

(No Model.)

J. LEACH.

HOOP FOR COOPER'S WARE.

No. 376,530.

Patented Jan. 17, 1888.

Fig. 1.

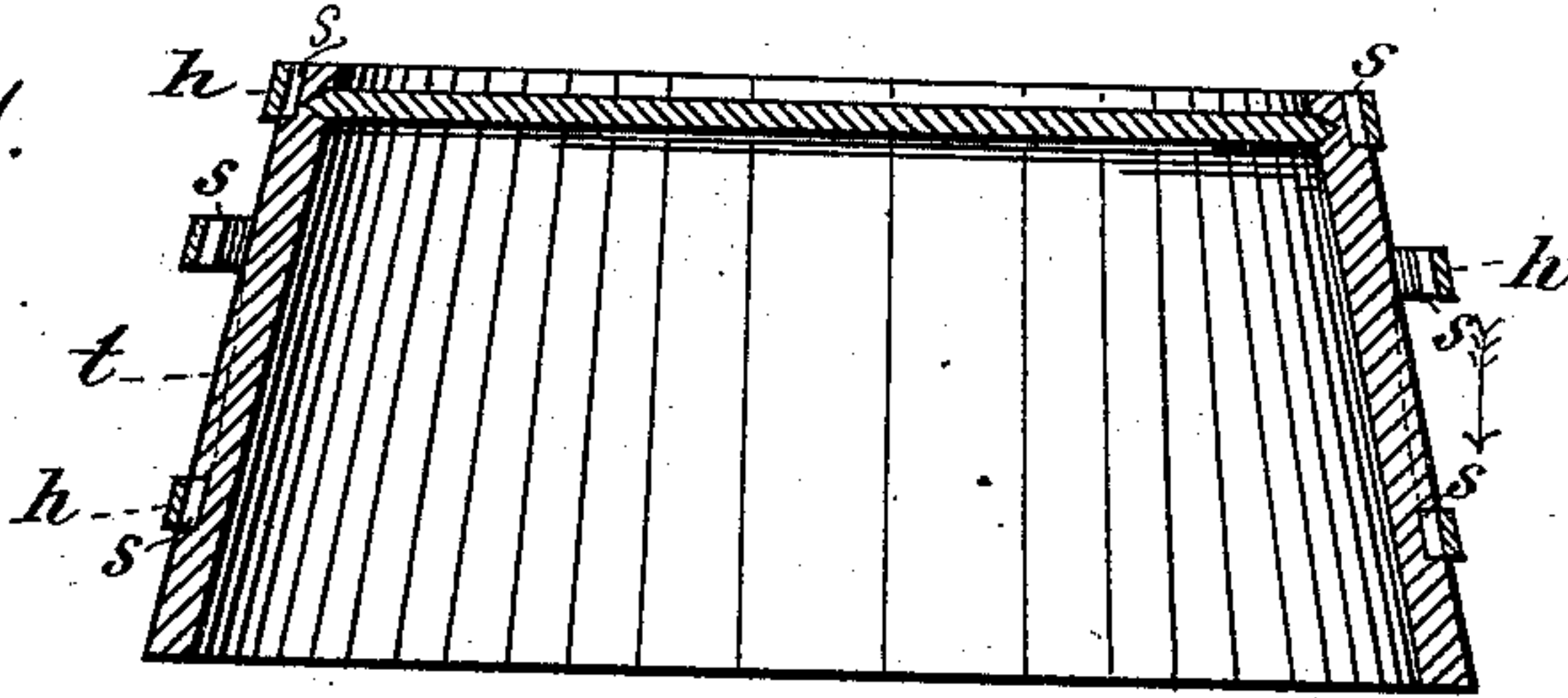


Fig. 2.

