(No Model.)

W. C. BLUNDELL.

BARREL OR TIERCE.

No. 550,094. Patented Nov. 19, 1895.

Fig. 1.

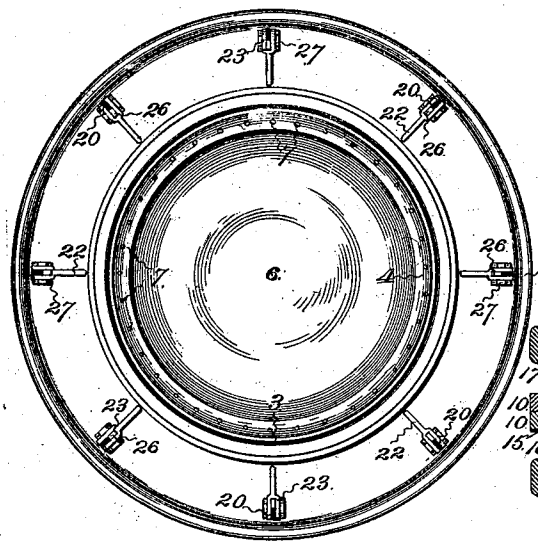


Fig. 2.

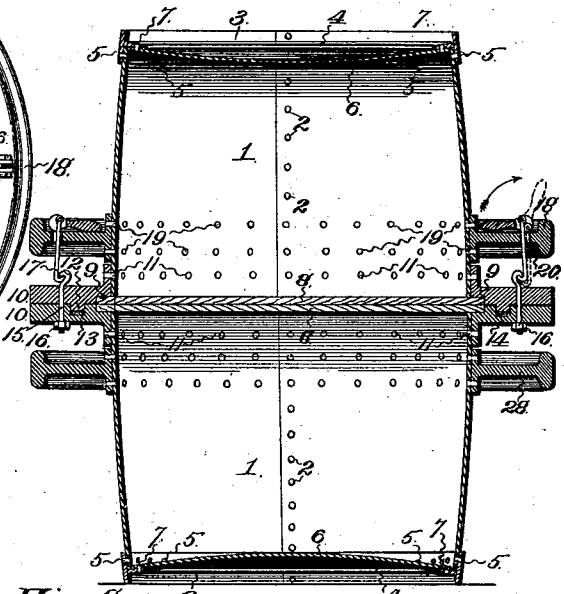


Fig. 3.

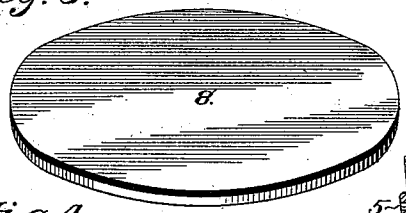


Fig. 8.

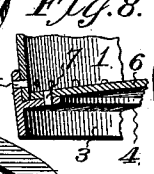


Fig. 5.

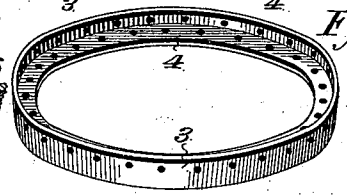


Fig. 4.

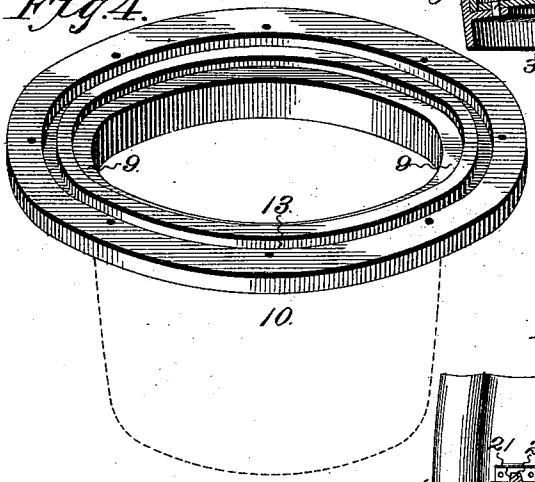


Fig. 6.

