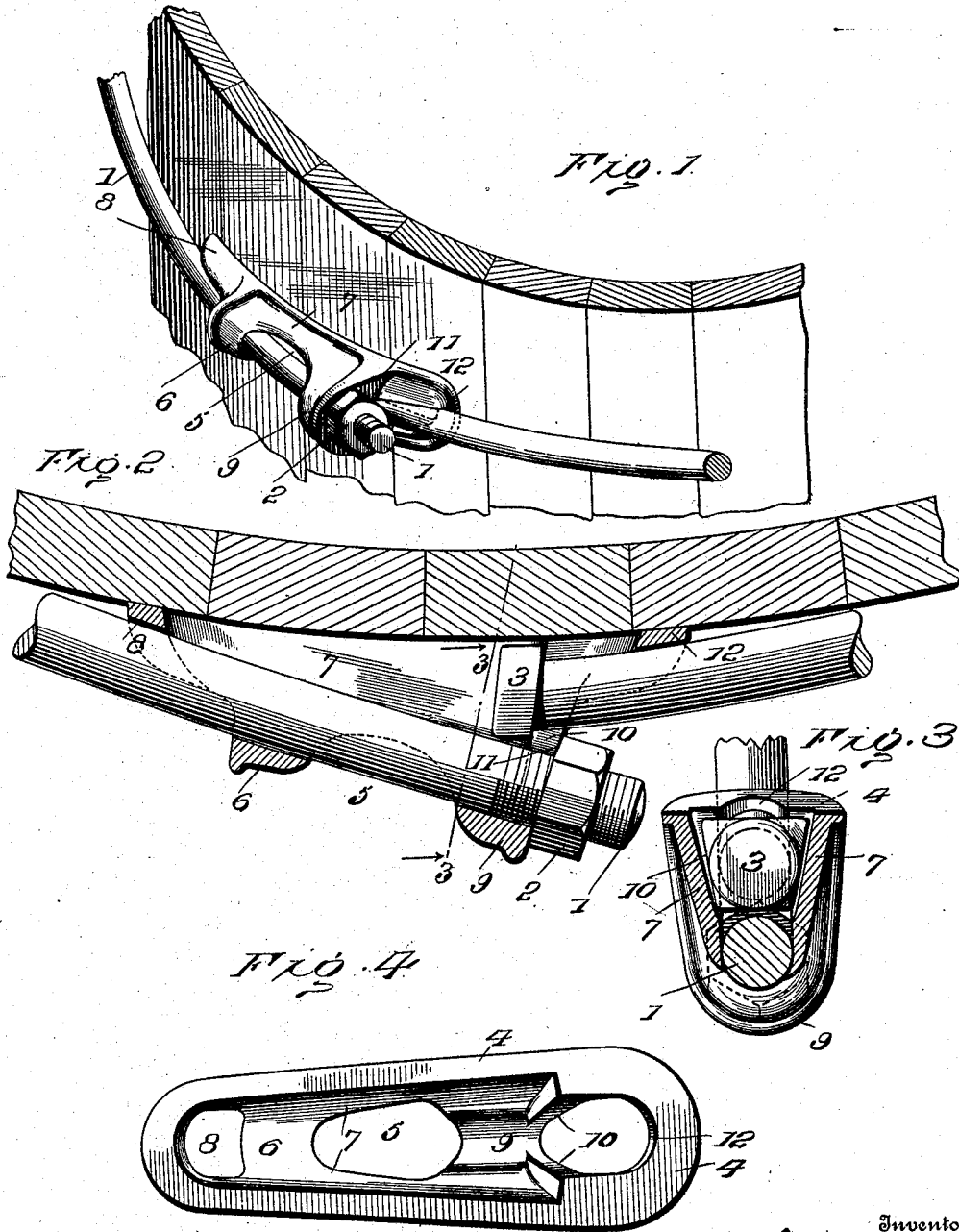


J. REICHERT.
TANK LUG.

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911,071.

Patented Feb. 2, 1909.



Witnesses

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TANK-LUG.

