

(No Model.)

2 Sheets—Sheet 1.

J. LOPP.
BARREL.

No. 579,716.

Patented Mar. 30, 1897.

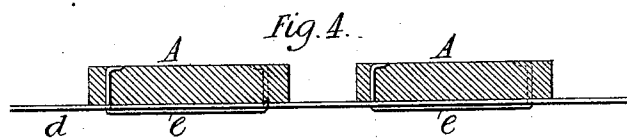
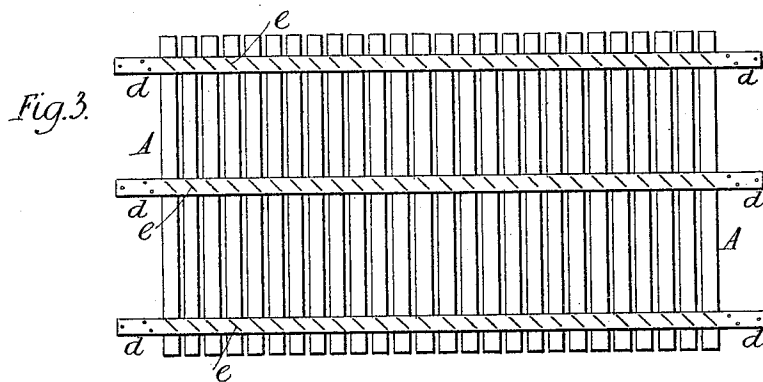
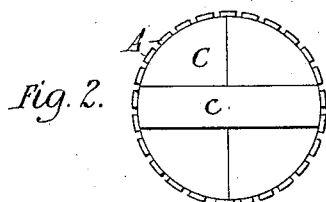
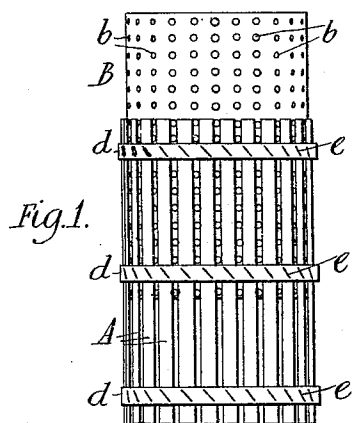
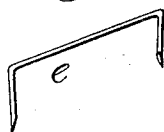


Fig. 5.



Witnesses

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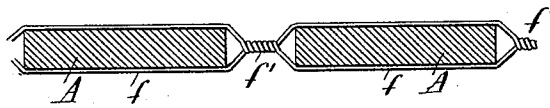
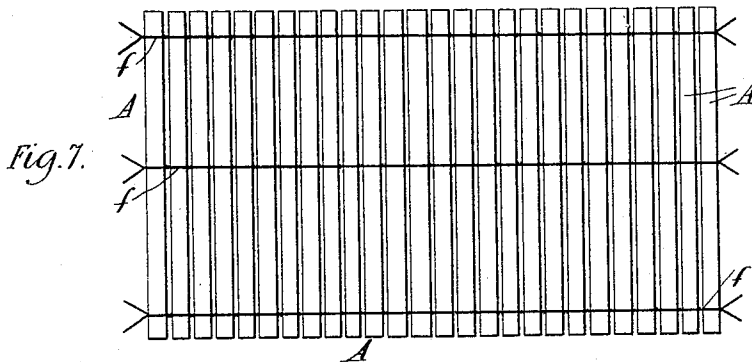
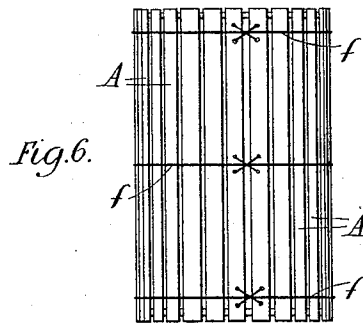


Fig. 8.

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JOHN LOPP, OF MONETT, MISSOURI.

BARREL.

SPECIFICATION forming part of Letters Patent No. 579,716, dated March 30, 1897.

Application filed June 20, 1896. Serial No. 596,264. (No model.)

