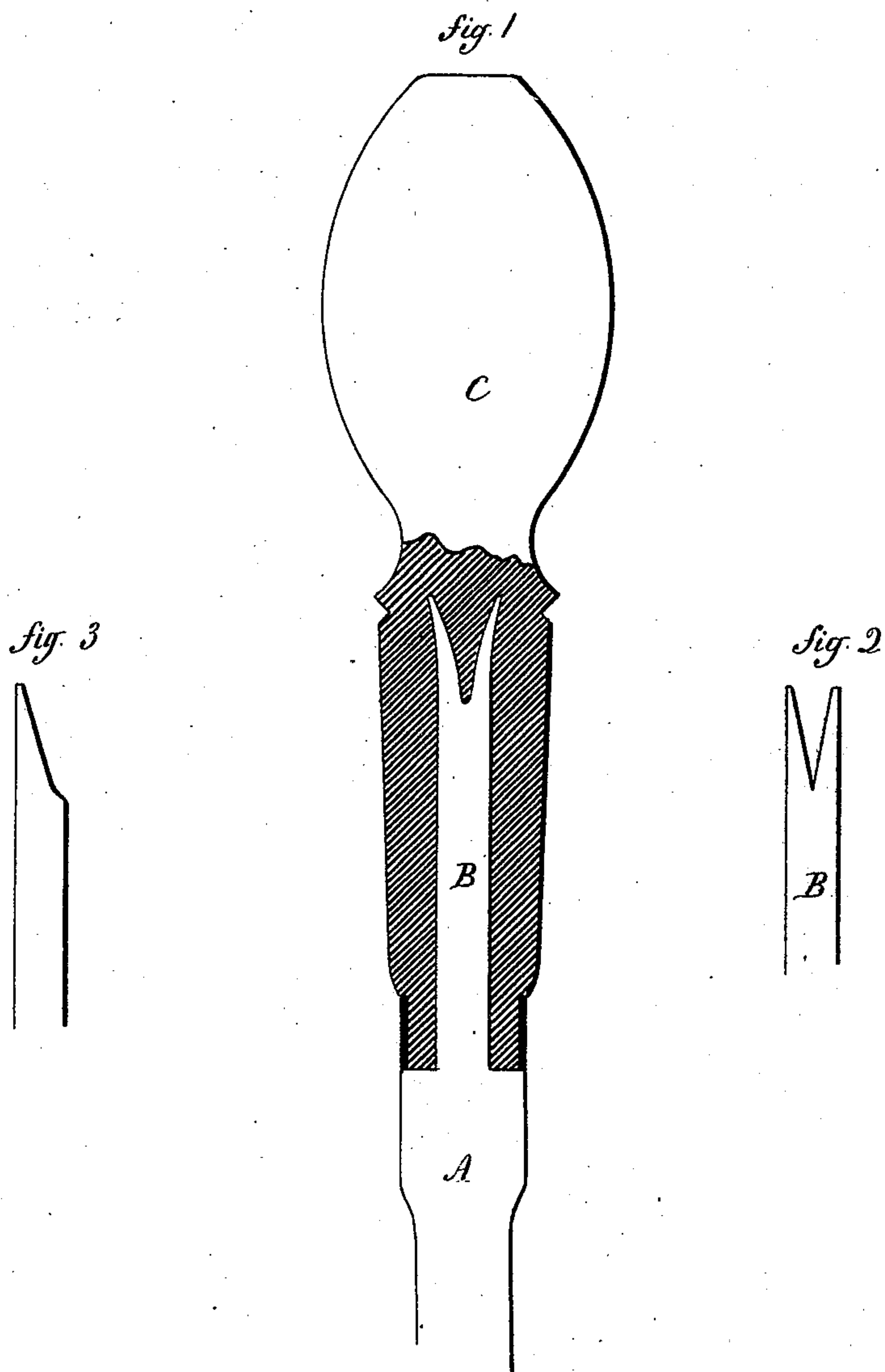


D. STEELE.  
Tool-Handle.

No. 207,781.

Patented Sept. 3, 1878.



Witnesses.

J. H. Chumney  
B. A. H. H.

David Steele  
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# UNITED STATES PATENT OFFICE.

DAVID STEELE, OF NEW BRITAIN, ASSIGNOR TO SARGENT & CO., OF NEW HAVEN, CONNECTICUT.

## IMPROVEMENT IN TOOL-HANDLES.

Specification forming part of Letters Patent No. 207,781, dated September 3, 1878; application filed March 20, 1878.

*To all whom it may concern:*

Be it known that I, DAVID STEELE, of New Britain, in the county of Hartford and State of Connecticut, have invented a new Improvement in Method of Securing Handles to Tanged Implements; 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 vertical central section; Figs. 2 and 3, detached views.

This invention relates to an improvement in the method of securing implements to handles, such as screw-drivers, chisels, knives, forks, &c.

In the usual construction of the class of implements to which this invention is applicable a simple tapering tang is formed on the handle end of the blade and driven into the handle, and, as is well known, these handles frequently become loosened to such an extent that it is difficult to retain the implement in the handle, and auxiliary devices are resorted to to resecure them.

The object of this invention is to overcome this difficulty; and it consists in constructing the tang so that in driving it into the handle its point will be turned outward into the grain of the wood and expand, as it were, the tang in the handle, making the separation from the handle impossible.

In illustration, the invention is shown as applied to a screw-driver, which is sufficient for illustration of its application to other implements. A is the blade, of the usual form, and constructed with a flat tang, B. The tip of the tang is divided, so as to give an incline

upon the inside to each of the divisions. The tang is inserted into the handle C in the usual manner, and the two divisions *a b* of the tang, striking the solid wood at the bottom of the cavity formed to receive the tang, will be turned to the right and left, in consequence of the said incline, thus expanding the inner end of the tang and making a connection between the tang and wood, so that it cannot be withdrawn therefrom.

It will be understood that the hole in the handle must be bored to a less depth than the length of the tang, in order that the end of the tang may meet an obstruction, to turn it to one side, as before described.

Instead of dividing the tang, it may be inclined upon one side, as seen in Fig. 3, and by that incline the point will be turned into the wood, as before described.

I do not claim, broadly, the shaping the end of an article to be driven into wood, so that it may turn out of its straight or entering line, as such, I am aware, is not new; but I am not aware of a tanged implement having been before made so that by the peculiar shape of the tang it would be bent out of its course by being driven into the handle.

I claim—

In implements provided with tangs by which to attach wood handles to said implements, the tang constructed with an inclined edge, the handle bored to a less depth than the length of the tang, forming an obstruction, whereby the tip of the tang will be turned out of line with the wood of the handle, substantially as described.

DAVID STEELE.

Witnesses:

J. H. SHUMWAY,  
H. A. KITSON.