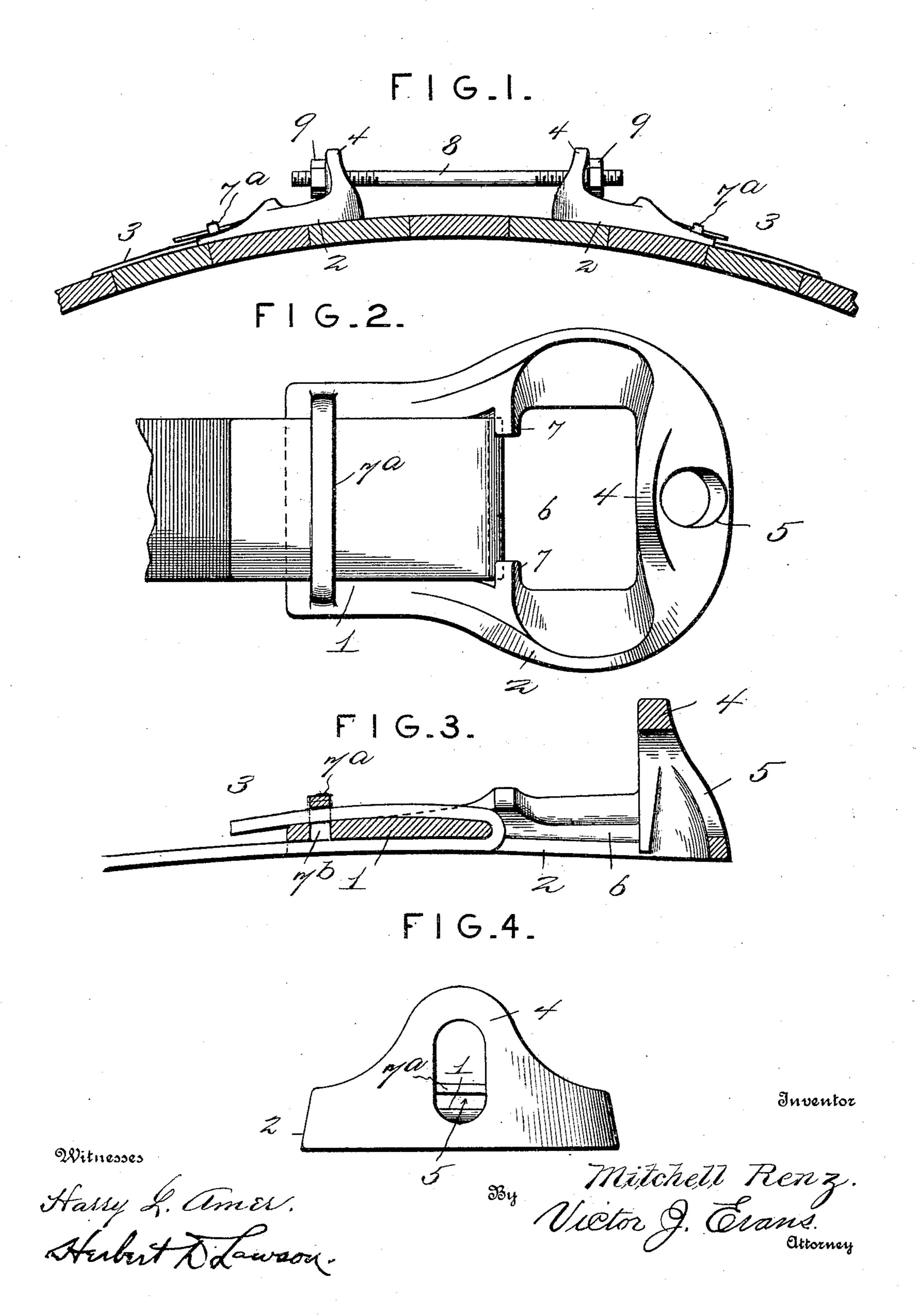
## M. RENZ. HOOP LUG. APPLICATION FILED MAY 24, 1904.



## United States Patent Office.

## MITCHELL RENZ, OF MOBILE, ALABAMA.

## HOOP-LUG.

SPECIFICATION forming part of Letters Patent No. 791,945, dated June 6, 1905.

Application filed May 24, 1904. Serial No. 209,508.

To all whom it may concern:

Be it known that I, MITCHELL RENZ, a citizen of the United States, residing at Mobile, in the county of Mobile and State of Alabama, 5 have invented new and useful Improvements in Hoop-Lugs, of which the following is a specification.

My invention relates to new and useful improvements in hoop-couplings for use upon 10 tanks, vats, cisterns, &c.; and its object is to provide a simple, inexpensive, and durable device adapted for use in connection with flat hoops or bands.

Another object of the invention is to provide a coupling to which the end of the hoop may be readily secured without the necessity of employing studs, screws, or other similar fastening devices.

Another object is to provide a coupling 20 which can be cast in a single piece of metal and which is so formed as to permit the couplings when arranged at the two ends of the hoop or band to be placed at desired angles to each other without preventing the insertion 25 of the securing-bolts thereinto.

