

(No Model.)

J. McDONALD.
STEEL BARREL.

No. 581,488.

Patented Apr. 27, 1897.

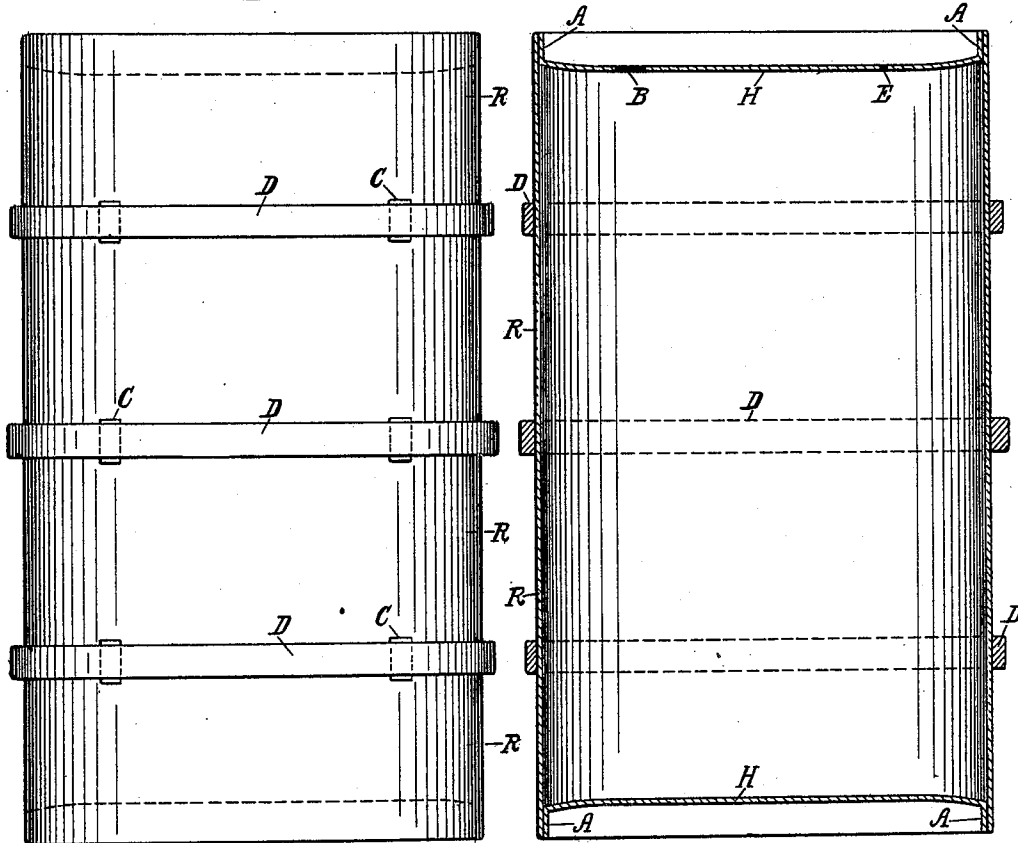
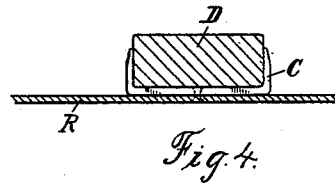
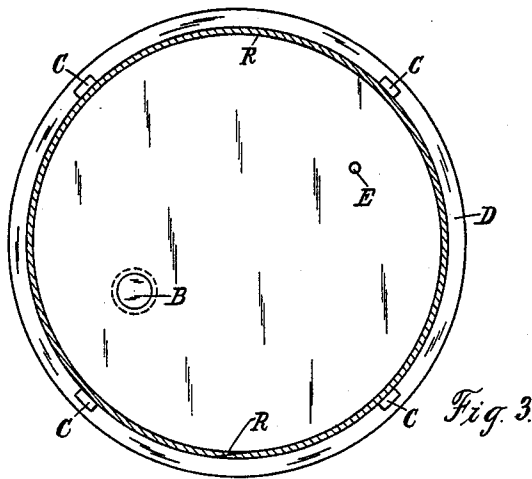


Fig. 1.
Witnesses
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Fig. 2.
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UNITED STATES PATENT OFFICE.

JOHN McDONALD, OF PETROLIA, CANADA.

STEEL BARREL.

SPECIFICATION forming part of Letters Patent No. 581,488, dated April 27, 1897.

Application filed September 12, 1895. Serial No. 562,351. (No model.)

To all whom it may concern:

Be it known that I, JOHN McDONALD, a subject of the Queen of Great Britain, and a resident of Petrolia, in the Province of Ontario, Canada, have invented a new and useful Steel Barrel, of which the following is a specification.