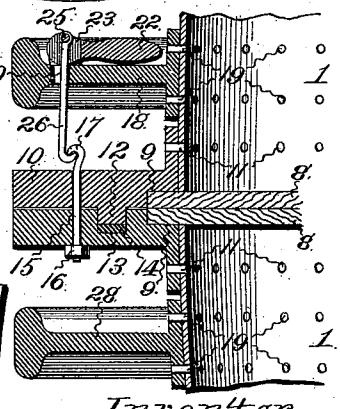
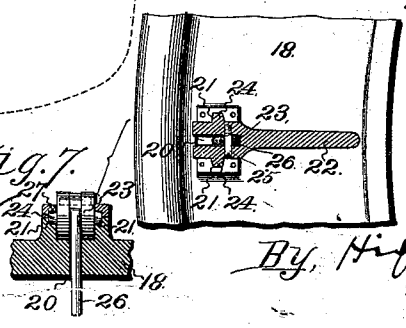


Fig. 7.



Witnesses,

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UNITED STATES PATENT OFFICE.

WILLIAM C. BLUNDELL, OF WICHITA, KANSAS.

BARREL OR TIERCE.

SPECIFICATION forming part of Letters Patent No. 550,094, dated November 19, 1895.

Application filed December 21, 1894. Renewed September 16, 1895. Serial No. 562,619. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. BLUNDELL, of Wichita, Sedgwick county, Kansas, have invented certain new and useful Improvements in Barrels or Tierces, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part thereof.

My invention relates to lard barrels or tierces; and the primary object of the same is to provide a receptacle of this character composed of two separable sections.

A further object is to provide means whereby said sections may be easily and expeditiously joined together or separated.

A still further object of the invention is to provide a jointed receptacle with a rolling-surface in the shape of encircling rings or annuli.

A still further object is to provide a device of this character which is simple, strong, durable, and comparatively inexpensive of construction.

Other objects of the invention will appear in the following description, and will be pointed out in the appended claims.

Referring to the accompanying drawings, which illustrate my invention, Figure 1 is a top plan view of a barrel or tierce embodying my invention. Fig. 2 is a vertical central section of the same. Fig. 3 is a detail perspective view of one of the detachable barrel-heads. Fig. 4 is a detail perspective view of one of the encircling grooved collars or bands. Fig. 5 is a detail perspective view of one of the hoops which encircle the ends of the barrel and carry the permanent heads thereof. Fig. 6 is an enlarged vertical section of a portion of said barrel or tierce. Fig. 7 represents, on a larger scale, sectional views to illustrate more clearly one of the levers for clamping the two sections of the receptacle firmly together. Fig. 8 represents, on an enlarged scale, a sectional view of a portion of the lower end of said receptacle to show more clearly its connection with the encircling hoop.

In the said drawings a barrel or tierce is composed of two similar sections 1 1. Each of these sections is formed of sheet metal or its equivalent rolled to the proper shape and having its ends secured permanently together by means of rivets, as shown at 2. These sections when secured together in the manner which will hereinafter appear will form a single barrel or tierce bulged at its middle in the ordinary manner, though it is to be understood that it may be of perfectly cylindrical form, if required. The smaller or diminished ends of these sections are encircled by metallic hoops 3 and rest against the inner side of the inwardly-projecting annular flanges 4 of the said hoops, and rivets 5 are employed to secure said hoops and the said ends of the sections permanently together inward of the said flanges 4, as illustrated most clearly in Fig. 8.

