

H. OGBORN.

Staples for Securing the Ends of Barrel-Hoops.

No. 140,430.

Patented July 1, 1873.

Fig. 1.

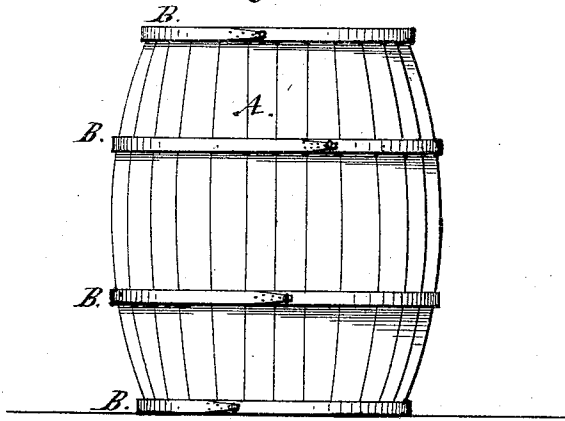


Fig. 2.

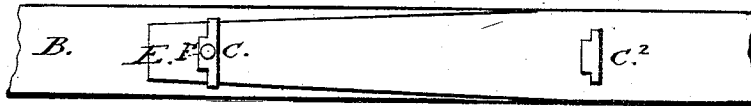


Fig. 3.

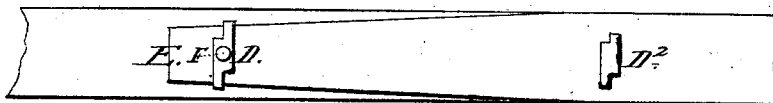


Fig. 4.

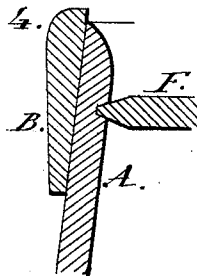


Fig. 5.

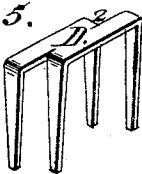
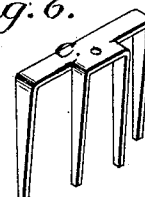


Fig. 6.



Attest;
Edw. W. Dunn
My commission

Inventor;
Harrison Ogborn

UNITED STATES PATENT OFFICE.

HARRISON OGBORN, OF RICHMOND, ASSIGNOR OF ONE-HALF HIS RIGHT
TO SAMUEL WATSON, OF INDIANAPOLIS, INDIANA.

IMPROVEMENT IN STAPLES FOR SECURING THE ENDS OF BARREL-HOOPS.

Specification forming part of Letters Patent No. **140,430**, dated July 1, 1873; application filed
June 20, 1873.

To all whom it may concern:

Be it known that I, HARRISON OGBORN, of Richmond, in the county of Wayne and State of Indiana, have invented new and useful Improvements in Staples for Securing the Ends of Barrel-Hoops, Baling Hay, and other purposes; and I do hereby declare the following to be a full, clear, and exact description thereof, sufficient to enable others skilled in the art to make and use the same, reference being had to the accompanying drawings making part of this specification.

Figure 1 is an elevation of a barrel on which my hoops are used. Fig. 4 is a view of a section of the head chine and hoop. Fig. 2 is a plan view of a portion of the hoop and attachments. Fig. 3 is a modification of the same. Fig. 6 is a view of the staple. Fig. 5 is a modification of the same.

The object of my invention is to construct a strong, cheap, and durable device for permanently uniting the ends of hoops together for barrels, baling hay, and other purposes, whether sawn, split, shaved, or otherwise made, and of whatever shape, size, length, or width; and consists in a new and improved staple for securing the ends of hoops for barrels and other purposes.

Figure 1 represents a barrel in which staves are used in the usual manner. B B are hoops, of which I usually use four on a barrel. They may be made of any width and thickness required. These hoops are generally sawed from the plank, with a bevel to fit the bilge of the barrel. The thickness of the plank from which they are sawed should be equal to the width of the hoop required. The corners of the hoop may be chamfered, if desired. The inner end of the hoop should be cut thin, but left full width, the slope running out some distance from the end, while the end forming the outer lap should be tapered, as shown in the drawing, but left nearly or quite full thickness to the end. The staple may be cut out of sheet metal and bent in the form shown.

To prepare the hoop for use, metal forms may be used, one for each size of hoop required, around which, either with or without steaming,

the hoops are bent, the thin end under and the taper end outside. The hoop being held in place, the staple is placed so that the outer prongs will embrace the taper end of the hoop, and is driven through the under lap of the hoop by a hammer or other tool or device, while the inside prongs of the staple pass directly through both the outer and inner ends of the hoop, when all the points are clinched on the inside, and the outer surface of the staple forced down even with the outside of the hoop. This staple has a hole through its middle part, through which a clinch-nail or rivet may be driven still more securely to lock and clamp all the parts together, thus preventing slipping, splitting, or starting up of the ends of the hoops, and holding all the parts together in the most perfect manner. Two or more staples may be used, or one staple used near the end, and a number of clinch-nails driven through both ends of the hoop. In case more than one staple is used, all of them, except the one nearest the end, should be driven so that all the points will pass through both ends of the hoop, as shown in the drawings, and be clinched on the inside.

These hoops may be applied to a barrel and driven on with great force without danger of breaking them, the hold on the barrel being more firm, tenacious, and effective as the hoop tightens uniformly over its bearing-surface. The end hoops should project slightly beyond the staves to protect them from breakage.

When a series of small hoops are used and driven on a barrel against each other one may receive all the strain, and break, while the others are loose.

Having thus described the nature, construction, and operation of my invention, what I claim therein as new and useful, and desire to secure by Letters Patent, is—

The staples constructed substantially as shown and described, for the purposes and uses indicated.

HARRISON OGBORN.

Witnesses:

EDW. W. DONN,
M. GARDNER.