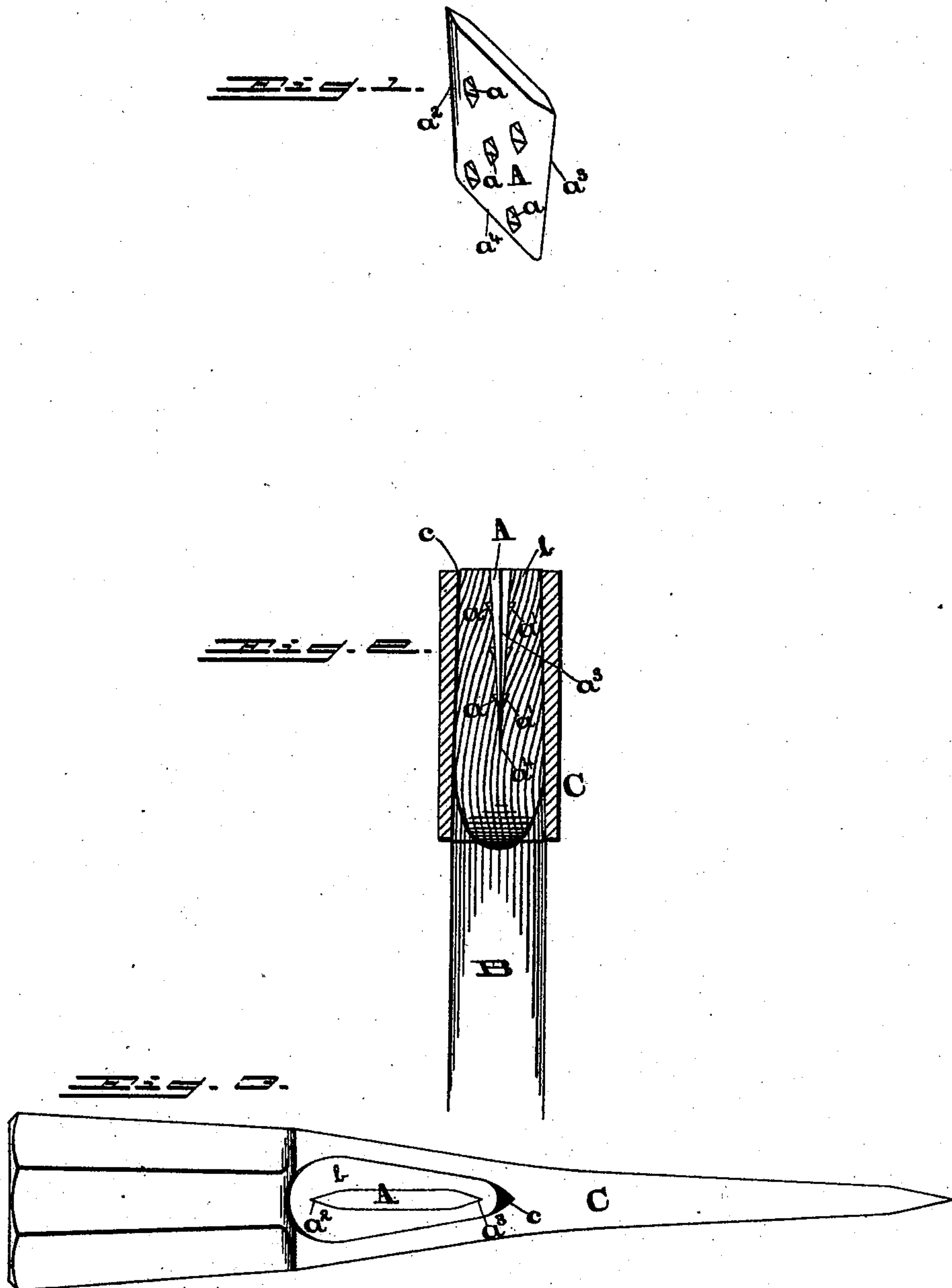


(No Model.)

W. H. THOMAS.
FASTENING FOR TOOL HANDLES, &c.

No. 502,107.

Patented July 25, 1893.



WITNESSES

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UNITED STATES PATENT OFFICE.

