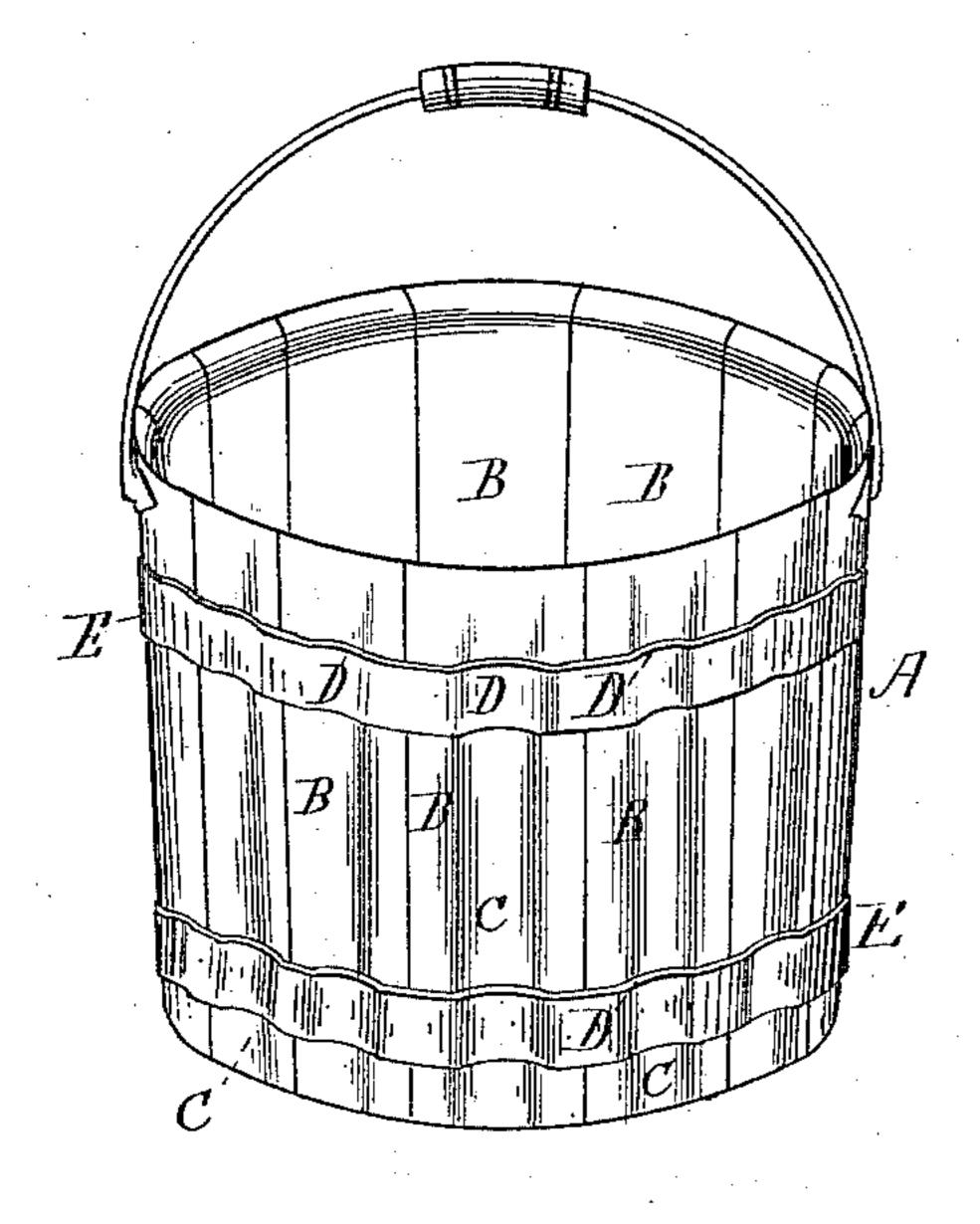
## I. L. G. RICE.

## BARREL STAVE AND HOOP.

No. 330,153.

Patented Nov. 10, 1885.



