H. OGBORN.

Barrel-Hoops.

No. 144,920. Patented Nov. 25, 1873.

Fig. 1.

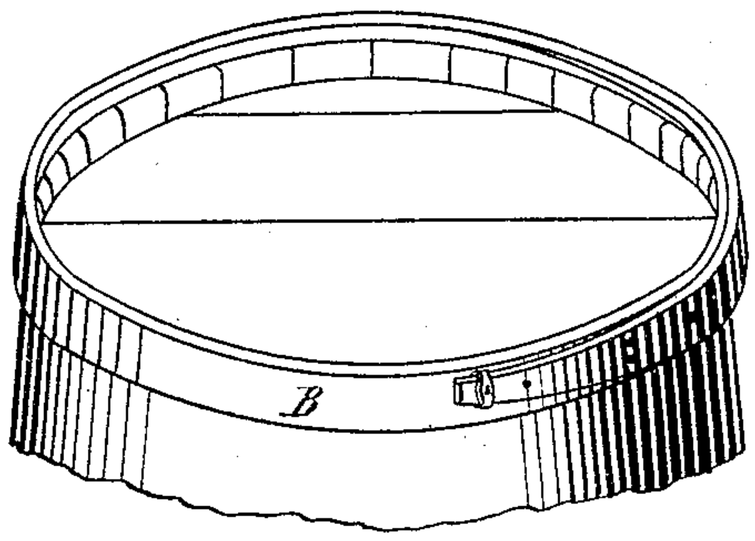


Fig. 2.

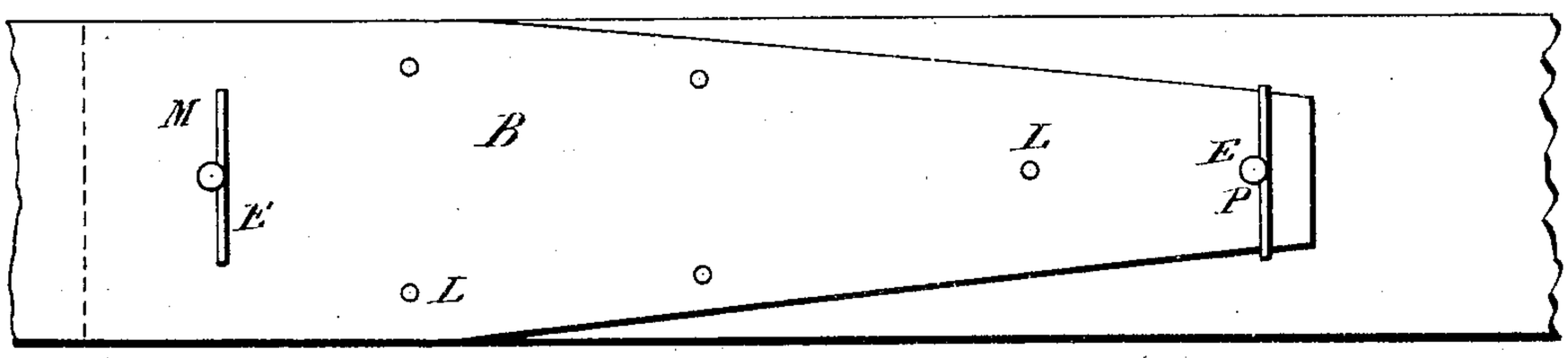


Fig. 3.

