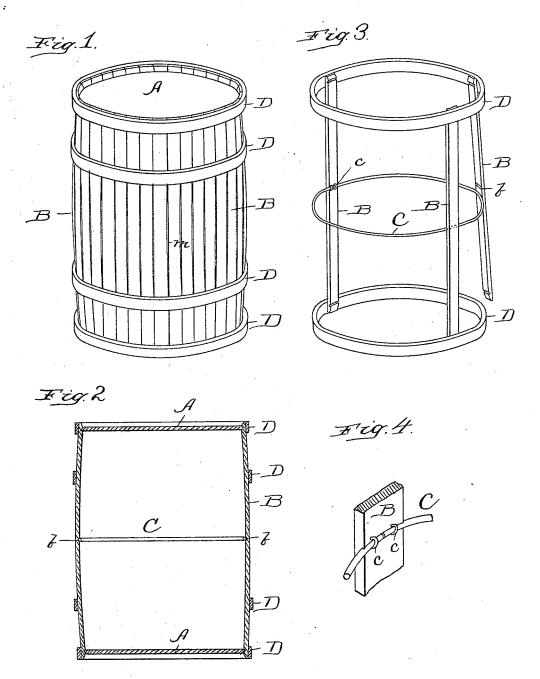
(No Model.)

W. H. CADWELL. BARREL.

No. 526,069.

Patented Sept. 18, 1894.



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UNITED STATES PATENT OFFICE.

WILLIAM H. CADWELL, OF LANSING, MICHIGAN.

BARREL.

SPECIFICATION forming part of Letters Patent No. 526,069, dated September 18, 1894.

Application filed January 12, 1894. Serial No. 496,626. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. CADWELL, a citizen of the United States, residing at Lansing, in the county of Ingham and State of Michigan, have invented a new and useful Improvement in Barrels, of which the follow-

ing is a specification.

This invention relates to the construction of what are commonly known as ventilated barrels, that is to say barrels with joints sufficiently open to allow the air to reach the contents, and which are yet sufficiently closed to prevent the escape of the contents. Barrels of this class are very largely used in storing and shipping fruit, and other kinds of merchandise which are not finely comminuted.

My object in the invention is to produce a cheaper barrel than those heretofore employed, and also to produce a barrel which can be furnished to the user in the knock down and which can be set up by unskilled labor and without the use of special tools or appliances.

The invention consists in the novel construction hereinafter set forth and pointed

out in the claim.

In the accompanying drawings I show at Figure 1 an elevation in perspective of the 30 invention. Fig. 2 is a vertical section. Fig. 3 is a perspective view showing the manner of setting up the barrel. Fig. 4 is an enlarged detail view showing the manner of securing the distending wire.

In said drawings A A represent the heads of the barrel and B B the slats forming the body thereof. These slats instead of being cut in the usual manner are of even width throughout and require no trimming or cut-ting except the crozing to receive the head and the cutting of a groove b upon their interior surfaces to receive the distending wire hereinafter mentioned; nor do these slats require any bending prior to their being put together in the barrel inasmuch as the barrel itself contains a device adapted to impart to them the bilge.

C is a distending wire which is placed inside the barrel and secured to the staves or a portion of them, so that it is rendered immov- 50 able. It is made of reasonably stiff metal, and I find that when made of No. 9 steel wire it answers the purpose very well. It is bent into circular form and its ends are secured to one of the staves by staples c, or in some 55 other suitable way. This wire acts to bend all the staves and impart the bilge to the barrel; and the diameter of the circle formed by it is of course greater than that of the hoops D which are used at the ends. In thus 60 bending the staves ventilating openings m are formed between them, and the size of these openings may of course be regulated by making the wire C longer or shorter to increase or decrease the amount of distention. 65 The transverse grooves b across the interior central portions of the staves give lodgment to the wire C and effectually hold it so that it cannot move in the barrel, and any tendency which it might have to slip out of 70 the grooves is of course additionally resisted by the diminishing diameter of the barrel toward its ends.

The manner of setting up the barrel will be fully understood from Fig. 3, it only being 75 necessary to place one of the exterior end hoops D upon the floor or other support, then to position the stave to which the wire is attached and a second end hoop at the top and then to insert another stave opposite to the 80 first one at the opposite side of the circle with its ends inside the hoops D and its center outside of the wire. After this has been done the remaining staves may be inserted in the same manner.

The staves are preferably made narrow so that they will bend readily and I find that in a barrel of the capacity of the ordinary fruit barrel a width of about one and one-half inches and a thickness about the same as that 90 of the staves heretofore used answer the purpose very well and form a very strong receptacle.

By sinking the distending wire in the

grooves in the stayes the interior of the bar- grooves b upon their interior surfaces, and a rel is rendered smooth, and the wire is prevented from injuring the fruit or other contents which may be shipped or stored in the 5 barrel.

I claim-

A ventilated barrel having a smooth inner surface adapted to avoid injury to the contents, and consisting of the heads A, a single 10 row of staves or slats B having transverse

wire C, placed inside the barrel and sunken within the grooves b, said wire being adapted and serving to impart the bilge to the staves, substantially as specified.

WILLIAM H. CADWELL.

Witnesses:

H. M. MUNDAY, EDW. S. EVARTS.