WILLIAM H. THOMAS, OF JENKINTOWN, PENNSYLVANIA.

FASTENING FOR TOOL-HANDLES, &c.

SPECIFICATION forming part of Letters Patent No. 502,107, dated July 25, 1893.

Application filed December 30, 1891. Renewed April 13, 1893. Serial No. 470,543. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. THOMAS, a citizen of the United States, residing at Jenkintown, in the county of Montgomery and State of Pennsylvania, have invented certain new and useful Improvements in Fastenings for Tool-Handles, of which the following is a specification.

My invention has relation to hatchets, axes, hammers, &c., and has for its object the provision of novel, simple and efficient means whereby the helves or handles thereof may be permanently secured therein, thus preventing the accidental dislodgment of the heads of such tools from their normal positions.

My invention consists in the provision of a headless wedge having its entering edges sharp, or approximately so, and provided with lateral projections or burrs, which burrs or projections, when said wedge is driven into the end of the helve or handle upon which the head of the tool is secured, embed themselves in the wood of which the latter is composed and effectually prevent the dislodgment of the wedge and the consequent loosening of said head, said wedge being adapted to be driven farther into the handle, from time to time, as the wood of which such handle is composed shrinks and the head of the tool thereby becomes loosened, resulting in the fastening of said head again and permitting of the cutting off of the portion of said handle beyond the wedge, without necessitating the removal of the latter.

Referring to the accompanying drawings, Figure 1 is a perspective view of my improved wedge. Fig. 2 is a transverse section of a hatchet-head and the end of the handle thereof, showing the improved wedge in operative relation with the latter; and Fig. 3 is an edge view of a hatchet-head, showing the end of the handle and the top of the wedge therein.

A represents the improved wedge which may be composed of wrought iron or steel, malleable or cast metal, or other suitable material and provided on each side with the lateral projections or burrs $a a'$, the same being formed by a punching or other process, if the wedge be of wrought, or cast integral with said wedge, if the latter be of cast metal. These

projections may be of any number other than that shown in the drawings and of different shape, although the shape illustrated is considered best adapted for the purpose for which my invention is designed, the sharp outer edges or apices thereof serving to more readily enter the wood of the handle or helve when the wedge is driven thereinto.

As will be observed, the side edges $a^3 a^3$ and the lower edge a^4 of the wedge A are sharp, permitting of the same being driven into the positions, shown in Figs. 2 and 3, in the handle or helve B, when the end b thereof is inserted in the opening c therefor in the hatchet-head C, with the exertion of comparatively little force. Yet, when the wedge is in this position, the burrs or projections $a a'$ engage with the wood into which said wedge is driven and prevent the accidental or other dislodgment of the latter from such position, the shape of the wedge causing the swelling of the end b of the handle or helve and the binding of the same on the sides of the eye or opening in which it is placed, effectually preventing the loosening of the head of the tool and its removal from its normal position.

While I have shown and described my invention as applied to the securing of the heads of tools on their handles or helves, it is quite obvious that the same is as readily adapted to other uses. For example, the wedge may be driven into and flush with the ends of the spokes of vehicle-wheels, after the same have been inserted in the openings therefor in the felly, preventing the loosening of said spokes in the latter, without interfering with the placing of the tire thereon. This possibility of having the wedge flush with the end of the part into which it is driven is an advantage where it is used in tool-handles, as where the tool is what is known to the trade as a "half hatchet," or one having its head provided with a straight front edge, in that it permits of a nail being, for example, driven into a floor, close to the wash-board, without the scarring of such wash-board which would result from the projection of the wedge beyond the line of said front edge.

What I claim as my invention is as follows:

As a new article of manufacture, a fastening for tool-handles; spokes; &c., consisting

of a headless wedge having its entering or
apex and side edges sharp, or approximately
so, and provided with lateral projections or
burrs, the latter being adapted to embed them-
selves in the part into which the wedge is
5 driven, substantially as and for the purpose
specified.

In testimony whereof I have hereunto set
my hand this 23d day of December, A. D.
1891.

WILLIAM H. THOMAS.

Witnesses:

WM. H. POWELL,
R. DALE SPARHAWK.