W. GOLDIE.

METALLIC HOOP.

APPLICATION FILED NOV. 9, 1907.

908,460. Patented Jan. 5, 1909.

FIG. 1

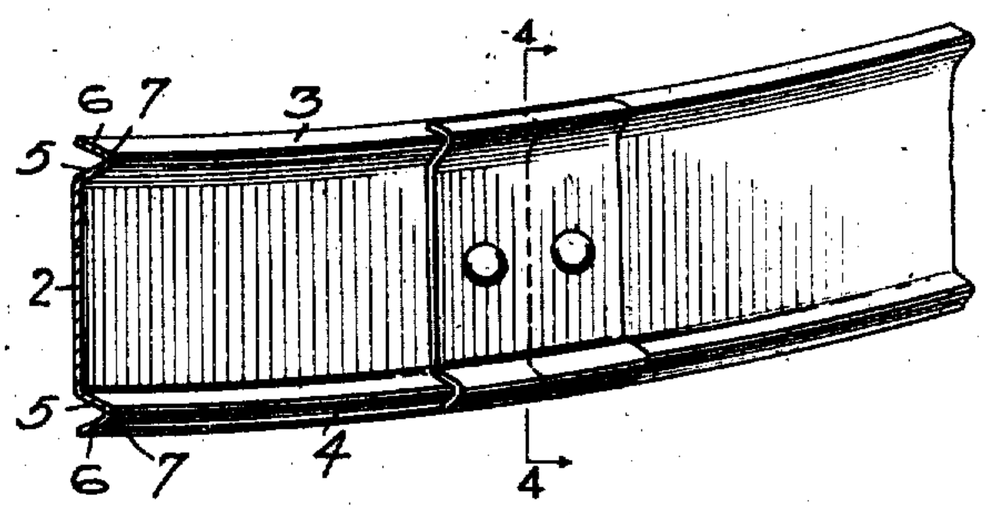


FIG. 4

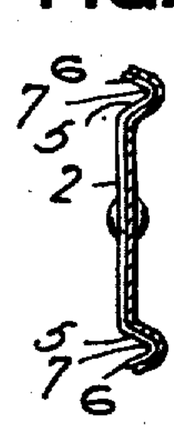


FIG. 2

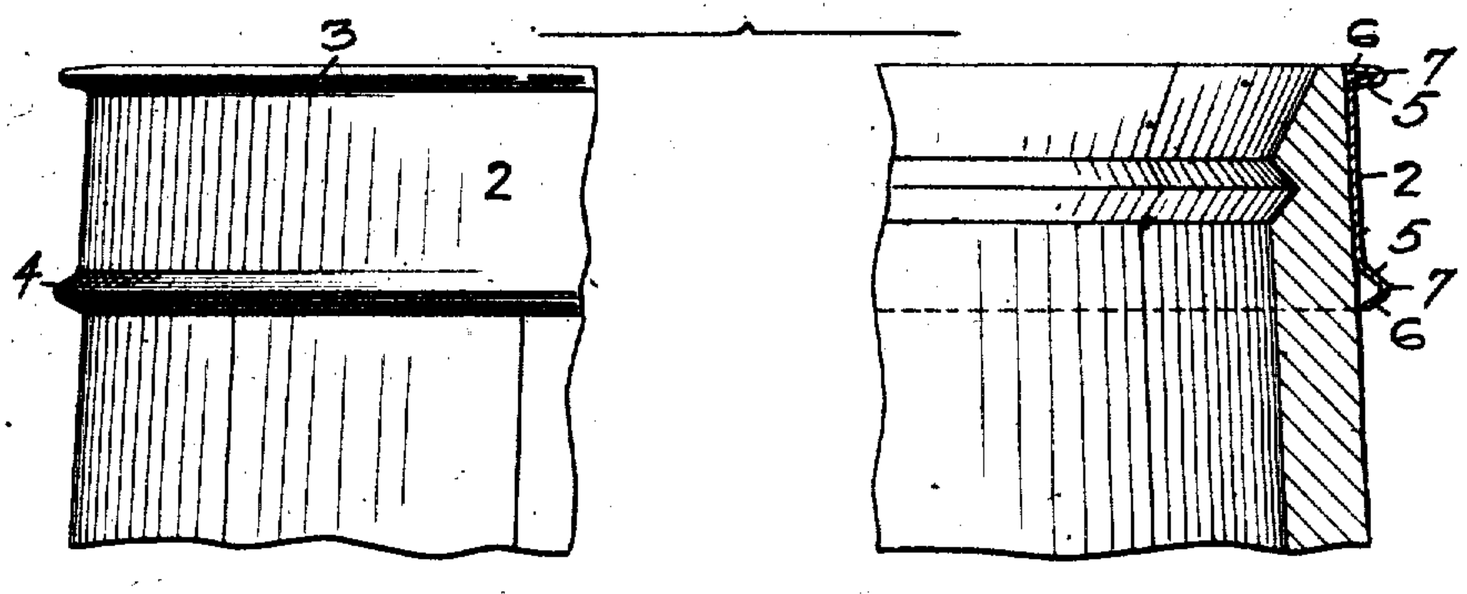
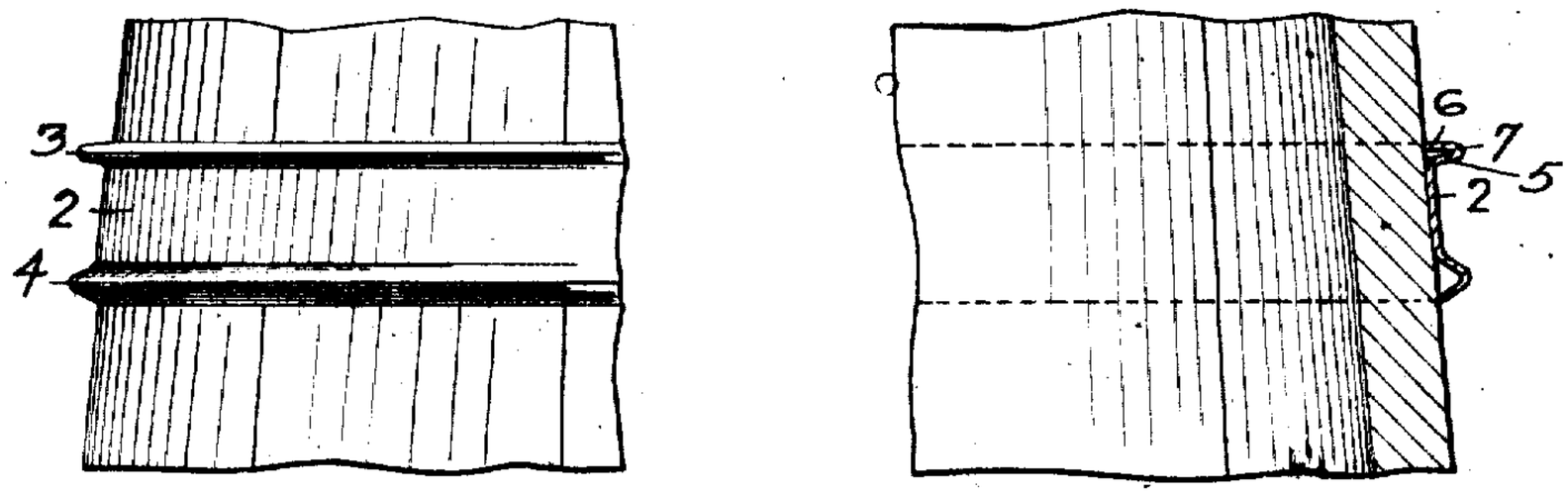


FIG. 3



WITNESSES.

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UNITED STATES PATENT OFFICE.

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METALLIC HOOP.

No. 908,460. Specification of Letters Patent. Patented Jan. 5, 1909.

Application filed November 9, 1907. Serial No. 401,525.

To all whom it may concern:

Be it known that I, WILLIAM GOLDIE, a resident of Wilkinsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Metallic Hoops; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to metallic hoops for barrels, casks, kegs, tubs, and the like. Its object is to provide a hoop which can be made from very thin sheet metal and which will provide a broad surface for driving and at the same time be properly trussed to give strength to the hoop and to the barrel to sustain loads.

