

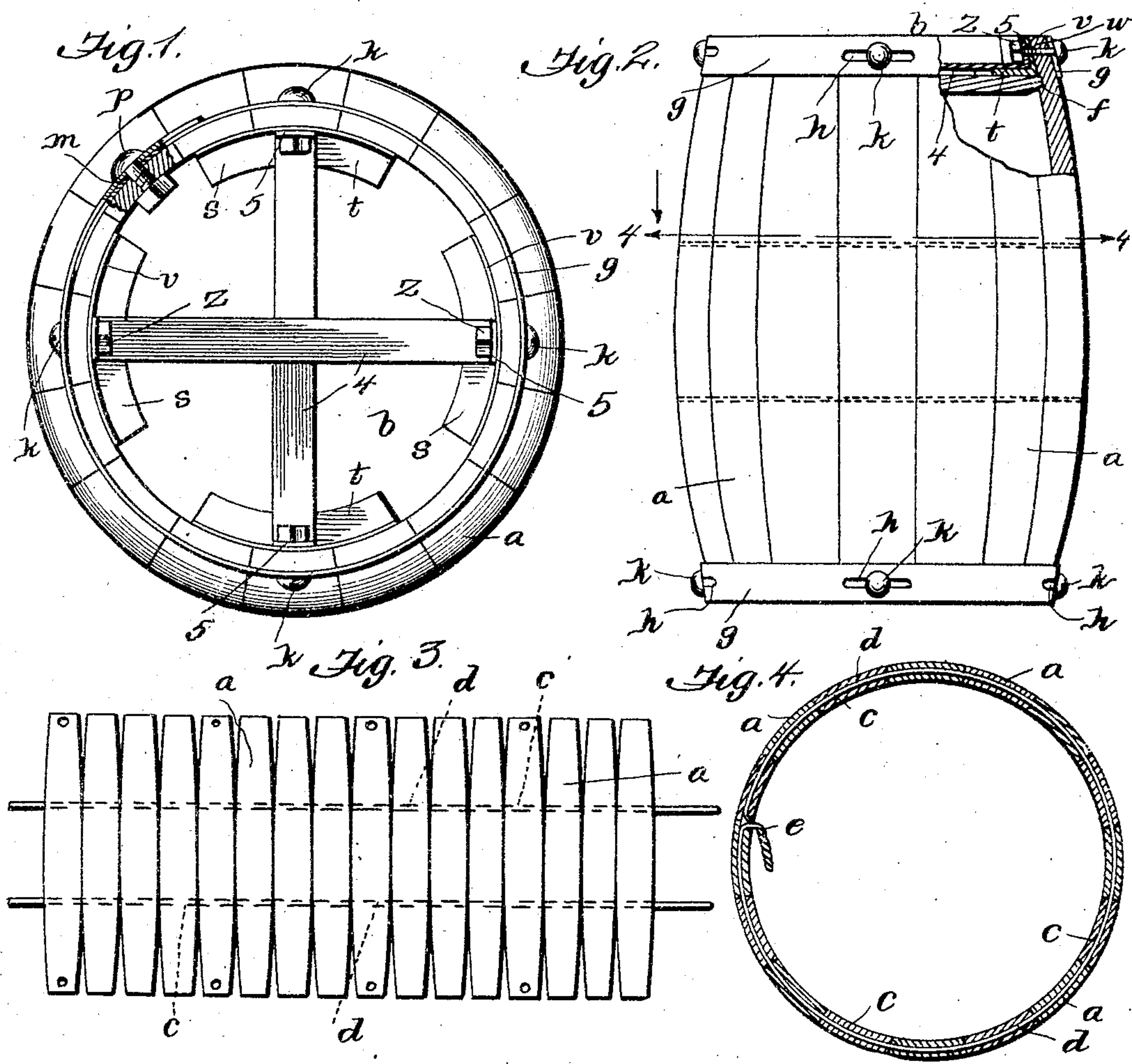
No. 786,208.

PATENTED MAR. 28, 1905.

