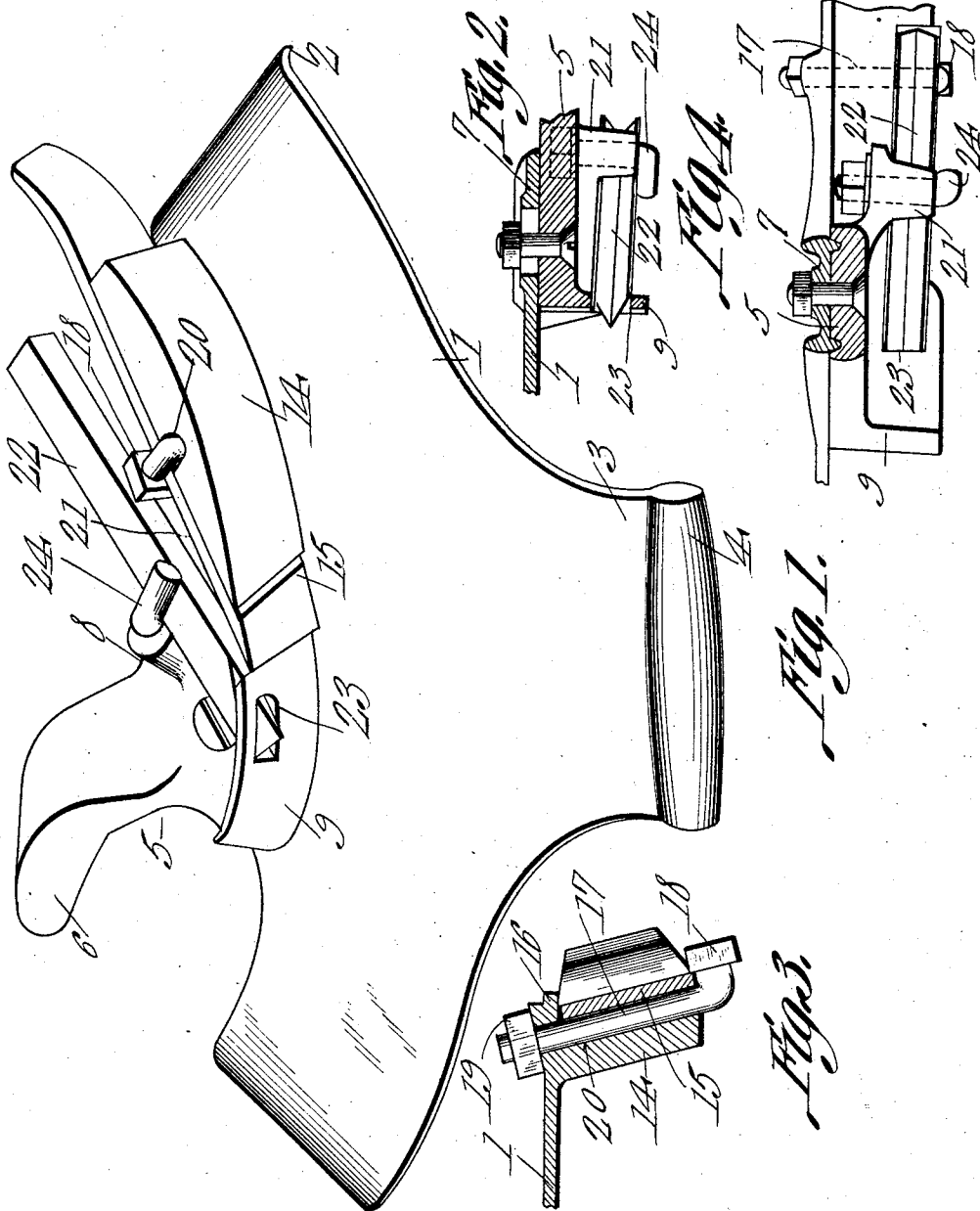


C. F. CLOSE.
CHAMFERING HOWEL.
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1,063,120.

Patented May 27, 1913.



Witnesses

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CHARLES F. CLOSE, OF BARNARD, NEW YORK.

CHAMFERING-HOWEL.

1,063,120.

Specification of Letters Patent.

Patented May 27, 1913.

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To all whom it may concern:

Be it known that I, CHARLES F. CLOSE, a citizen of the United States, residing at Barnard, in the county of Monroe and State of New York, have invented a new and useful Chamfering-Howel, of which the following is a specification.

