

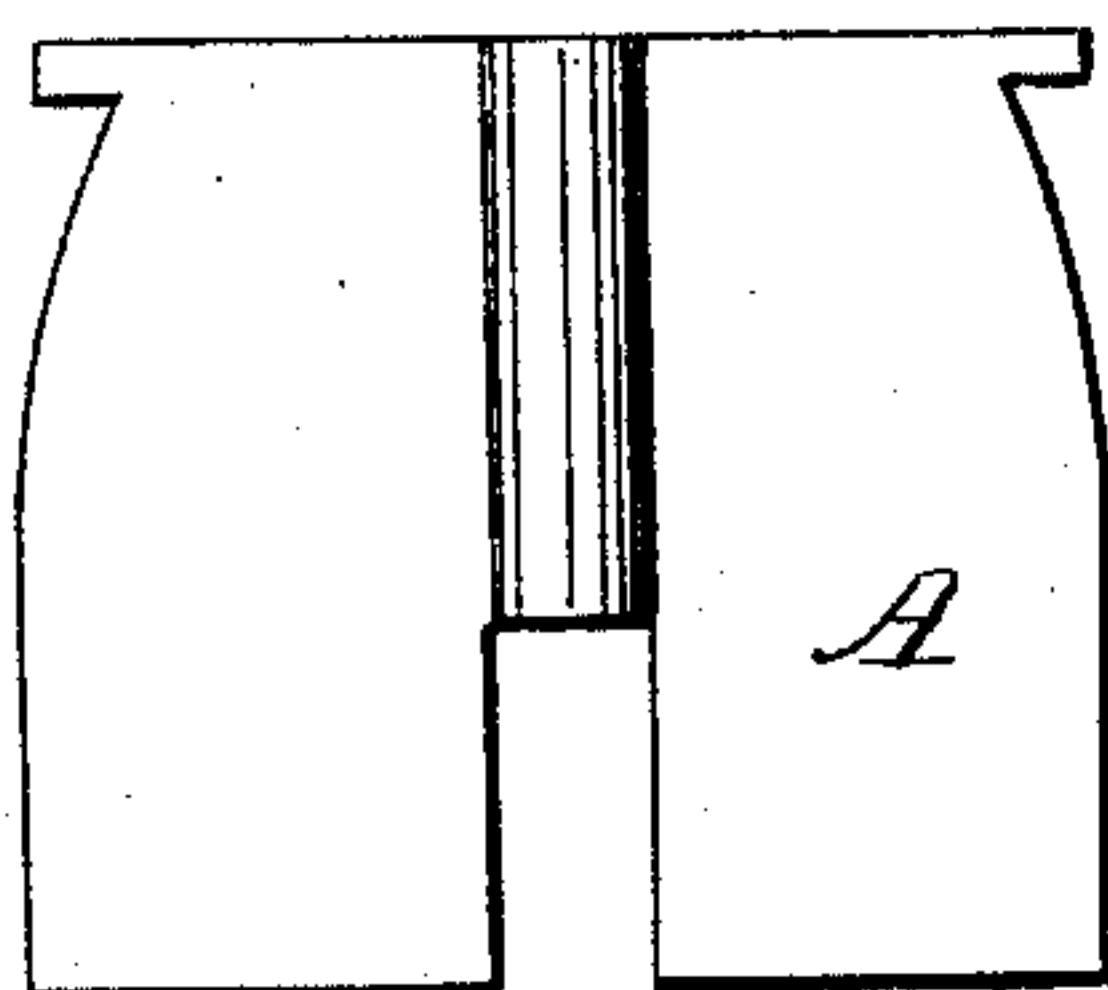
*H. C. Wooding,*

*Axe Handle,*

*No 55,437,*

*Patented June 5, 1866.*

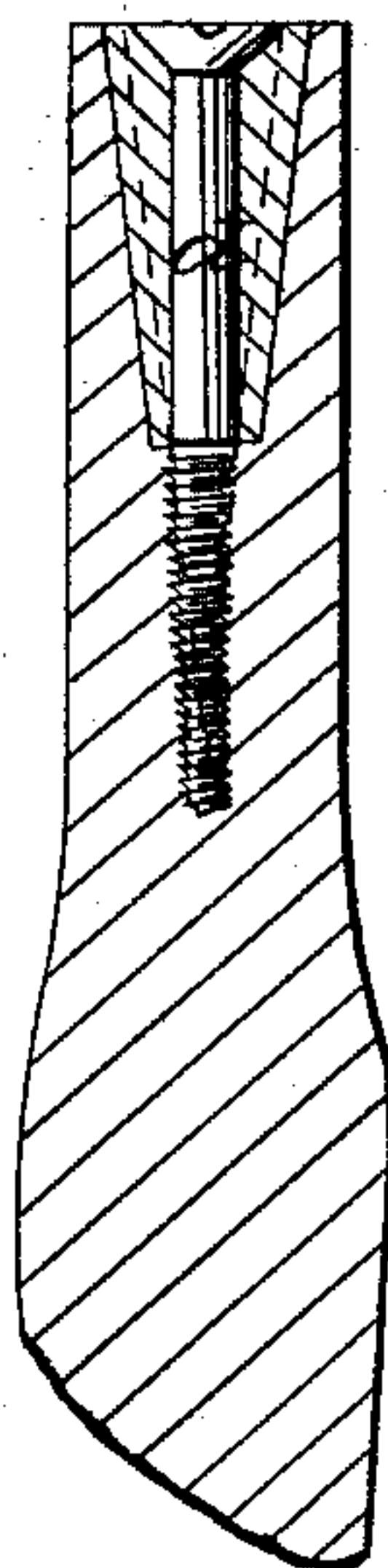
*Fig 1.*



*Fig 2. Fig 3. Fig 4.*



*Fig 5.*



*Witnesses:*

*John B Shumway*  
*John Russey*

*Inventor:*

*H. C. Wooding*  
*R. H. Day*  
*John E. Eads*

# UNITED STATES PATENT OFFICE.

HENRY C. WOODING, OF WALLINGFORD, ASSIGNOR TO HIMSELF AND  
L. W. TURNER, OF GALESVILLE, CONNECTICUT.

## IMPROVEMENT IN ATTACHING AXES TO THEIR HANDLES.

Specification forming part of Letters Patent No. 55,437, dated June 5, 1866.

*To all whom it may concern:*

Be it known that I, HENRY C. WOODING, of Wallingford, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Wedges for Handles, &c.; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view; Figs. 2 and 3, edge views; Fig. 4, a central section, and in Fig. 5 a central section as inserted into the handle.

My invention relates to an improvement in the manner of securing wedges into handles of axes and other similar instruments, so that the wedge may be removed without injury to the instrument. In securing handles into axes and similar instruments it is necessary to employ a wedge, which is usually of metal, firmly driven into the end of the handle, and when, by breakage or otherwise, it is desired to remove the wedge it is found necessary to burn the wood away, which is done with more or less injury to the instrument.

Another difficulty in the use of wedges for this purpose arises when the wedge is driven into a handle not thoroughly seasoned, which, as the handle shrinks, loosens the wedge, so that it is often lost.

By my invention these two difficulties are overcome, and the wedge not only firmly se-

cured into the handle, however much the handle may shrink, and at the same time may be withdrawn, however tightly it may be driven.

To enable others to construct and use my improved wedge, I will proceed to describe the same as illustrated in the accompanying drawings.

A is the wedge. Through its center I form a hole to receive a screw, as seen in Fig. 4, through which, after driving the wedge into the handle, insert a screw, *d*, as seen in Fig. 5, which firmly secures the wedge into the handle, so that if the handle shrinks the wedge will still remain and may be tightened by the application of a screw-driver or wrench, according to the nature of the screw.

The two ends of the wedge I form as seen in Figs. 1 and 2, so as to leave a projection by which the wedge may be withdrawn, or, as in Fig. 3, form a projection upon the sides, or on both sides and ends, so as to make a head beneath which an instrument may be placed to withdraw the wedge.

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

The herein-described wedge, provided with a head, and constructed so as to be secured substantially in the manner specified.

HENRY C. WOODING.

Witnesses:

JOHN E. EARLE,

JOHN H. SHUMWAY.