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To all whom it may concern:

Be it known that I, JOHN REICHERT, a citizen of the United States, residing at Racine, Racine county, State of Wisconsin, have invented certain new and useful Improvements in Tank-Lugs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to certain improvements in tank lugs; and the objects and nature of my invention will be readily understood by those skilled in the art in the light of the following description of the construction shown in the accompanying drawings as my preferred embodiment.

An object of my invention is to produce an exceedingly simple, economical and yet strong and durable tank lug of an improved construction particularly adapted for securing round bands on tanks, kilns or wherever such bands can be advantageously employed.

The invention consists in certain novel features in construction and arrangement as more fully and particularly set forth hereinafter.

Referring to the accompanying drawings:—Figure 1, is a perspective view showing the lug in operative position connecting round band ends. Fig. 2, is a longitudinal section of the lug showing the band ends therein. Fig. 3, is a cross section on the line 3—3, Fig. 2. Fig. 4, is a bottom plan of the lug.

The lug shown is particularly adapted for use in adjustably coupling together the opposite ends of round bands, having one end longitudinally screw threaded to receive a tightening nut, and the opposite end formed with an enlarged head.

In the drawings, 1, is the threaded end of the band, having the tightening nut 2, thereon, and 3, is the head or enlargement on the opposite end of the band. The means employed for tightening or coupling together the band ends are commercially known as "lugs" or "tank lugs."

The tank lug of this invention consists of a single hollow metal frame formed in any suitable manner, preferably by casting, and the lug is preferably so formed that it can be cast without employing a core. The lug is longitudinally elongated, approximately ob-

long in shape, and is open at the inner side or bottom, said open bottom being surrounded by the loop-like or surrounding flat bearing edge 4, adapted to rest on the surface of the tank or other structure or object on which the band is secured.

The lug is formed hollow with end openings to provide a longitudinal passage there-through for the band ends. The intermediate portion of the lug is formed with one or more upward or outward arches, the opposite ends of the lug projecting beyond said arch or arches. One elongated arch can be employed with or without an intermediate top opening 5, if so desired, one end of the arch being elevated, or two arches can be employed having their upper ends separated by said opening 5. Taking the latter explanation of the formation; 6, is an upward or outward arch between the side walls 7, of the lug and located adjacent to the rear end of the lug, the lug being open below said arch 6.

At the rear end of the lug, that is, the end adjacent to arch 6, the side walls are connected by the end bridge or cross connection 8, having a concaved top face which, in connection with the side walls 7, tapering down to said cross connection, forms a seat for the band end 1. This end 1, passes over the bridge 8, and under arch 6, and is by said arch, held down in the seat formed by said bridge between the two side guide or stop walls. The bridge 8 is also braced and strengthened by said side walls extending between the same and the arch 6. At the opposite end portion of the lug, I provide the large or elevated arch 9, the lug being open below said arch. This arch is formed with opposite longitudinal or upright inwardly projecting flanges 10, forming the nut bearing face 11, at the front side of the arch, said face usually inclining upwardly and rearwardly. Within the arch said flanges form a socket or opposite shoulders, behind which the headed end of the band engages. The lug extends forwardly from the arch 9, and is formed with the front bridge or cross connection 12, having a concaved top seat or face, and the side walls of the lug taper from the arch 9, down and merge into said bridge and in connection therewith form a seat and side guides for the end of the band provided with the head. Said side walls between the arch

9, and bridge 12, also brace said parts and distribute the strain, while the side walls between the two arches 6 and 9, also serve to brace the arches and distribute the strain.

5 In applying the band, the threaded end thereof is passed through the bottom of the lug and forwardly through the arch 9, until the head 3, at the opposite end of the band engages the inner or rear faces of the inner side flanges 10, of said arch. These flanges form stop shoulders within the lug and particularly within the lower portion of the arch, holding the band head against forward movement within the lug. The band head 3, thus rests within 15 the lower portion of the arch 9, with the band extending forwardly through the lower portion of the arch and across the front end bridge 12, and between the front ends of the side walls. If so desired, the internal stop 20 shoulders for the head 3, and formed by said flanges 10, can be inclined forwardly and downwardly, so that forward pull or strain on the band will cause said head 3, to draw down and hence hold said band firmly down 25 in the seat formed by bridge 12.