It has particular reference to hoops for barrels for containing dry material, such as flour, lime, etc., in which it is important to provide a hoop very light in weight and cheap and yet sufficiently stiff to sustain the blows in driving and of sufficient truss strength to hold the barrel to shape; though of course it may be employed to advantage with heavier hoops for barrels containing liquids.

To these ends it consists, generally stated, in the hoop composed of a metallic strip having at its upper or driving edge an outwardly projecting flange and above the same an inwardly projecting lip connected thereto by a crease, making a V-shaped or reverse open fold, this flange and lip providing a broad surface for engagement with the maul or driving tool and adapted to be closed down in the course of the driving of the hoop to place, so providing an outwardly projecting closed fold or trussed member extending around the barrel and also giving stiffness to the hoop to withstand outward or bursting strain. It also consists in certain other improvements hereinafter referred to.

In the accompanying drawing Figure 1 is a view of the preferred form of hoop; Fig. 2 is a side view partly broken away, part of the view showing the hoop applied to the chime portion thereof; Fig. 3 is a like view showing the hoop applied to the bilge portion of the barrel; and Fig. 4 is a cross section showing the joint between the ends of the hoop.

The hoop is preferably made from very thin sheet metal, such as 28 to 30-gage, which can be cut to proper width and the resulting strips fed to proper bending machinery to shape them. The hoop has the body portion 2 and the upper rib 3 and the lower rib 4. These ribs are preferably formed alike so that the hoop can be passed over the barrel either way, and the same description will apply to both ribs. The rib has the outwardly extending flange 5 and beyond the same the inwardly extending lip 6, these two being connected together by an actual crease or bend 7, as distinguished from a mere curve, and giving a V-shaped or reverse open fold, the crease forming the line for the folding of the flange and lip together, so forming an open fold which under the blows of the maul or driving tool is forced together and forms a practically closed fold as shown. It is preferred that the outwardly and inwardly extending portions of the rib shall be about of the same width as illustrated.

When the hoop as so constructed is applied to the barrel the open fold provides a broad surface to receive the driving blows upon the top edge of the same, and said blows will tend to close down this open fold, bringing the lip 6 down into contact with the flange 5 and so forming a practically closed fold as illustrated in Figs. 2 and 3. This results in an outwardly extending closed ribextending around the upper edge of the hoop as driven and which is stiff and strong enough to protect the edge of the barrel while at the same time it gives great strength to resist bursting strain and gives great truss strength to hold the barrel to shape. The construction may be employed either as a chime hoop or as a bilge hoop, the latter being shown in Fig. 3, and where it is evident that the reverse flange 3 provides a broad surface for the end of the driver, and the blows of the same in driving the hoop down solid around the barrel will practically close up the open fold and bring the hoop to about the form illustrated. The other, or lower, edge 4 of the hoop as driven on the barrel forms a strengthening trussed rib extending around the barrel, and in its open form also strengthens the hoop to sustain bursting strain and stiffens and trusses the same, both edges of the hoop imparting to it great truss strength and sufficient load carrying strength where the barrels resting on their bilge portion are piled one upon the other.

The hoop is exceedingly simple in construction, requiring no complicated machinery in its manufacture. It can be made of very thin sheet metal and therefore very cheap and yet provides a sufficiently broad surface for driving to place, and when in place gives a strong, stiff, trussed hoop which

by the folding over of its edges liability to the cutting of the hand of the workman in handling the barrel is overcome. While I prefer to employ the open folded rib at each edge, it is evident that it may be formed at the driving edge only.

What I claim is:

1. A metallic hoop for barrels formed of a metal strip having a concentric upper or driving edge formed of an outwardly extending V-shaped reverse open fold.

2. A metallic hoop for barrels formed of a metal strip having concentric upper and lower edges, the upper driving edge being formed of an outwardly extending V-shaped reversible fold and the lower edge being of like form.

In testimony whereof, I the said WILLIAM GOLDIE have hereunto set my hand.

WILLIAM GOLDIE.

Witnesses:
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