Fig\_ 1\_

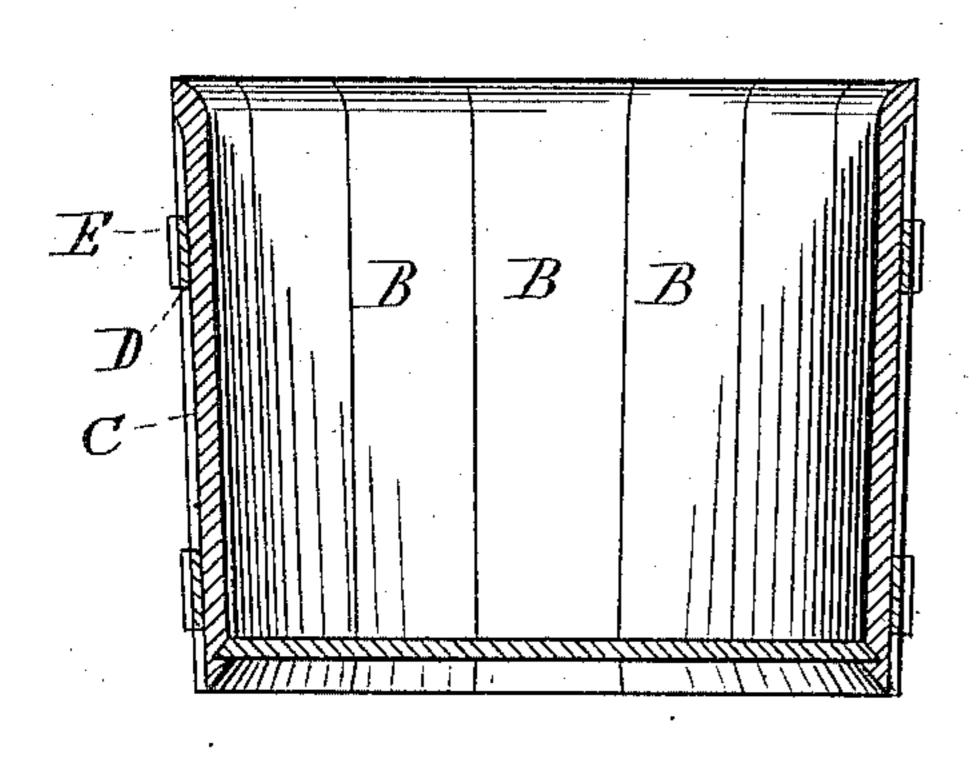
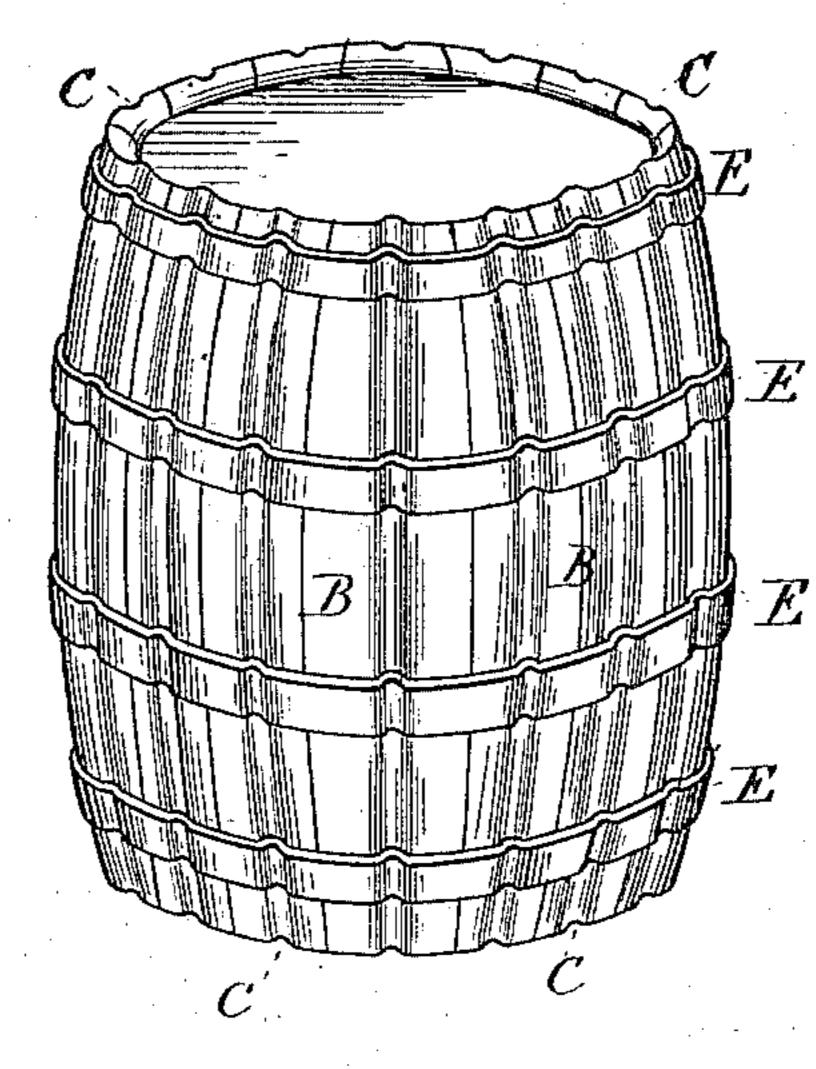


Fig. 5.