J. GILMOUR & R. O'FLYNN, JR.

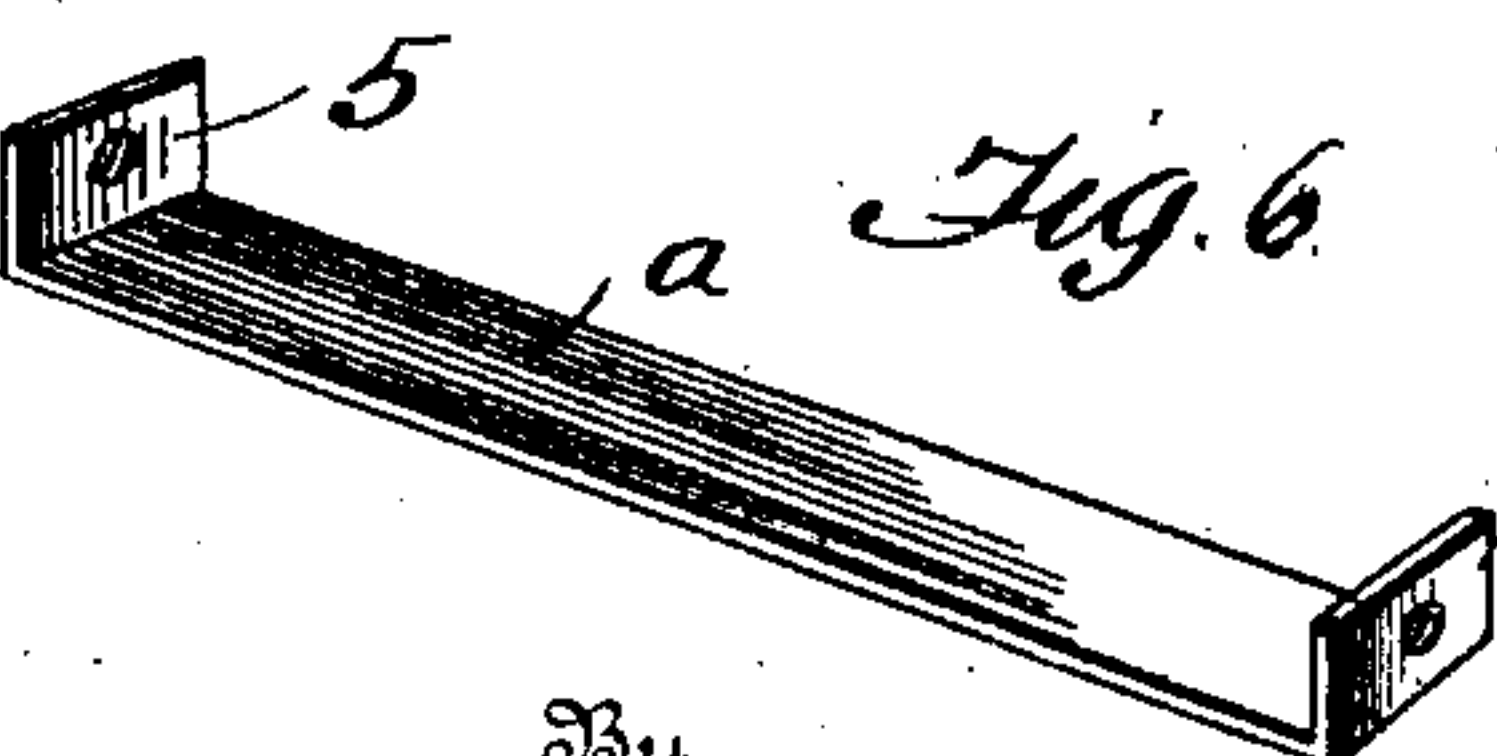
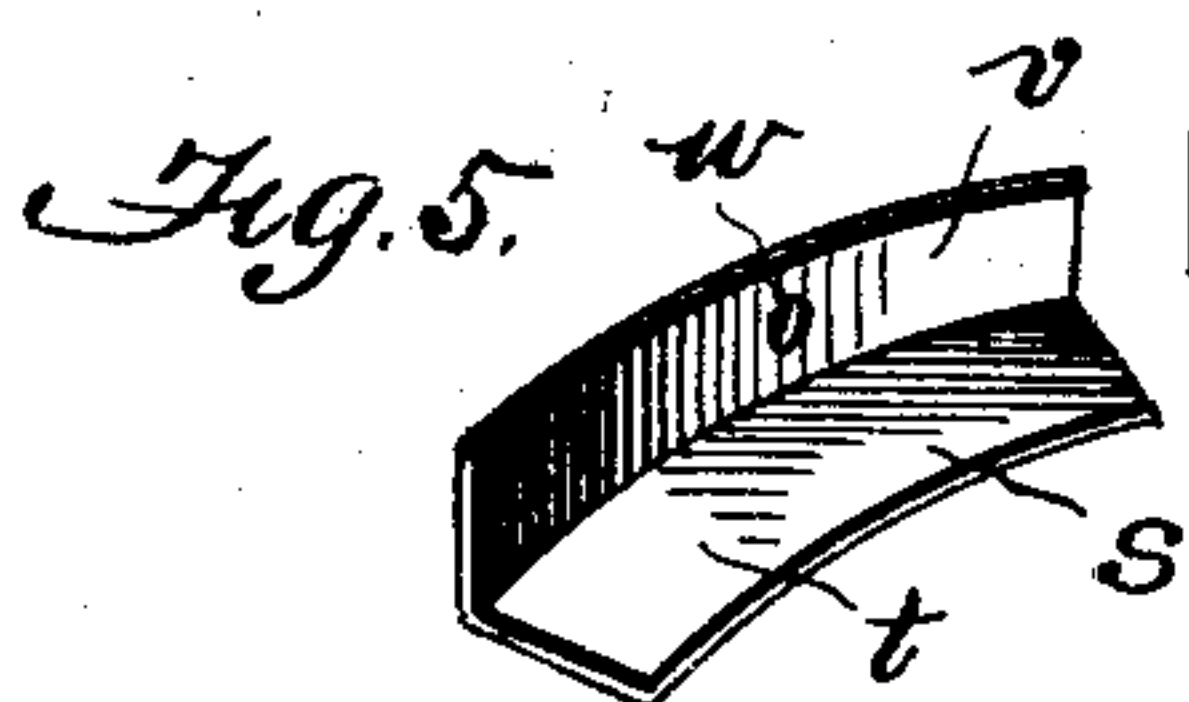
CASK.