To all whom it may concern:

Be it known that I, JOHN LOPP, a citizen of the United States, residing at Monett, in the county of Barry and State of Missouri, have invented certain new and useful Improvements in Barrels and Like Vessels; and I 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.

My invention is directed to improvements in collapsible or knockdown packing and storage vessels, and has for its object the production of a collapsible barrel or similar vessel possessing advantages in point of efficiency, economy in manufacture, and durability, and added to these the devices have means for insuring proper ventilation to the contents and occupy the minimum of space when in a built-up or a collapsed condition.

The nature of my invention will fully appear from a reading of the following detailed description, when taken in connection with the accompanying drawings, in which—

Figure 1 is a side elevation of my improved barrel or similar vessel, showing the lining partly withdrawn. Fig. 2 is a top view of the same. Fig. 3 is a view showing the barrel as it appears when in its knockdown condition. Fig. 4 is an enlarged cross-sectional view of a number of the connected staves. Fig. 5 is a perspective view of the form of staple employed. Fig. 6 is a side elevation of a barrel, showing a modified arrangement of connecting the staves. Fig. 7 is a view of the barrel in its collapsed condition, and Fig. 8 is an enlarged cross-sectional view of a number of the connected staves.

Referring to the said drawings, it will be observed that my improved barrel or similar vessel is cylindrical in shape, as contrasted with the bulge in the barrel as ordinarily constructed, and is formed of a number of staves A A, flexibly connected together in a manner to provide intermediate spaces for ventilating purposes. A lining B for the barrel is provided, which is perforated at intervals, the perforations being shown at b b and so arranged as to be exposed by the space between the staves, whereby is maintained a direct communication between the interior of the barrel and the outer air, whereby the contents

are afforded thorough ventilation. The heads C C of the barrel are each preferably in two parts and held to place and strengthened by a transverse strip c.

The staves, as before stated, are flexibly connected in a separated condition, one means consisting of metallic strips d d, preferably three in number, and staples e e for connecting the strips and staves. The staples e are pointed at their ends and are each driven through diagonally-disposed holes in the strips and through a stave, after which the ends are upset, as shown more clearly in Fig. 4. The diagonal placing of the staples not only precludes the splitting of the staves, but materially strengthens the connection, as will be evident. The ends of the strips are extended beyond the staves and perforated, and when the barrel is built up the said ends are lapped and secured by driving nails, screws, or the like therethrough into the end staves.

In Figs. 6 to 8 I have shown a modification of the means for connecting the staves, which consists in wires f f, embracing the strips and twisted at f' or between the strips to afford a separation of the latter. Beyond the end strips the wires are separated, and when the barrel is built up the separated ends are lapped and driven into the opposite strips, the ends of the wires being bent to permit of their being driven into perforations in the said strips, as shown. When in place, the lapped ends of the wires assume an X shape, which arrangement insures strength to the connection.

In either of the stave-connecting means a sufficient degree of flexibility is present to enable the staves to be placed flat, as shown in Figs. 3 and 7, or to be rounded into the form of a barrel, as in Figs. 1 and 6. When in the collapsed condition, the barrels may be transported readily and cheaply by reason of the small amount of space required, and when the barrels are complete or built up the cylindrical shape, the diameter being the same throughout, enables them to be placed in a much smaller space than that occupied by the same number of barrels of the usual construction.

I claim as my invention—

1. A collapsible barrel or similar vessel of cylindrical shape, comprised of a number of staves, flexible strips connecting said staves

in a separated condition, and a perforated lining for the barrel the perforations being exposed between the staves.

2. A collapsible barrel or similar vessel
5 made up of separated staves connected together by flexible metallic strips and pointed staples driven diagonally through the strips and staves and having their ends upset, means for connecting the ends of the strips, and a

lining having perforations coincident with the spaces between the staves. 10

In testimony whereof I affix my signature in presence of three witnesses.

JOHN LOPP.

Witnesses:

MERRILL W. JOHNSON,
HENRY H. KIRKPATRICK,
JOE. W. MCKEE.