

J. PENNIE, Jr.
Crozing Staves.

No. 168,410.

Patented Oct. 5, 1875.

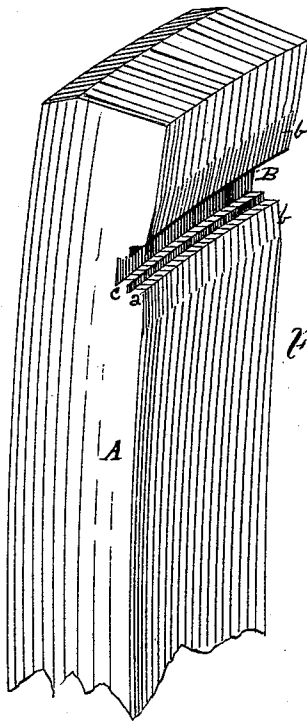


Fig. 1.

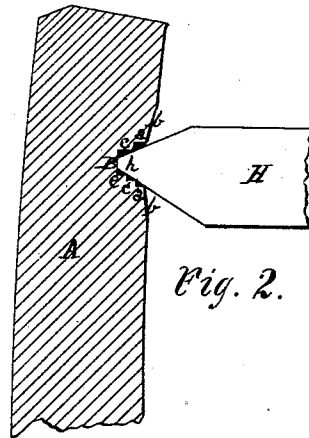


Fig. 2.

Witnesses. { Henry B. Biddle.
Lewis Conner

John Pennie Jr.
By his Attorney
Alex. Delkisk
Inventor.

UNITED STATES PATENT OFFICE.

JOHN PENNIE, JR., OF ALBANY, NEW YORK.

IMPROVEMENT IN CROZING STAVES.

Specification forming part of Letters Patent No. **168,410**, dated October 5, 1875; application filed March 2, 1875.

To all whom it may concern:

Be it known that I, JOHN PENNIE, JR., of the city and county of Albany, State of New York, have invented certain new and useful Improvements in Crozing Staves; and I do hereby declare that the following is a description thereof, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a perspective view of a stave of a barrel, illustrating the improvements in this invention. Fig. 2 is a sectional view of the stave, showing the head in place in the croze.

My invention relates to that part of the barrel known to the trade as the croze-channel, which is to hold the head in place in the barrel; and consists in a croze-channel made with two or more series of grooves, in which the succeeding groove or grooves will each be wider than the first or preceding groove, so that the width of the said channel at its mouth or at the inner surface of staves may be wider than its bottom, and its sides may be made inclined with one or more steps, channels, or grooves, to present a corner or edge to engage with the usual beveled edge of the head when inserted, and forced in the channel by the hoops binding the staves of the barrel against the edges of the head entering the said channel.

The object of this invention is to give to the croze-channel a greater width at its mouth, so as to be capable of receiving a thicker edge of the head, and also to present to the said edge on each of its bevels two or more corners, all of which may coact with the bevels of the said edge to render the joint tighter and stronger than heretofore made.

To enable others skilled in the art to make and use my invention, I will proceed to describe it in reference to the drawings and letters of reference marked thereon, the same letters indicating like or similar parts.

In the drawings, A represents a stave of a barrel, and one of the several usually employed to form the body of the barrel, each of which is made in the usual form, and jointed together in the usual manner. B is the croze-channel, cut the same in the ends of the several staves back of the usual howel-track *b*. The said

croze-channel consists of two or more grooves or channels, *a c*, or *a, c*, and *e*, as shown, so as to form a double or triple channel, in which the channel *a* next to the howel will be wider than the one next succeeding channel *c*, and the channel *c* will, if more than two are employed, be wider than the next succeeding channel *e*, as shown in the several figures, that the mouth of the channel may be made considerably wider than bottom when finished, and consist in a step form of channel formed by double or triple grooves, capable of presenting to the edge *h* of the head H several corners, each of which will be capable of indenting into the wood of the edge of the said head, and be in their turn somewhat compressed by the head, so as to form a tight joint when forced together by the hoops.

It is to be understood that I do not confine myself to any particular number, more than two, of grooves or channels made successively to form the said improved croze-channel.

The advantages intended to be secured by this improvement in the invention are these: The bevel of the head may be made more obtuse, so as to leave more material at the edge of the head for the strengthening of the same against any pressure that may be exerted from either side. The several steps of the side or sides of the channel or groove permit the workman, who only works by the eye and not by rule or gage, to make a tighter joint of the head with the stave when the barrel is completed.

The said groove may be made deeper in the staves, so as to receive the edge to a greater depth by reason of the wider mouth of the said groove, and operates at the same time with a thicker edge for increasing the strength of the joint.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

In a barrel, the croze-channel B, having two or more steps, channels, or grooves, *a c*, or *a, c*, and *e*, cut in each of its sides, substantially as and for the purpose set forth.

JOHN PENNIE, JR.

Witnesses:

HENRY BINLEY,
JNO. SIMPSON.