

(No Model.)

J. WINTERBOTHAM.
HOOP GUIDE FOR BARRELS.

No. 460,346.

Patented Sept. 29, 1891.

Fig. 1.

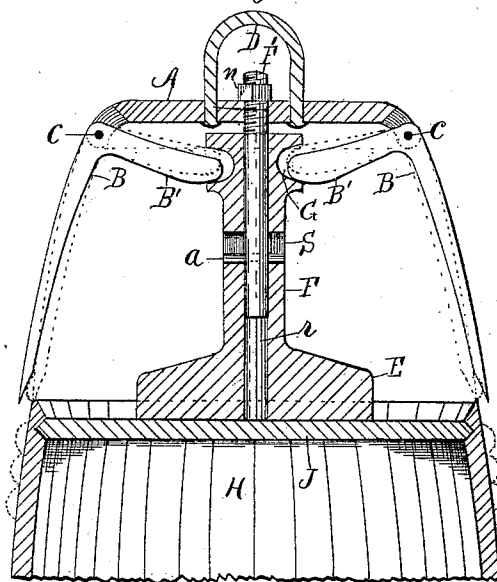
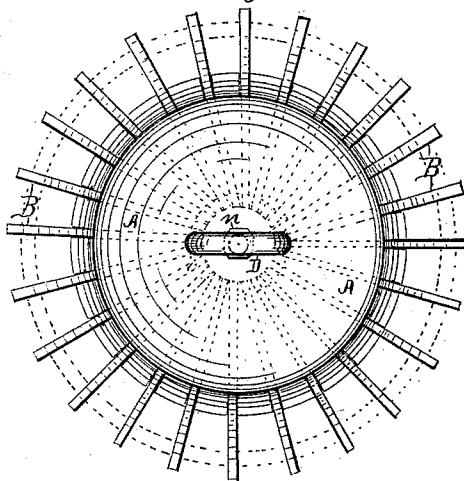


Fig. 2.



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HOOP-GUIDE FOR BARRELS.

SPECIFICATION forming part of Letters Patent No. 460,346, dated September 29, 1891.

Application filed March 26, 1891. Serial No. 386,476. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH WINTERBOTHAM, a citizen of the United States of America, residing at Joliet, in the county of Will and State of Illinois, have invented certain new and useful Improvements in Hoop-Guides for Barrels, of which the following is a specification, reference being had therein to the accompanying drawings, and the letters of reference thereon, forming a part of this specification, in which—

Figure 1 is a central vertical section, and Fig. 2 a top plan view as it would appear looking down on the top of the device.

This invention relates to certain improvements in a device for introducing hoops on a barrel, which improvements are fully set forth and explained in the following specification and claims.

Referring to the drawings, F represents a standard, having a broad base E for resting centrally on the head J of the barrel H, and has a central aperture r for receiving the rod F', which has vertical movement in said standard within the limits of the transverse slot s controlled by a pin a passing through said rod and slot, which slot-and-pin mechanism causes the extending ends of arms B to be brought in contact with the barrel when the device is being lifted off, so they may not displace and lift off hoops with which they may be in contact at that time. The upper end of said rod is screw-threaded and passes through the head A, into which it screws, and is provided with the nut n on its upper end, by means of which screw-thread and nut said head may have vertical adjustment on said rod, which is necessary in order to adapt the device for use on different-sized barrels, for by such vertical adjustment of said head the extending ends of the arms B may be placed in proper position for the sized barrel the device is applied to. Were the barrel shown in Fig. 1 smaller, it would be necessary to adjust head A farther up on rod F', so as to bring the extending ends of arms B to the proper distance from the barrel and so a hoop brought down over them would close them to and in contact with the barrel, and were the barrel larger than that shown then the said head would have to be adjusted lower on said rod for the like purpose.

D is a bail secured to said head A, and furnishes means for lifting the device on and off a barrel.

B B' represent a series of guide-arms, bell-crank in form and pivoted at their angle to the periphery of head A in such manner that their downwardly-extending part B will extend a trifle below the upper end of the barrel-staves, and so that when drawn toward each other or toward the barrel by means of a hoop being brought down over them they will close around the upper end of the barrel-staves, as shown in the broken lines, and thus form guides for guiding the hoop and introducing it on the barrel. The part B' of said guide-arms is weighted, so its weight will throw the lower ends of the arms B out from the barrel, as shown in the full lines, to the extent permitted by the annular groove G in the upper end of the standard F, which groove receives the inwardly-extending ends of the arms B'. Said groove is wide enough so the outer ends of arms B' may have vertical movement therein to the extent shown in the broken lines, and so as to permit the lower ends of arms B to be brought in contact with the barrel by means of hoops passing down over them and permit the guide-arms B B' to expand by their own gravity and be closed upon the barrel when a hoop is pulled down over the guide-arms B and guide the hoop to be introduced upon the barrel. Each guide-arm operates independently from the other, and in such manner that irregularities in form of the barrel do not hinder their operation.

In using this device it is intended to rest the base E of the standard F on the barrel-head J at about its center. Hoops are then placed over the device so as to come in contact with the outer sides of the guide-arms B B' and draw them in to be in contact with the barrel all around and form guides for conducting the hoops to the barrel successively, as may be desired.

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

1. The combination of the standard E F, having the central aperture r , slot s , and annular groove G, rod F', having its upper end screw-threaded and provided with nut n and having the transverse pin a for operating in

slot s, head A, having the bail D, and the gravity-operated guide-arms B B', pivoted to the periphery of said head, substantially as and for the purpose set forth.

5 2. In the hoop-guide for barrels shown and described, the combination of standard E F, having the annular groove G, the head A, connected to the upper end of said standard, and the gravity-operated guide-arms B B', the
10 part B' having its inwardly-extending end arranged in said annular groove and the parts B adapted to engage the barrel, substantially as and for the purpose set forth.

3. A guide for introducing hoops on a barrel, consisting of the combination of the series of gravity-operated guide-arms arranged concentrically with the barrel and pivotally connected to a support resting on the barrel-head and adapted to expand from the barrel
15 by their own gravity, substantially as and for the purpose set forth.

4. A guide for introducing hoops on a bar-

rel, consisting of the combination of the series of guide-arms arranged concentrically with the barrel and pivotally connected to a
25 support resting on the barrel-head and adapted to close upon the barrel by means of the gravity of a hoop passing down over them and be expanded from the barrel by means of their own gravity, substantially as and for
30 the purpose set forth.

5. A guide for introducing hoops on a barrel, consisting of the combination of a series of guide-arms arranged concentrically with the barrel in a conical form above its end and
35 pivotally connected to a support resting on the barrel-head and in combination therewith and adapted to engage and disengage the barrel, substantially as and for the purpose set forth.

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