

J. C. Hofer,

Crozing Staves,

No 78,740,

Patented June 9, 1868.

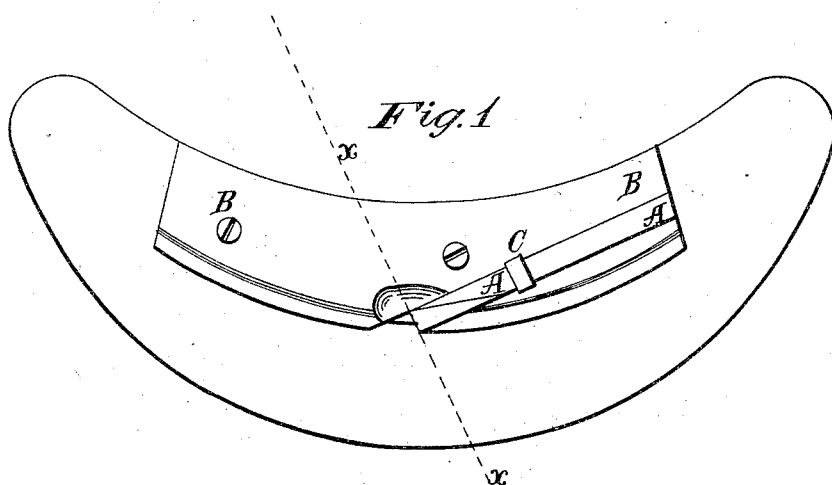


Fig. 2

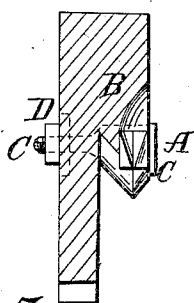


Fig. 3

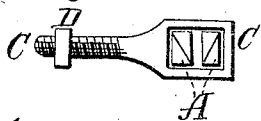
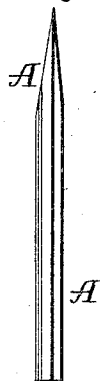


Fig. 4



Witnesses:

H. C. Aschmutter
Wm A. Morgan

Inventor:

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United States Patent Office.

JOHN C. HOFER, OF BELL AIR, OHIO.

Letters Patent No. 78,740, dated June 9, 1868.

IMPROVEMENT IN COOPERS' CROZE.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN C. HOFER, of Bell Air, in the county of Belmont, and State of Ohio, have invented a new and useful Improvement in Coopers' Crozes; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

Figure 1 is an under side view of my improved croze.

Figure 2 is a detail sectional view of the same, taken through the line *x x*, fig. 1.

Figure 3 is a detail view of the knives or bits and clamping-bolt.

Figure 4 is a detail view of the knives or bits.

Similar letters of reference indicate corresponding parts.

My invention has for its object to improve the construction of crozes, designed especially for slack work, such as flour, apple, sugar, cracker, and salt-barrels, nail-kegs, and other cooperage of similar character; and it consists in the construction of the bits or cutters, and in the manner in which they are secured to the guide.

A are the bits, which are made in two parts, the shanks of which are rectangular in form. The forward ends of the parts of the bit are bevelled off upon their alternate corners, so as to form a diagonal cutting-edge, and so that when the said parts are placed side by side, the lower or inner corners of the cutting-edges may meet each other, forming a V-shaped cutting-edge, as shown in figs. 2 and 3. This construction enables the bits or knives to be conveniently ground upon both sides, so that they may be always kept sharp, so that should the edge of one of the parts crumble or break, it will not be necessary to grind both parts.

The parts of the bit A are secured to each other and to the guide B by a bolt, C, having a slot in its outer end, of such a size as to freely receive the two parts of the bit. The bolt C passes through the guide B, and has a screw-thread cut upon its forward end, upon which fits the nut D, so that by turning up the said nut, the said bit A may be clamped in the groove in the guide B, so as to hold it securely in place. This manner of attachment enables the bits to be placed nearer the edge of the guide B, so as to bring the cutting-edges against the staves in the most favorable cutting-position, while at the same time there is no danger of splitting the said guide B.

It should be observed that by grinding off the corners of the bit A, next to the guide, or, in other words, by having the outside corners the longest, the bit may be made to cut a deep and narrow croze, similar to a regular tight-barrel croze.

I claim as new, and desire to secure by Letters Patent—

The bit A, formed in two parts, having the alternate corners of their forward ends bevelled or ground off, said parts secured to each other and to the guide B by the slotted clamping-bolt C, as herein described, for the purpose specified.

JOHN C. HOFER.

Witnesses:

T. A. PORTENFIELD,

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