The circular heads 6 of the barrel or tierce are concavo-convex and are arranged with their convex surfaces presented inwardly and rest upon and against the inner sides of the said flanges 4, to which they are permanently secured by rivets 7. It will thus be seen that the ends of the barrel or tierce cannot spread, because they are encircled by the hoop 3, and that there can be no independent longitudinal movement of the said sections 1 or of said hoops 3, because they are riveted together to prevent movement in one direction, and the inwardly-projecting flange 4 prevents movement and strain upon said rivets in the opposite direction. It will also be apparent that the pressure of the article within said barrel or tierce cannot force the heads 6 outward, owing to the fact that they rest upon and against said flanges 4 and cannot move inward because they are riveted securely to said flange. Therefore it is manifest that a most strong and substantial connection is made between the sides and the heads of said barrel or receptacle. When said sections are to be joined together, they are provided with detachable heads 8, circular in contour and preferably of wood or equivalent material. These heads, being interposed between the sections of said receptacle, have their opposing surfaces in contact, and being of greater diameter than the said barrel or tierce at its middle, where it is bulged, fit snugly within the annular grooves 9, formed in the opposing margins of the circular collars or bands 10. These collars or bands are provided with outwardly-projecting base-flanges, which bear against and are secured permanently to said sections by means of the rivets 11. In order to make a

joint between said collars or bands lard or water tight, a tongue-and-groove connection is made, one of said sections being provided with an annular tongue 12, which projects into an opposing groove 13, of the same contour, in the face of the other collar or band and against a gasket or ring 14, of rubber or equivalent material, which will yield under pressure and expand when the pressure is removed. At suitable points said collars or bands are provided with registering-apertures, through which extend rods 15. Each of these rods at one end is screw-threaded and engaged by a retaining-nut 16, and at its opposite end is provided with a hook 17. Arranged outward of and parallel with one of said collars or bands is a wheel or rolling-surface 18, which in cross-section is in the form of a T-rail, the head of which forms the rim, the web the equivalent of spokes, and the base-flange, which is secured to the barrel or tierce by the rivets 19, the hub of said wheel. The web of said wheel is provided with radial slots, in number equaling the rods 15, and arranged in the same radial plane and projecting outwardly from said web at opposite sides of said slots are lugs, which are provided with bearing-cavities 21. An equal number of levers 22 are provided with circular bifurcated heads 23, and projecting axially from the outer sides of said head are the trunnions 24, which engage the bearing-cavities 21. A series of pins 25 are carried by and project across the bifurcated portion of said heads adjacent to their periphery, and pivotally mounted upon said pins are the upper ends of a corresponding number of rods 26, which extend through the registering-slots 20 and are provided with hooks at their free ends, which engage the opposing hooks 17 of the rods 15. The connection between said rods 26 and said levers constitutes practically a crank or eccentric connection, so that when the levers are in the position shown in full lines in the drawings the pivotal point of connection between the same and the rods 26 is inward of the axis of the said levers, and the tongue 12 of one section is clamped firmly and immovably against the rubber gasket in the groove of the other section, thus making a perfectly tight joint and absolutely preventing the leakage of lard or the entrance of water. When in this position it will be noted, by reference particularly to Fig. 6, that as the pivotal point of connection between said levers and said rods is inward of the axis of said levers the expansive strain upon the barrel only tends to more firmly clamp or join the separable sections of the same together. To separate said sections it is only necessary to grasp said levers and move them to the position shown in dotted lines, Fig. 2. This operation causes the pivotal point of connection between said levers and said rods to move to the opposite side of the axis of the lever, so as to relieve the strain upon the hooked rods and permit them to be easily and expeditiously disengaged. Immediately this takes place the sections of the barrel or tierce may be taken apart by simply lifting one from the other. The trunnions 24 of said levers are embraced at their outer sides by the bearing-caps 27, which are screw-bolted in the ordinary manner to the bearing-lugs. The only function of these bearing-caps is to prevent the disengagement of the trunnions when the sections of the barrel or tierce are apart, as it is obvious that when secured together the strain is always upon said lugs, and is also upon said lugs during the operation of said levers in either direction. A wheel 28, similar to the wheel 18, except that it is not provided with the slots 20 and the bearing-lugs, nor with the said levers and rods, is secured to the other section of the barrel or tierce outward of and parallel with the contiguous collar or band 10. Said wheels in external diameter are equal to the external diameter of said collars and bands, so that the barrel when placed upon its side will have a wide and level bearing-surface comprising the peripheries of the said wheels and the said collars, so that it may be rolled quickly and expeditiously to any position required.

