F. P. WARES.

Hoop for Tank.

No. 214,536. Patented April 22, 1879.

Fig. 1.

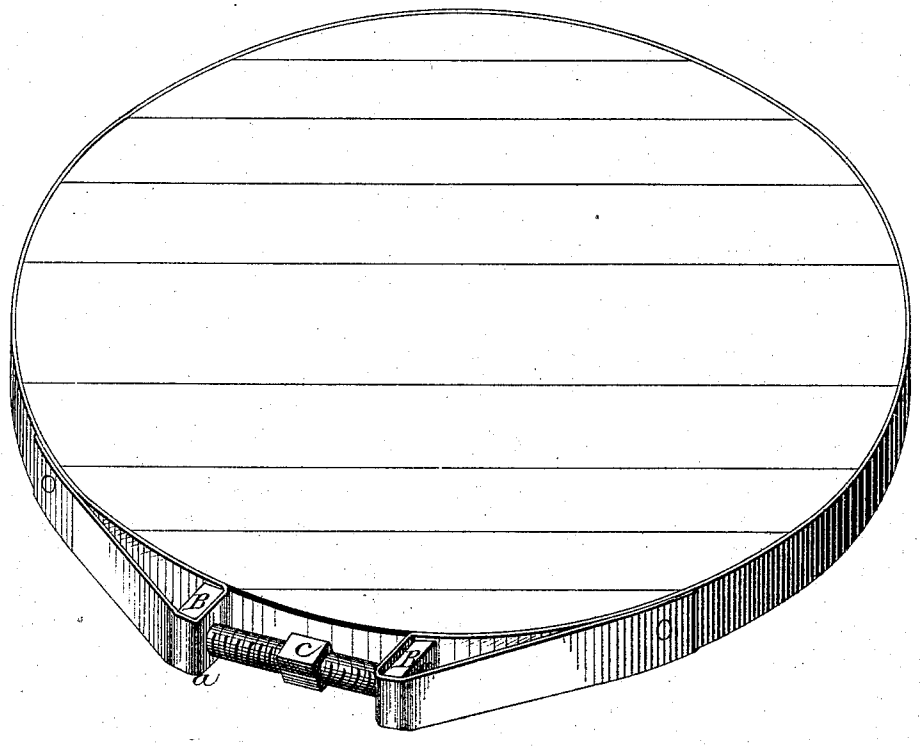


Fig. 2.

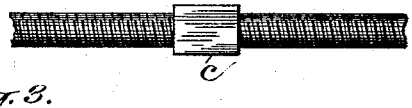


Fig. 3.

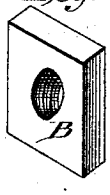
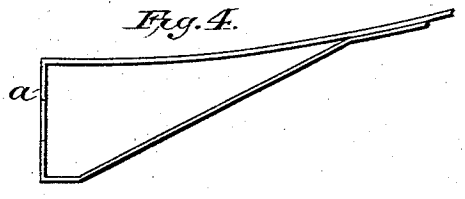


Fig. 4.



Witnesses:

Ripley Wares

Evandale Seober

Inventor:

Frank P. Wares.

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

FRANK P. WARES, OF KENDALL, PENNSYLVANIA.

IMPROVEMENT IN HOOPS FOR TANKS.

Specification forming part of Letters Patent No. **214,536**, dated April 22, 1879; application filed January 30, 1879.

To all whom it may concern:

Be it known that I, FRANK P. WARES, of Kendall borough, in the county of McKean and State of Pennsylvania, have invented a new and useful Improvement in Hooping all kinds of Wooden or Metal Tanks, of which the following is a specification.

The invention relates to providing hoops for all kinds of wooden or metal tanks, with bolts, nuts, and loops for tightening the hoops around the tanks, reference being had to the accompanying drawings and to the letters of reference marked thereon.

The object of my invention is to provide tanks with hoops that can be tightened without driving, and that the tanks may be built without any taper.

The invention consists in the arrangement of the bolts, nuts, and loop in connection with the hoop, that it may be tightened with a wrench and without driving.

In the accompanying drawings, Figure 1 is a view of my complete hoop. Fig. 2 is a view of the bolt. Fig. 3 is a view of the nut; and Fig. 4 is a view of the loop formed at each end of the hoop.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I construct my hoop in the known form and apply to the two ends the loops, as shown by Fig. 4. I then place the hoop around the tank, bringing the ends close enough together to admit the bolt through a hole, *a*, punched in the loop, and screw it into the nut B, placed inside the loop. Then, having arranged the other end in like manner, I place a wrench on the square *c*, and by turning the bolt I draw the hoop firmly around the tank, drawing the joints tightly together, the bolt being provided with a left-handed thread on one end and a right-handed thread on the other. Thus I am enabled to tighten the tank without any jarring.

What I claim is—

The combination of the hoop having a perforated loop at each end, the nuts placed within said loop, and the right-and-left screw-bolt engaging both nuts, as and for the purpose set forth.

FRANK P. WARES.

Witnesses:

RIPLEY WARES,

CRANDALL SCOBEY.