(No Model.)

C. W. BARNES.

CASK HOOP FASTENING.

No. 321,938.

Patented July 14, 1885.

Fig. 1

A a-A

Fig. 2

a - A

WITNESSES: Orlandot Peck Wir Blackburn.

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By P. H. Gunckel
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## UNITED STATES PATENT OFFICE

CHARLES W. BARNES, OF CROOKSTON, MINNESOTA.

## CASK-HOOP FASTENING.

DPECIFICATION forming part of Letters Patent No. 321,938, dated July 14, 1885.

Application filed November 13, 1884. (No model.)

To all whom it may concern:

Be it known that I, Charles W. Barnes, a citizen of the United States, residing at Crookston, in the county of Polk and State of Minnesota, have invented a certain new and useful Improvement in Cask-Hoop Fastenings, of which the following is a specification.

My invention relates to hoops provided with prongs or tongues made integrally therewith, to and which penetrate the staves to prevent the

slipping of the hoops.

In the drawings, Figure 1 represents the inside of a portion of a hoop with the prong, and

Fig. 2 an edge view of the same.

the fastener or prong, formed on the inside of the hoop by cutting through the metal on two intersecting lines and bending the freed portion on a line at right angles to the edges of the hoop, so that the prong will project inwardly at right angles to the surface of the hoop and its edges. a' is the triangular opening in the hoop, made by turning out the prong.

The prong may be of any suitably-angular shape, but it is preferably in the form of an obtuse angled triangle, as shown in the drawings, as in that form a sharper prong-point is

obtained.

The prong may be flattened and sharpened,

30 if desired.

Several prongs should be provided for each hoop, and should point back ward from the di-

rection the hoops are driven on. As the hoops are driven on and tightened the prongs penetrate the staves under the hoops and prevent 35

slipping back.

I am aware that hoop-fasteners formed integrally with the hoop, and having a longitudinal portion inclined outwardly, and an inwardly-projecting arm adapted to be driven into 40 the stave have been used; and I am also aware that semicircular cuts in the hoop adapted to be indented by a punch have been known; and I am further aware that pointed bosses, rectangular dents, and longitudinal ridges at 45 the under side of hoops were known prior to my invention. I therefore do not claim, broadly, the invention of fasteners formed integrally with the hoop; but I am not aware that fasteners of the form and adapted to operate 50 in the manner hereinbefore set forth have ever been known or used; and

I therefore claim as my invention and de-

sire to secure by Letters Patent—

A metal hoop provided with triangular fast- 55 eners formed of portions of the hoop cut on intersecting lines and bent at right angles to the edges and surface of the hoop, substantially as described.

CHARLES W. BARNES.

Witnesses:

FRITZ MULLOH, RICHARD B. REILAY.