The wheels 18 and 28 are constructed of T-rail, because it possesses great strength and provides a convenient handle by which the barrel may be grasped in rolling or in lifting or lowering the same. While I have shown the web of said rails continuous, it is to be understood that said web may be of skeleton formation, so as to provide a greater or less number of spokes. This construction would be lighter than the construction previously described.

It will be noted that by encircling the opposite ends of said jointed barrel or tierce by the hoops 3 when lifting the same to an upright position, or in reversing this operation, and also when a barrel or tierce stands upon end, the whole strain and weight is borne directly by the hoop in contact with the surface upon which the barrel or tierce stands, so that the margin of the barrel proper is relieved of a greater part of the strain incident to the manipulation of the barrel.

It is to be understood also that various modifications in form and arrangement of parts may be made and other means than the one shown and described herein may be employed to clamp the sections of the barrel or tierce together without departing from the spirit and scope of my invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A barrel or tierce, comprising a pair of separable sections, closed at their outer ends by permanent heads and at their inner ends by detachable heads, collars or bands carried externally by said sections at their inner ends, having a tongue-and-groove connection, and provided with grooves into which said detachable heads project, and means for

clamping said collars or bands, and therefore the said separable sections of the barrel or tierce firmly together, substantially as set forth.

2. A barrel or tierce, comprising a pair of separable sections, closed at their outer ends by permanent heads and at their inner ends by detachable heads, collars or bands carried externally by said sections at their inner ends, having a tongue-and-groove connection, and provided with grooves into which the said detachable heads project, a rubber gasket interposed between the base of the said groove and said engaging tongue, and means for clamping said collars or bands and therefore the said separable sections of the barrel or tierce firmly together, substantially as set forth.

3. A barrel or tierce, comprising a pair of separable sections, permanently closed at one end by means of heads, and closed by detachable heads at their opposite or engaging ends, a pair of collars or bands having a tongue-and-groove connection carried by said sections and embracing said detachable heads, hooked rods carried by said collars or bands, a wheel or rolling-surface also carried by one of said sections, levers carried by said wheel or rolling-surface, and hooked rods engaging the first-mentioned hooked rods and eccentrically pivoted to said levers, whereby the sections may be clamped firmly together, substantially as set forth.

4. In a barrel or tierce, the combination with a pair of separable sections larger at one end than at the other, hoops encircling externally their smaller ends and riveted thereto, and provided with inwardly projecting annular flanges, concavo-convex heads bearing against and riveted to said inwardly projecting flanges and arranged with their convex sides presented inwardly, detachable heads of greater diameter than their larger ends closing the same, a pair of collars or bands riveted externally to said sections and provided with grooves which receive that portion of the detachable heads which projects externally of the larger or bulged portion of said barrel or tierce, one of said collars or bands being provided with an annular groove and with a rubber gasket therein and the other of said collars or bands being provided with an annular tongue which engages said groove and said gasket, rods extending through said collars or bands, and provided with hooks at one end and engaged by retaining-nuts at the other, a pair of wheels or rolling-surfaces secured externally to said sections and outward of said collars or bands, levers carried by one of the said wheels or rolling-surfaces, rods extending through said wheel or rolling-surface and provided with hooks at one end engaging the first-mentioned hooks, and eccentrically pivoted at their opposite ends to said levers, substantially as set forth.

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

WILLIAM C. BLUNDELL.

Witnesses:
WM. J. HESS,
G. Y. THORPE.