This invention relates to chamfering howels of that type used by coopers in shaping the inner surfaces of barrel ends and its object is to provide a simple and compact device of this character which can be easily manipulated, and which is so shaped as to ride easily over the ends of the barrel staves and without danger of becoming caught thereby.

Another object is to provide a howel having novel means for attaching the cutting blade in proper position, there being an adjustable gage cooperating with the blade and whereby the size of the cut produced can be readily regulated.

With these and other objects in view the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claims.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings:—Figure 1 is a perspective view of the chamfering howel. Fig. 2 is a transverse section through a portion thereof. Fig. 3 is an enlarged transverse section through the chamfering blade and the fastening device used in connection therewith. Fig. 4 is a transverse section through the tongue and showing the croze and adjacent parts in elevation.

Referring to the figures by characters of reference 1 designates the body of the howel, the same being preferably in the form of a plate having upturned terminals 2, constituting means for guiding the plate over uneven surfaces during the actuation of the tool. A wing 3 extends laterally from the body 1 at a point between the upturned terminals 2, and has an enlarged edge portion 4, which may be used as a grip or handle. An extension 7 extends from the opposite side of the body and is adjustably engaged by a slide 8 from which extends a tongue 5 preferably hooked at its outer end as shown at 6. Said slide 8 constitutes the base of a gage plate 9, which bears upon and is adjustable on the body 1. This gage plate 9 is preferably slightly inclined relative to

the body 1, and both it and the slide 8 are designed to be held in any predetermined position by means of a suitable clamping device extending into the base 8.

Formed upon the body 1 between the tongue 5 and one of the upturned terminals 2 of said body is a guide block 14 inclined relative to the body and having one face thereof curved to correspond substantially with the curvature of a barrel end, the opposite face of the block being straight from end to end and inclined to constitute a seat or bearing for the cutting blade 15. One edge of this blade rests upon a bearing ledge 16, and the blade is firmly secured upon said ledge and upon the block 14 by means of a fastening bolt 17, the head 18 of which engages and straddles one longitudinal edge of the blade, as clearly indicated in Fig. 3, while the other end of the bolt which is screw threaded, extends through the body 1 and is engaged by a nut or other suitable adjusting device 19 whereby the blade may be firmly clamped in place. A groove or recess 20 is formed in the flat face of the block 14 and the bolt 17 is seated therein.

The device is designed to be used in the same manner as the ordinary chamfering howel, but is advantageous, because, by adjusting the slide 8 longitudinally within the recess of extension 7, the gage plate 9 can be brought close to or shifted away from the cutting edge of blade 15, and the depth of the cut produced by said blade can thus be regulated. Importance is also attached to the particular means employed for fastening the blade upon the body 1 and also to the provision of the upturned terminal portions 2 which operate to guide the body over uneven edges or surfaces such as are produced when the staves are of slightly different lengths.

The entire device is formed of very few parts and can be manufactured at slight cost. Especial importance is attached to the fact that the body 1 and the block 14 are formed in a single piece.

If desired, a croze may be used in connection with the blade 15, the slide 8, under these conditions, supporting the croze 22 which bears against a boss 21 and the working end of which extends through a slot 23 in the gage plate 9. The croze 22 is held in place in the same manner as is the chamfering blade 15, the outer edge of the croze being engaged by the offset end of a bolt

24 extending through and secured within the slide 8. It is to be understood of course that the chamfering blade can be used with or without the croze as desired.

5 What is claimed is:—

1. In a chamfering howel, a body, a guide block, a gage spaced from the block and adjustable on the body, a crozing tool adjustably mounted on the gage and movable
10 therewith, and a chamfering tool secured to the block and extending between the block and gage.

2. A tool for chamfering and crozing barrels and the like, consisting of a body, a
15 guide block integral therewith and outstanding therefrom, said block having a curved work engaging face, a gage adjustably mounted on the body and spaced from

the block, said gage having a curved work engaging face movable into and out of the
20 arc of the working face of the block, a grip integral with the body, a second grip integral with the gage, means upon the body and block for fastening a chamfering tool
25 thereto, and means upon the gage for adjustably clamping a crozing tool thereupon, there being an opening in the gage for the reception of the cutting end of the crozing tool.

In testimony that I claim the foregoing as
30 my own, I have hereto affixed my signature in the presence of two witnesses.

CHARLES F. CLOSE.

Witnesses:

W. E. OTTS,

EDMUND J. FINCH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."