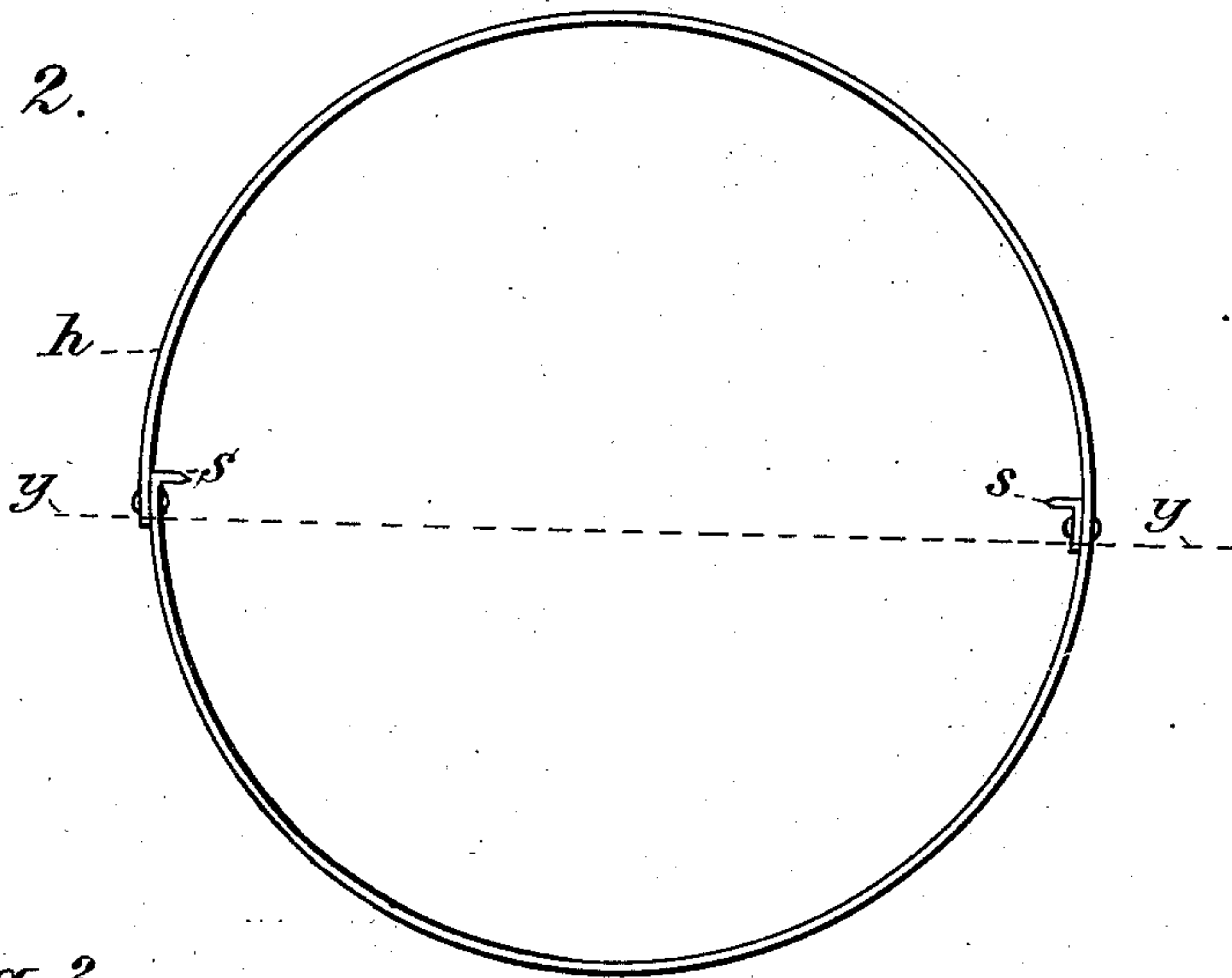
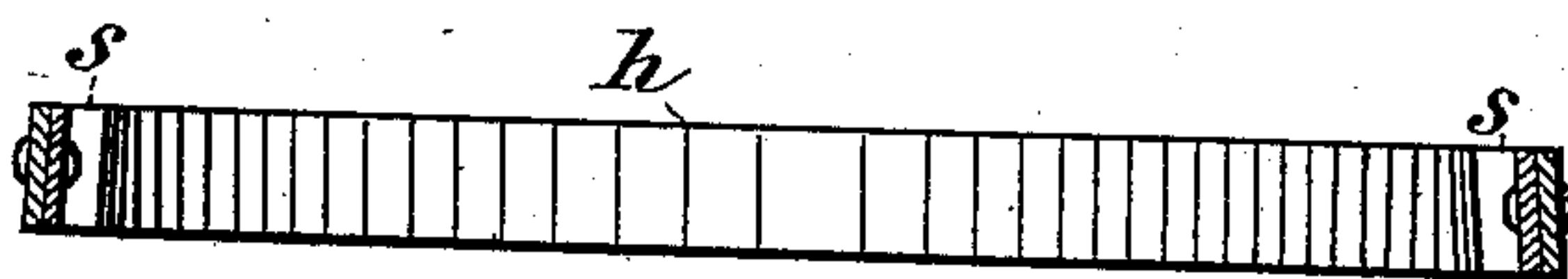