The band having been passed around the tank or other structure, its threaded end is then passed longitudinally into the lug through the rear end thereof, that is the band 30 is passed over the rear end bridge and under the rear end arch and through the upper portion of the front elevated arch 9, above the opposite end of the band and its head. The threaded end of the band passes through the 35 lug at an upward inclination, and the nut is then applied to the forwardly projecting end thereof and screwed down into engagement with the front face of said arch 9, to tighten the band to the extent desired.

40 It will be observed that the pressure of the nut is rearwardly against the arch, while the pressure of the head 3, is forwardly against the arch, whereby the strain on the lug is practically equalized. This is a feature and 45 advantage of material importance, particularly in view of the fact that the ends of the band practically lap one over the other and have their bearing abutments against the lug in practically the same plane extending 50 transversely of the lug. Advantages are also attained by forming the lug with the end extensions constituting concaved seats for the band with side stop or guide walls thereby holding the lug true or in the longitudinal 55 line of the band and against twisting or lateral deflection. The formation of the lug is such that it is properly held down and tightly to the surface of the structure to which the band is secured and against rocking or tilting 60 outwardly therefrom, and furthermore said lug can be very economically produced of maximum strength and minimum lightness.

It is evident that various changes and modifications might be resorted to without 65 departing from the spirit and scope of my

invention, hence I do not wish to limit myself to the exact structure shown.

What I claim is:—

1. A tank lug having longitudinal side walls, depressed cross bridges between the 70 opposite ends of said walls, an outward arch between said walls and adjacent to one end of the lug, and another outward arch adjacent to the opposite end of the lug and connecting said side walls and having opposite bear- 75 ing faces to form opposing abutments for fastening means of opposite band ends, said lug being open at the bottom between said side walls and the end depressed bridges, and being open at the top except at said arches, 80 substantially as described.

2. A tank lug at both ends having depressed cross bridges forming end concaved seats for opposite band ends passing in opposite directions longitudinally of the lug, an 85 outward arch adjacent to one end of the lug and under which one band end passes, an elongated arch through which both band ends are adapted to pass one over the other and having opposite bearing faces to form oppos- 90 ing abutments for the fastening head and nut of said band ends, respectively, and opposite longitudinal vertical side walls connecting and bracing said arches and end bridges and extending throughout the length of the lug. 95

3. A tank lug consisting of an elongated hollow body at both ends having side walls and depressed cross bridges over which the band ends are adapted to pass between said side walls, whereby the lug is held in the lon- 100 gitudinal line of the band, said lug between said ends being formed with an outwardly projecting arch through which the opposite band ends pass one over the other, said arch having an inner abutment to receive the head 105 on one band end and an outer abutment to receive a nut on the other band end, said arch being closed at the outer end and open at its inner end through the bottom of the lug.

4. A tank lug consisting of an elongated 110 hollow body open at its inner side and having longitudinal side walls and depressed end cross bridges at both ends of the lug, and alined intermediate outward arches between said side walls, said lug being open outwardly 115 above said bridges and open inwardly below said arches, one arch adapted to receive and hold down one band end, and the other through its opening adapted to receive both band ends and formed with opposing abut- 120 ments for the heads on the band ends.

5. A tank lug comprising an elongated hollow body having its inner side open, and formed with extended ends having cross bridges over which the band ends are adapted 125 to pass, and an outwardly projecting arch intermediate the length of the lug and through and under which opposite band ends are adapted to pass one over the other, said portion having an inner abutment to receive 130

the head on one band end and an outer abutment to receive the nut on the other band end, whereby the strain of the head and nut will be in opposite directions on said arch,
5 said lug having side walls joining said bridges to said arch, for the purposes substantially as described.

In testimony whereof I affix my signature, in presence of two witnesses.

JOHN REICHERT.

Witnesses:

HUBERT E. PECK,
E. R. PECK.