APPLICATION FILED AUG. 11, 1904.



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# UNITED STATES PATENT OFFICE.

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## CASK.

SPECIFICATION forming part of Letters Patent No. 786,208, dated March 28, 1905.

Application filed August 11, 1904. Serial No. 220,377.

*To all whom it may concern:*

Be it known that we, JOHN GILMOUR and RICHARD O'FLYNN, Jr., citizens of the United States, and residents of Owensboro, in the 5 county of Daviess and State of Kentucky, have made a certain new and useful Invention in Casks; and we declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to 10 which it appertains to make and use the invention, reference being had to the accompanying drawings, and to letters and figures of reference marked thereon, which form a part of this specification.

15 Figure 1 is a plan view of the invention. Fig. 2 is a side elevation, partly broken away, in which the staves are shown wired together. Fig. 3 is a view of the stave portion flattened out, showing convex staves wired together. 20 Fig. 4 is a sectional view on line 4 4 of Fig. 2. Figs. 5 and 6 are detail views.

The invention has relation to knockdown casks adapted for use chiefly in the transportation of tobacco; and the invention consists 25 in the novel construction and combinations of parts, as hereinafter set forth.

In the accompanying drawings, illustrating the invention, the letter *a* designates the staves, and *b* the heads, of the cask. The 30 staves *a* are transversely perforated at *c c* to receive the wires *d*, which extend through all the staves which form the cask and are twisted or hooked together on the inside at *e*. The staves are provided with the usual inside 35 shoulder-grooves *f* at their ends to receive the heads.

Instead of using the inserted wires the staves may be connected by riveting straps thereto, said straps having end laps for fast- 40 tening purposes.

The hoop-straps *g* are designed to extend around the chimes of the cask, and they are provided with short slots *h* to engage the screw-bolts *k*, which are secured in the staves 45 at suitable distances apart. The end portions

of the hoop-straps are provided with perforations *m* for the fastening-screws *p*.

When the cask is rolled in form and the heads placed in position, the hoop-straps are tightened and secured. Then the metallic 50 chime-flanges *s* are put in position on the heads and are secured to the chimes of the staves by the screw-bolts *k*.

The chime-flange is formed with the flat stop portion *t* and extending at right angles 55 thereto the arc flange *v*, which has a perforation *w*. The arc flange is seated against the inside of the chime and is secured in place by means of the nut *z* of the screw-bolt *k*. Each of these chime-flanges is usually made long 60 enough to extend beyond the stave to which it is attached on each side, so that it forms a brace not only for the head to hold it in position if the chime-groove is loose, but also 65 from one stave to another laterally.

In order to further secure the head in position, especially when it is made in two or more pieces, the metallic cross-straps *4* are employed, these having flanged and perforated ends *5*, which are secured to the chime- 70 flanges and staves by the screw-bolts *k*. One of these straps extends across the head between the chime-flanges in one direction, while the other one extends across the head between the chime-flanges in a direction at right an- 75 gles, or nearly so, thereto.

When the head-straps *4*, chime-flanges *s*, and hoop-straps *g* are removed, the wires *d* are unhooked, and the cask-wall of staves can be laid out flat. A number of such casks can be 80 in a similar manner knocked down and the heads, hoops, straps, and chime-flanges laid thereon in such wise that they can be packed in small compass for storage or transportation to the place where the casks are to be 85 filled.

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

A knockdown cask consisting of a series of 90



flexibly - connected staves, exterior slotted  
hoop-straps, removable heads, interior remov-  
able arc - form chime - flanges, removable  
flanged straps extending at right angles to  
5 each other over each head between the chime-  
flanges and removable bolts connecting the  
exterior hoop-straps, staves, chime - flanges  
and flanged straps, substantially as specified.

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

JOHN GILMOUR.  
RICHARD O'FLYNN, JR.

Witnesses:

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