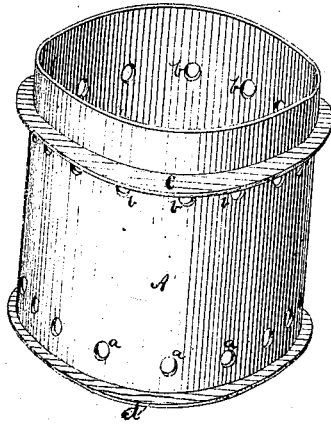


J. D. Copenhagen,

Charring Barrel Heads.

No. 107339.

Patented Sept. 13/87.



Witnesses.
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JACOB D. COPENHAVER, OF MARTINSBURG, WEST VIRGINIA.

Letters Patent No. 107,339, dated September 13, 1870.

IMPROVEMENT IN CHARRING BARREL-HEADS.

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, JACOB D. COPENHAVER, of Martinsburg, in the county of Berkeley and State of West Virginia, have invented a new and useful Improvement in the Process of Charring Barrels or Cask-Heads; and I do hereby declare that the following is a full, clear, and exact description thereof, sufficient to enable others skilled in the art to which my invention appertains to make, construct, and use the same, reference being had to the accompanying drawing, making part of this specification.

In the drawing—

Figure 1 is a perspective view of my device.

This invention relates to a device for charring the heads of barrels or casks, &c., and consists of the employment of a flame within a cresset or tube, upon the top of which is placed the head of the barrel or cask desired to be charred.

It also consists of the peculiar construction of the cresset or tube within which the flame is produced, so constructed as to afford draught for the fire, support for the barrel or cask-head, and also to allow free escape for the flame and smoke, when said head is placed upon the cresset or tube.

Furthermore, it has for its object to prevent the burning of that portion of the barrel or cask-head which enters where the croze is formed by means of a flange formed at or near the top of the cresset or tube.

In the drawing—

A may represent the body of the cresset or tube, which, in the present instance, is made in the form of a cylinder, and may be constructed of sheet metal, cast or wrought-iron, or any other suitable material, and of any desired form best adapted for the purpose, and, when not cast in one piece, the ends overlap, and are secured together by means of bolts, rivets, or other attachments.

At or near the bottom of the cresset or tube A are formed a series of openings, *a a a*, which afford a complete draught for the fire kindled within.

Near the top is formed, or otherwise secured, a projecting metallic flange, C, extending entirely around the periphery of said cresset or tube A, which serves to prevent the flame within the cresset or tube burning or injuring the outer edges, or that portion which enters the crozes of the barrel.

Immediately below the projecting flange C is formed a series of vent-holes, *b b b*, which allows the flame and smoke produced within the cresset, where heads are being charred, to descend and escape through said openings.

The flame is carried outwardly through openings *b b b*, and prevented from injuring the outer portion of the head, which enters the croze of the barrel, by means of the projecting flange above described. A se-

rious objection is thus overcome, and a result produced not heretofore accomplished.

The cresset or tube may be formed with a projecting base, as at *d*, so as to prevent it upsetting, in which case it rests directly upon the hearth or other suitable platform; or it may be provided with feet, and raised several inches from the hearth or platform, so as to leave an open space, in order to admit the combustible material through the said opening. But I prefer that it rest directly on the hearth or platform, and the combustible material thrown in at the top.

The operation is as follows:

The head being ready for insertion into the croze of the barrel or cask, allowing, say, about one-sixteenth of an inch for shrinkage, it is placed upon the cresset or tube, a fire is made therein, and in the space of a few minutes the head will be perfectly charred, and ready for insertion while in a hot state, and, on becoming cold, it will, from expansion, fit tight, and prevent all leakage.

For the purpose of handling the head, when heated, a small spike or other device is inserted into it previous to the charring, so as to aid the operator in arranging it in its proper place in the barrel or cask.

It will thus be seen that I have produced a simple and cheap device, readily constructed by any one, and, at the same time, I have overcome the difficulty now experienced in charring the heads of barrels, &c., last inserted, said difficulty being this, that when the aforesaid heads are charred by the old process, that portion of the head which enters the croze is always more or less burned, and when it is placed in the barrel or cask, there is a leakage at the joint. Thus the barrel or cask is rendered imperfect.

Having thus described my invention,

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

1. The method of charring the heads of barrels or casks, substantially as described.

2. The cresset or tube A, provided with a projecting flange, C, on its periphery, and a series of draught-holes, *a a a*, and vent-holes *b b b*, substantially as described.

3. The cresset or tube A, provided with a base, *d*, openings *a a a* and *b b b*, and projecting flange C, substantially as described, for the purpose herein set forth.

To the above I have signed my name this 6th day of June, 1870.

JACOB D. COPENHAVER.

Witnesses:

L. S. LUCE,

E. G. ALBURTIS.