L. F. THORPE.
TUMBLING BARREL.
APPLICATION FILED OCT. 29, 190

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UNITED STATES PATENT OFFICE.

LAUREN F. THORPE, OF NEW BRITAIN, CONNECTICUT.

TUMBLING-BARREL.

No. 800,692.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, Lauren F. Thorpe, a resident of New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Tumbling-Barrels, of which the following is a specification.

My invention relates to improvements in tumbling-barrels; and the objects of my improvement are simplicity and economy in construction and efficiency in use, particularly with reference to convenience of renewing certain parts when worn.

In the accompanying drawings, Figure 1 is

a plan view of my barrel. Fig. 2 is a broken sectional side elevation of the same.

A designates the driving-shaft, having at its upper end the flanged hub B, to the flange 3 of which the barrel head or bottom 4 is secured in any proper manner. As shown, the barrel is intended for use as an "upright" barrel, so called, the shaft being set at an incline, as usual in this class of barrels. On the top of the head or bottom 4 I prefer to | place a false bottom 5, which may readily be renewed from time to time as occasion requires or when it becomes thin by wear, whereby the main head or bottom never comes in contact with the articles being tumbled. This head or bottom, together with the false bottom, is drilled near its edge with as many holes as the barrel is to have staves. I have provided for a barrel with eight staves, as shown in the drawings, and hence there are eight holes to receive the tenons 6 or shouldered portion of the longitudinally-slotted posts 7. The said posts are square in crosssection or end view, and I provide each post with longitudinal slots or grooves 8 on two opposite sides, the said grooves extending inwardly from near the opposite corners of an ungrooved side of the post. Only one pair of grooves on each post is necessary; but I prefer to employ two pair of grooves, as shown, so as to make the posts reversible. These posts have their shouldered ends or tenons inserted in the holes in the head and secured therein by the nuts 9. If the posts are for an open-ended or upright barrel, as shown, and consequently have the tenons 6 at one end only, the ends without the said tenons are supplied with a hoop or rim 14, to which they are secured by bolts or rivets 10 to hold them securely in place and at a uniform distance apart, as shown.

The barrel-staves 11 are flat plates of metal either perforated or solid, according to the work intended, and are assembled to complete the barrel by sliding them edgewise into place between the respective posts with their edges 60 entering the grooves, as shown. If desired to further secure the staves, so as to prevent them from accidentally working up out of place, it may be done by any ordinary and simple means—as, for example, by drilling 65 and tapping holes 12 in the upper ends of the posts adjacent to the slots or grooves 8 and then putting in headed screws 13 with a portion of the head extended over a portion of the end of the staves near one edge, as shown. When 70 the staves become worn, they can be readily replaced with new ones. If the posts become worn on the side which comes within the barrel, the stave 11 and the rim 14 can be removed, the posts loosened by unscrewing the 75 nuts 9, and then turned a half-revolution to bring what was before their outer side into the inner side of the barrel. The rim and staves may then be replaced. A new false bottom can readily be substituted for a worn 80 bottom by removing the nuts 9 and posts 7 and then replacing the said posts.

I claim as my invention—

1. A tumbling-barrel comprising a rotary head, a series of longitudinally-slotted posts 85 secured to and projecting from the broad face of the said head, and a series of staves between the said posts with their edges resting in the slots of the said posts.

2. A tumbling-barrel comprising a rotary 90 head, a series of longitudinally-slotted posts secured by one end to the said head, a hoop or band connecting the opposite ends of the said posts, and a series of staves between the said posts with their edges engaged by the 95

slotted portions of the said posts.

3. A tumbling-barrel comprising a rotary head, a series of posts having tenons by which they are secured to the said head, a false bottom placed on the inner face of the said head 100 and secured thereto by the said posts, and a series of staves filling the spaces between the said posts.

LAUREN F. THORPE.

Witnesses: C. A. SHEPARD, JAMES SHEPARD.