Fig. 3.



WITNESSES.

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JOSEPH LEACH, OF INDIANAPOLIS, ASSIGNOR OF ONE-HALF TO CALVIN G. UDELL, OF NORTH INDIANAPOLIS, INDIANA.

HOOP FOR COOPERS' WARE.

SPECIFICATION forming part of Letters Patent No. 376,530, dated January 17, 1888.

Application filed September 12, 1887. Serial No. 249,412. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH LEACH, of Indianapolis, county of Marion, and State of Indiana, have invented certain new and useful
5 Improvements in Hoops for Coopers' Ware; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which like letters refer to like parts.

10 My invention relates to the construction of metal hoops for coopers' ware, and will be understood from the following description.

In the drawings, Figure 1 represents a sectional view of a tub upon which my hoops are
15 placed. Fig. 2 is an edge view of the hoop itself. Fig. 3 is a section on the line *yy*, Fig. 2.

In detail, *t* is the tub, made in the usual manner. *h* is the hoop, which may be made
20 of either one or two pieces of metal, and is provided with one or more spurs, *s*, on the inside, having knife-edges, as shown in Fig. 2. One of these spurs may be conveniently made by upsetting the end of the hoop beyond the
25 rivet, while the other, if the hoop is made of one piece, may be fastened on by an extra rivet, as shown in Fig. 2. The hoop is preferably made of ordinary iron, and if used upon a flaring vessel will flare correspondingly.

30 The object of this improvement is to prevent the hoop from falling off the vessel when the latter shrinks, which is the invariable result when the ordinary hoop is used.

I form the hoop with the spurs, as before described, these spurs being bent at right angles to the inner face of the hoop, and they
35 can be driven into a stave and will hold the hoop upon the vessel. Two of these spurs are sufficient, and in some cases one is enough; but two are generally preferable. When the

hoop is formed ready to put on, it is placed in
40 position for driving it on the vessel, letting it go as near to where it will bind all of the staves as the spurs will allow. Then with any sharp instrument an opening is made in the stave
45 where the spur comes in contact with it, so that the edge of the spur will enter the opening thus made without driving, and the hoop can be driven to where it must remain by an
50 ordinary instrument. The spurs will cut their own grooves up the wood as the hoop is driven to its proper place, and the wood will close up behind the spur without showing any indentation or marks, as the spurs are made
55 with a knife-edge.

I am aware that hoops provided with angular spurs or points struck out of the body of
60 the hoop have been heretofore made, and that auxiliary devices for spurs, one part encompassing the hoop, have been also used, and do not claim the same as my invention.

What I claim as my invention, and desire to secure by Letters Patent, is the following:

1. A metal hoop for barrels or casks, formed of a single piece of metal, the end of the inner lap upset to form a spur for engaging with the
65 sides of the tub and preventing the hoop from falling off, substantially as described.

2. The hoop *h*, formed of a single piece of metal, the end of the inner lap upset to form a spur, *s*, and an additional spur bolted to the inside of the hoop at a point opposite such lapped end, substantially as shown and described.

In witness whereof I have hereunto set my hand this 6th day of September, 1887.

JOSEPH LEACH.

Witnesses:

C. P. JACOBS,
E. B. GRIFFITH.