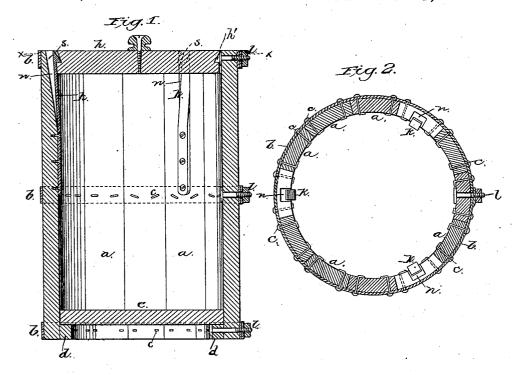
(No Model.)

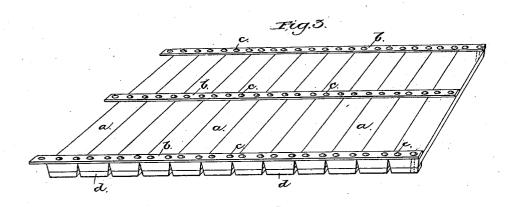
## F. S. OLMSTED & G. HUFFMAN.

Knockdown Return Barrel.

No. 243,604.

Patented June 28, 1881.





WITNESSES Villette Inderson, Philip Collasi. INVENTOR

Francis of Olmsted

by George Huffman

by Allement Smith

his ATTORNEY

## United States Patent Office.

FRANCIS S. OLMSTED AND GEORGE HUFFMAN, OF CEDAR FALLS, IOWA.

## KNOCKDOWN RETURN-BARREL.

SPECIFICATION forming part of Letters Patent No. 243,604, dated June 28, 1881.

Application filed April 13, 1881. (No model.)

To all whom it may concern:

Be it known that we, Francis S. Olmsted and George Huffman, citizens of the United States, resident at Cedar Falls, in the county of Black Hawk and State of Iowa, have invented certain new and useful Improvements in Knockdown Return-Barrels; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 is a vertical section of the barrel set up. Fig. 2 is a transverse section of the same on line xx, Fig. 1. Fig. 3 represents the staves stretched out.

This invention has relation to return-barrels for shippers' use in shipping dry material; and it consists, mainly, in the construction and novel arrangement of cylinder-staves connected externally by flexible bands having fastenings at their ends, and provided with internal end flanges or offsets for the bottom and spring-catches for the upper head, all as hereinafter shown and described.

In the accompanying drawings, the letters of a designate the staves, which are segments of a cylinder, and are suitably beveled on their sides to fit neatly together. b b are external flexible bands, to which these staves are secured by means of nails or pins c c, which are designed to be clinched or otherwise secured on the inside. Each stave is provided at its lower end with a flange or offset, d, internally arranged, forming, when the staves are cylindrically arranged, an annular ledge, upon which the bottom e of the barrel rests securely.

h represents the barrel-head, provided with the circumferential groove h', beveled above and straight below, into which groove the heads of the spring-catches hold.

In order to fasten the top or head h of the 45barrel, three or more of the staves are provided with longitudinal spring-catches k, seated in recesses n, made in said staves, and having beveled ends s near the ends of the staves. The recesses n are made on the inside of the 50 staves, and the spring-catches, also arranged inside, have their catch ends turned inward, as shown, so that when the head h is pressed into place it will first force back the catches, and these, reacting after the head has passed, will 55 extend over and secure it. The staves are arranged in cylindrical form, and secured by bolting the ends of the bands b b together, the bolts passing through a stave, and being secured by nuts, as indicated at l. When the 60 barrel has reached its destination and is unloaded and ready to be returned to the shipper, the ends of the bands b b are disconnected by taking off the nuts and withdrawing the bolts. The series of staves can then be pressed 65 out in flattened form, and with the flat heads can be stowed in compact form, occupying but little space comparatively. The bolts can be readily kept with the package by passing them through the perforated stave and applying 70 their nuts.

Having described this invention, what we claim, and desire to secure by Letters Patent, is—

The knockdown shipping-barrel consisting 75 of the cylinder-staves a, the flexible bands b, connected thereto, the fastenings c, connecting the staves to the bands, the band-connecting bolts, end flanges, d, spring-catches k, bottom e, and head h, substantially as specified.

In testimony whereof we affix our signatures in presence of two witnesses.

FRANCIS S. OLMSTED. GEORGE HUFFMAN.

Witnesses:
FRANK F. HAZLETT,
THOMAS LANDGRAF.