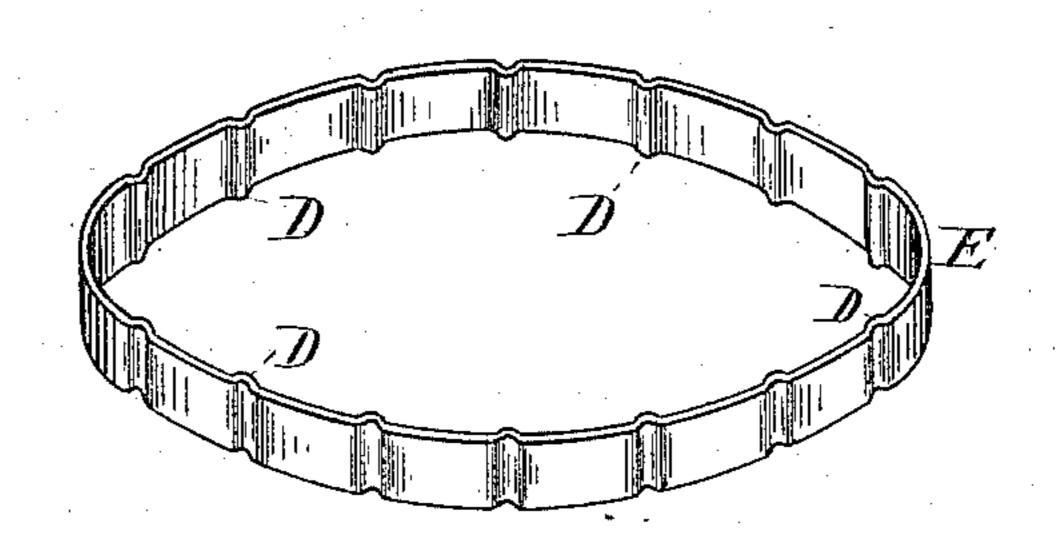


Fig. 4.

WITNESSES.
Frankle. Parker
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INVENTUR. Israel L. G. Rice.

## United States Patent Office.

ISRAEL L. G. RICE, OF BOSTON, MASSACHUSETTS.

## BARREL STAVE AND HOOP.

SPECIFICATION forming part of Letters Patent No. 330,153, dated November 10, 1885.

Application filed June 11, 1885. Serial No. 168,364. (No model.)

To all whom it may concern:

Be it known that I, ISRAEL L. G. RICE, a citizen of the United States, residing at Boston, (Brookline,) in the county of Norfolk and State of Massachusetts, have invented a new and useful Stave and Method of Fastening the Same, of which the following is a specification.

My invention relates to improvements in staves for pails, barrels, tubs, &c., made in such a way that when grouped together in position for the hoops to be put on them there will be grooves in which will enter the corrugations of an elastic metallic hoop. The method of fastening these staves is by means of elastic corrugated metallic hoops made of spring-steel, the hoops being forced around the staves, the corrugations or projections on the hoops entering the grooves in the staves, so that a smooth outside surface is given to the pail-hoop free from projections.

The accompanying drawings illustrate the invention. Figure 1 shows a pail whose staves have grooves for the corrugations of the hoop. Fig. 2 is a barrel bound with an elastic hoop. 25 Fig. 3 is a vertical section of a pail, showing the grooved staves and elastic hoop. Fig. 4

is an elastic hoop.

The staves B B have grooves C C to receive the corrugations D D of the hoop, thus allowing the uncorrugated or the outwardly corru-30 gated parts of the hoop to press firmly against the ungrooved portions of the staves.

An additional advantage of the staves being grooved is that a much neater and more desirable pail can be made than there can be if 35 the corrugations project like teeth beyond the smooth parts of the pail-hoop. These corrugations in the hoop cause it to be elastic, and thus prevent the staves from falling apart when they become dry and shrunken.

What I claim as my invention, and desire to

secure by Letters Patent, is-

The combination, with a barrel, tub, or pail having grooved staves, of an elastic hoop having corrugations resting in the grooves of the 45 staves, substantially as and for the purpose set forth.

ISRAEL L. G. RICE.

Witnesses:

FRANK G. PARKER, CHAS. SPAULDING.