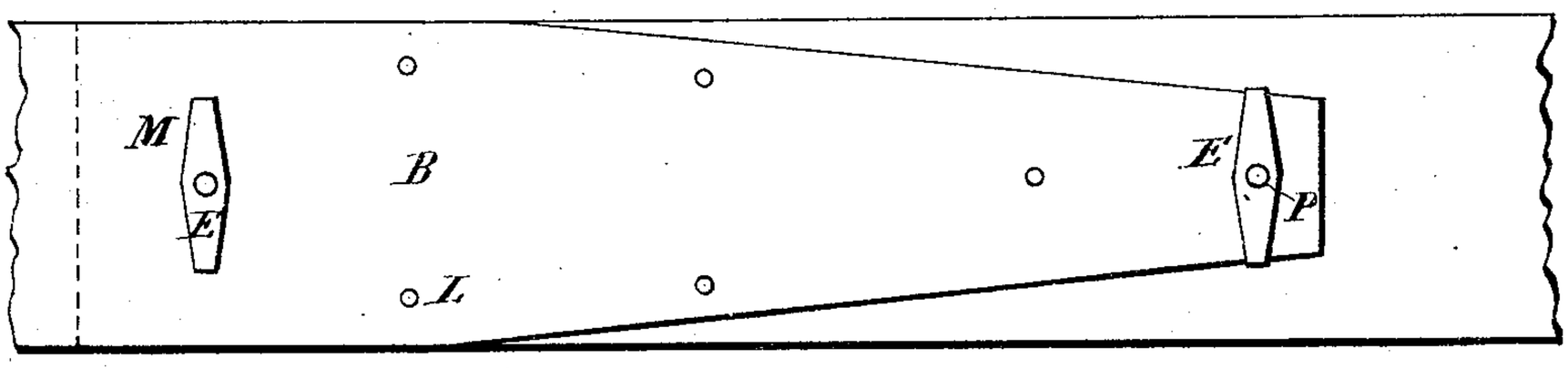


Fig. 4.

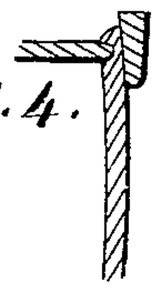


Fig. 6.

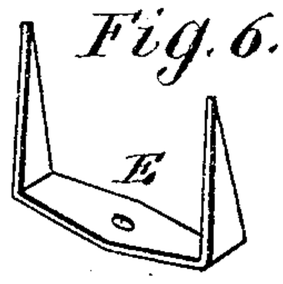
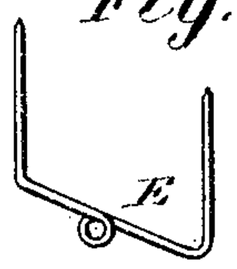


Fig. 5.



Witnesses
Edw. F. Brown
J. H. Keene

Inventor
Harrison Ogborn

UNITED STATES PATENT OFFICE.

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

IMPROVEMENT IN BARREL-HOOPS.

Specification forming part of Letters Patent No. **144,920**, dated November 25, 1873; application filed May 15, 1873.

To all whom it may concern:

Be it known that I, HARRISON OGBORN, of Richmond, Indiana, have invented new and useful Improvements in Barrel-Hoops, and for 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 a perspective view of a portion of a barrel with my improved hoop attached. Fig. 4 is a sectional view of the head, chime, and hoop. Figs. 3 and 6 are detached views of my improved hoop and staple cast or cut out of plate metal. Figs. 2 and 5 are views of the hoop and staple when the latter is made of wire or other continuous pieces of metal, and the eye formed by bending.

The object of my invention is to construct a strong, cheap, and durable device or combination of devices, whereby the ends of hoops for barrels and other purposes may be securely and permanently fastened or attached together, whether sawed, split, shaved, or otherwise made, and of whatever shape, size, length, or width; and consists in a new and improved staple, and combination of staples and nails, with a hoop for barrels and other purposes.

Fig. 1 represents part of a barrel, which is made of staves in the usual manner. B B are hoops, of which I usually employ four on a barrel. These hoops are usually sawed from the plank, with a bevel to fit the bilge of the barrel. The thickness of the plank should be equal to the width of hoop required. The corners of the hoops may be beveled or 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 drawings, but left nearly or quite full thickness to the end. To prepare the hoops for use, metal forms should 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 taper end outside. The hoop being held in place, the staple is placed so as to embrace the taper end of the hoop, and driven, by any convenient device, tool, or hammer, into and through the inner portion of the hoop, and its ends clinched down upon the iron form. The rivet or clinch nail P is then driven through the staple and both ends of the hoop, and clinched down in the same manner, which sinks the staple and nail-head into the wood, and securely fastens the nail, staple, and two ends of the hoop together, and prevents slipping, splitting, or starting up of the ends of the hoop. If it is desired to use two staples to each lap it may be readily done by driving both prongs of the staple and clinch-nail through both ends of the hoop, as shown at M M, and clinching them on the former, and thus still more securely fasten the ends of the hoop together.

These hoops may be applied to the barrel and driven on with great force without danger of breaking. The hold on the barrel is more tenacious and effective, as the hoop tightens uniformly over the entire bearing-surface alike. Where a series of small hoops are used and driven against each other one may receive all the strain, and break while the others are loose. It is also found advantageous in rolling and handling, relieving the staves of the strain and breakage of the chime.

The half-round hoop has become scarce and dear in price, while my hoop may be produced cheaply and in the greatest abundance, by sawing or otherwise, from various kinds of wood, but, preferably, from elm, ash, linden, or oak.

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—

1. Staples E E, constructed with a hole in their central or middle part, for the purposes herein specified.

2. The staples E E, in combination with nail P, when used to unite the ends of hoop B, in the manner substantially as shown and described.

Witnesses: HARRISON OGBORN.
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