This invention relates to a receptacle for safely and securely holding oil or other merchandise during transportation or storage; and the object contemplated is the provision of a simple, inexpensive, and efficient device for this purpose; and this invention consists of clips secured to the body of the receptacle—one, two, or more, as preferred, for each hoop—which clips are constructed longer than the hoop in cross-section, onto which clips said hoop is driven, after which the hoop is securely locked in position to avoid and completely prevent its accidental displacement by bending or turning up the ends of the clips on each side of said hoop; and this invention also consists in forming the central hoop thicker than the end hoops or gradually decreasing the thickness of the hoops from the center to each end for the purpose of forming the bilge in the hoops in place of in the body of the receptacle; and this invention also consists of the improved construction and combination of parts of the same, as will be hereinafter first fully set forth and described, and then pointed out in the claims.

In order that my improvements may be better understood, I have illustrated in the accompanying drawings a barrel constructed according to my invention, in which—

Figure 1 is a side elevation of a barrel embodying my invention. Fig. 2 is a central longitudinal sectional view of same. Fig. 3 is a cross-sectional view of Fig. 1. Fig. 4 is an enlarged detail side view showing the ends of the clip turned up to lock the hoop in place. In this view the hoop and a portion of the barrel are shown in section.

R designates the body of the barrel or receptacle, which is formed of steel, iron, or other equivalent material, which body is preferably formed by bending in a cylindrical form a flat plate of metal of the required size until the side edges overlap each other. These overlapping edges are then riveted and

soldered or otherwise firmly secured together to form a tight joint at this point.

C C designate clips formed of U-shaped strips of metal, whose bases normally stand flat against the body R of the vessel and are riveted or otherwise rigidly secured thereto, while their ends project outward at right angles to their bodies, and one, two, or any number of these clips may be used in connection with each hoop, as preferred.

D D designate hoops of wood or other equivalent material, with any suitable number of which this barrel is provided. These hoops D are driven onto the barrel and up over on the metal clips C until said hoops are adjusted centrally thereon, after which the ends of said clips are bent or turned upward at two opposite sides of the hoop D, as shown in Fig. 4, for the purpose of avoiding and completely preventing the accidental displacement of said hoops D. It will also be seen that when the ends of these clips are in this position they terminate short of the outer face of the hoop, so that when the barrel is rolled on its side they will not mark or scratch the floor and are also protected from becoming jammed. These hoops D are for the purpose of protecting the body of the barrel, and the central hoop is formed thicker, so that its outer face shall set out farther from the body of the barrel than the outer faces of the other or end hoops, or, in other words, so that these hoops may gradually decrease in thickness from the center to each end, by which construction the bilge to the barrel is formed in the hoops and not in the body. This construction effects a considerable saving in expense, since a bilged steel barrel is quite costly, in addition to which said bilged hoops permit a barrel having a body of even diameter throughout to be readily and easily turned in any direction or to be rolled from one point to another in the warehouse or from the dock onto the vessel.

I consider the employment of a single hoop at the center of the barrel, thicker than all others, far preferable to the use of two thick hoops near the center, for the reason that in turning the latter one or both hoops must slip on the floor to some extent, as there are then two points of supporting contact instead of

but one, as in the present invention. While the turning (and, in fact, the straight rolling) may be done upon other hoops, it almost invariably falls on the thickest central one, and
 5 this hoop I therefore prefer to always attach by the means set forth above, so that the ends of the clips will not mar or scratch the floor. However, I consider this form of attachment as cheap, strong, and otherwise desirable for
 10 all the hoops, and have so illustrated it, although some other attachment might there be used.

H H designate the heads of the barrel, preferably formed in one piece and with the
 15 flanges A, the latter forming a convenient means by which the heads H may be riveted and soldered or otherwise rigidly secured in the ends of the body R in order to form a tight joint at this point.

20 B designates an opening in the end of the barrel, which is provided with a suitable bung or stopper through which the barrel may be filled or its contents removed.

E designates a suitable vent with which the
 25 barrel is provided, which vent is securely closed after the barrel is filled.

This construction just described provides a barrel or the like or a receptacle for any class of merchandise and one such as con-
 30 templated which is simple and consequently inexpensive to manufacture and at the same time will efficiently serve the purpose for

which it is intended. At the same time I wish it understood that while I prefer the construction shown I do not limit myself to
 35 the details thereof, as they may be modified in various ways without departing from the spirit of my invention.

Having thus described my invention, I claim—

1. As an improved article of manufacture, the herein-described barrel comprising a truly cylindrical body, and hoops surrounding the same, a single one at its center and others
 40 near the ends, said central hoop being thicker than any other, as and for the purpose set forth.

2. As an improved article of manufacture, the herein-described barrel comprising a cylindrical body, and hoops surrounding the
 50 same one at its center and others near the ends, the external diameter of said central hoop being larger than any other; combined with clips secured to the body and having ends projecting outward therefrom alongside
 55 the edges of the hoops and terminating short of the outer face thereof, as and for the purpose set forth.

In testimony whereof I have signed in the presence of the two undersigned witnesses.

JOHN McDONALD.

Witnesses:

P. J. EDMUNDS,
 E. G. DEWAN.