Another object is to provide hoop-couplings having apertures formed therein into which bolts of different sizes may be inserted.

With the above and other objects in view 3° the invention consists of a coupling which comprises a base having an ear at one end thereof, said ear being formed integral with the base and provided with a longitudinallyextending slot for the reception of the hoop-35 fastening bolt. An aperture is arranged within the base adjacent the ear and has inwardlyextending lugs at opposite sides thereof. The end of the hoop is adapted to be inserted under the base and through the aperture, so as 4° to be overlapped by the lugs. It is then bent backward from the base and under a strap, raised thereabove.

The invention also consists of the further 45 novel construction and combination of parts hereinafter more fully described and claimed, and illustrated in the accompanying drawings, showing the preferred form of my invention, and in which—

tank having my improved hoop-couplings in position thereon. Fig. 2 is an enlarged plan view of one of the couplings with a hoop connected to it. Fig. 3 is a central longitudinal section through the coupling and showing the 55 end of the hoop in elevation, and Fig. 4 is an

end elevation of the coupling.

Referring to the figures by numerals of reference, 1 is a base-plate having a groove 2 in the lower face thereof, said groove being, 60 preferably, of the same width as the hoop 3 to be used in connection with the coupling. The base is enlarged at one end and terminates in an ear 4, having a longitudinally-extending slot 5 therein. This ear is tapered upward 65 from the base thereof, so that the slot 5 varies in length. The inner face of the ear is preferably at right angles to the base. An aperture 6 is formed within the enlarged portion of the base and has inwardly-extending lugs 70 projecting inwardly from the sides thereof. These lugs are located above and adjacent the edge of the aperture 6 farthest removed from the ear 4, the space formed between said edge and the lugs being substantially equal in width 75 to the thickness of the hoop 3. A strap 7<sup>a</sup> extends across the base 1 adjacent the outer end thereof and is raised above the base, so as to form a space of sufficient size to receive the end of the hoop 3. This strap 7<sup>a</sup> is prefer- 80 ably above and parallel with a slot 7<sup>b</sup>, which is formed within the base, and therefore the strap can, if desired, be formed of the metal removed in the formation of the slot.

When it is desired to secure a hoop in po- 85 sition around a tank, vat, or cistern, each end of the hoop is provided with a coupling such as above described. The hoop is secured to the coupling by placing the end thereof in the groove 2 and inserting it through the ap- 90 erture 6 and under the lugs 7. Said end of which is formed integral with the base and is | the hoop is then bent backward upon the base 1 and inserted under straps 7<sup>a</sup>. After both ends of the hoop have been connected to couplings in the above-described manner a bolt 8, 95 having its end screw-threaded, is inserted into the elongated slots 5 and nuts 9 are placed thereon and turned to draw the ears 4 of the two couplings toward each other, so as to bind Figure 1 is a section through a portion of a | the hoop firmly upon the object inclosed there- 100

by. It will be seen that after the couplings have been secured in position the ends of the hoop cannot be withdrawn from engagement therewith. I attach importance to the fact 5 that in this construction of coupling it is unnecessary to perforate the hoop for the reception of any securing means, and, moreover, by providing elongated slots 5 in the ears 4 the couplings can be placed practically at any 10 desired angles to each other without preventing the insertion of the bolt 8 thereinto.

In the foregoing description I have shown the preferred form of my invention; but I do not limit myself thereto, as I am aware that Is modifications may be made therein without departing from the spirit or sacrificing any of the advantages thereof, and I therefore reserve the right to make such changes as fairly fall within the scope of my invention.

Having thus described the invention, what is claimed as new is—

1. A coupling for hoops formed in a single piece and comprising a base having an enlarged portion provided with an aperture, said base 25 having a longitudinally-extending hoop-receiving groove in its inner face, an ear integral with the base and having a slot therein, a hoop-engaging lug integral with the coupling, and a strap upon the base for engaging 3° the end of a hoop.

2. A coupling for hoops formed in a single piece and comprising a base having an enlarged

portion provided with an aperture, said base having a longitudinally-extending groove in one face thereof, an ear integral with one end 35 of the base and adjacent the aperture, said ear having an elongated slot therein, inwardlyextending lugs projecting from the sides of the aperture and above and adjacent one end thereof, and a transversely-extending strap 4° upon the base adjacent its outer end and forming a space for the reception of a hoop.

3. The combination with a pair of couplings each comprising a base having an aperture therein and a longitudinally-extending groove 45 in one face of the base, an ear at one end of the coupling having an elongated slot therein, and inwardly-extending lugs projecting from the side of and adjacent one end of the aperture, of a hoop extended between said coup- 5° lings and seated adjacent its ends in the grooves, the ends of the hoop being extended through the apertures and beneath the lugs, a strap integral with each coupling and spaced therefrom to receive the ends of the hoop be- 55 neath them, a bolt projecting through the slots in the ears, and means for securing the bolt in position.

In testimony whereof I affix my signature in

presence of two witnesses.

MITCHELL RENZ.

Witnesses:

M. L. Johnson,

B. Davis.