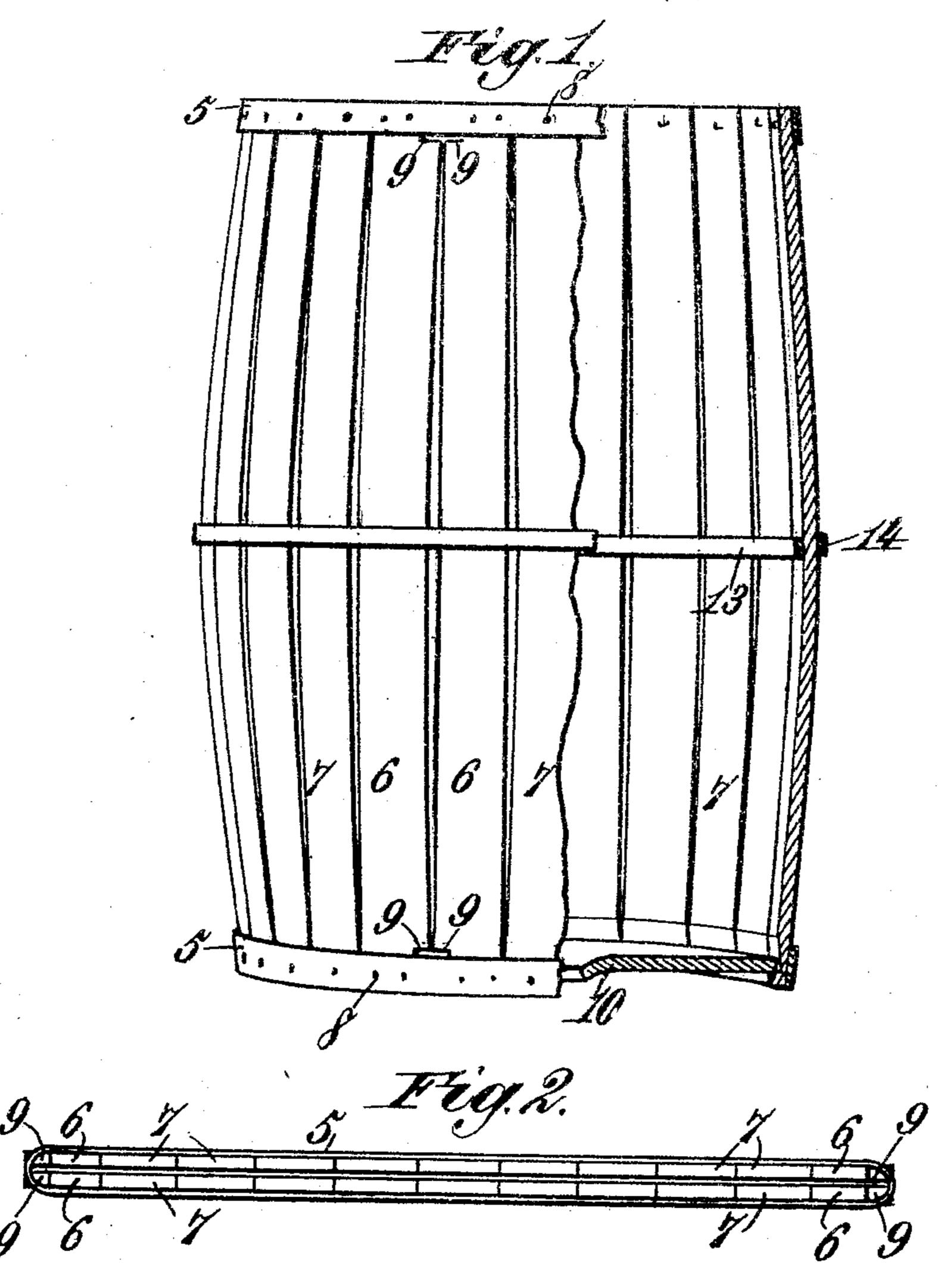
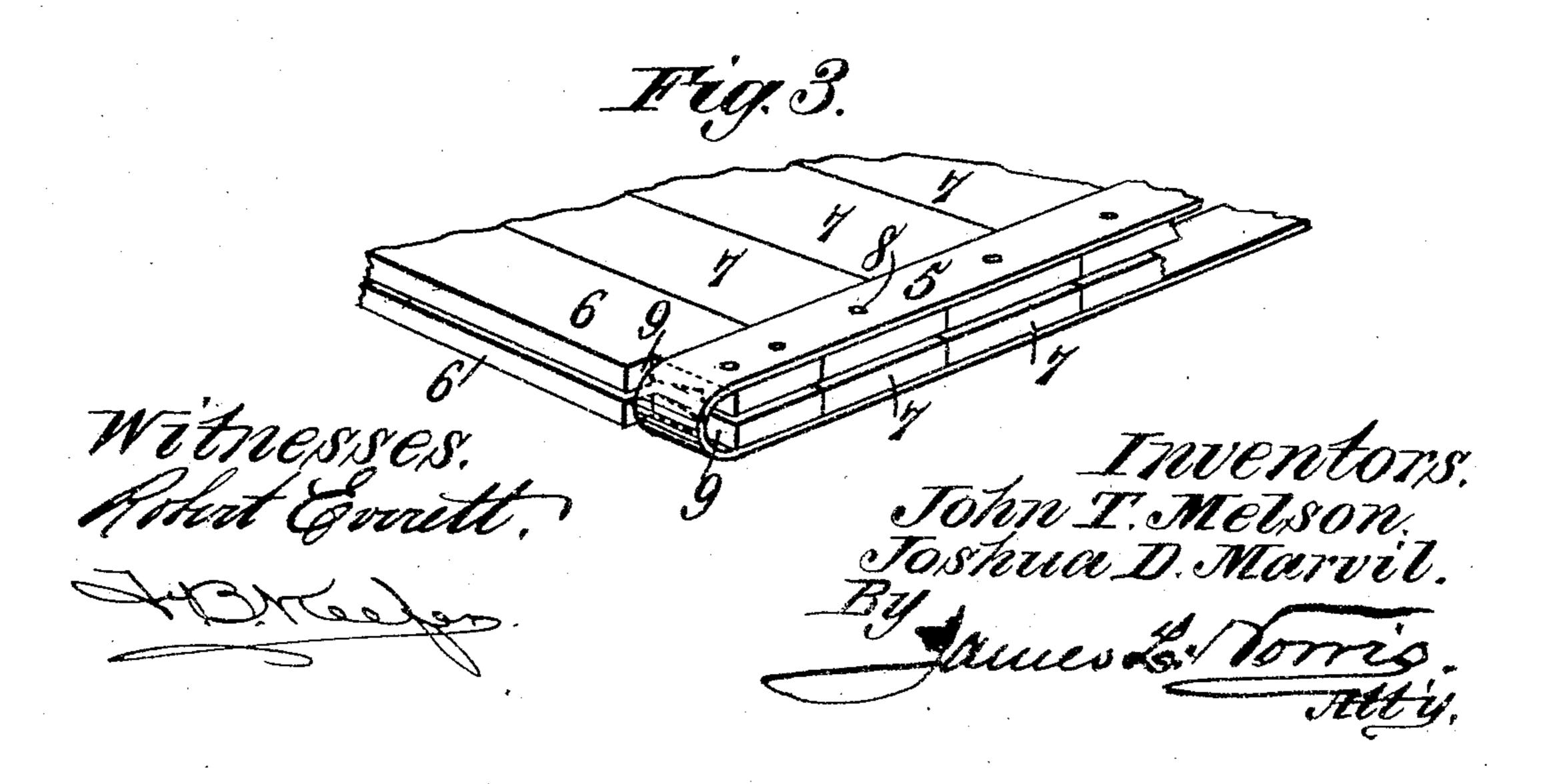
J. T. MELSON & J. D. MARVIL.

BARREL.

APPLICATION FILED APE. 30, 1904.





## United States Patent Office.

JOHN T. MELSON AND JOSHUA D. MARVIL, OF LAUREL, DELAWARE, ASSIGNORS TO COLLAPSIBLE BARREL CO., OF LAUREL, DELAWARE, A CORPORATION OF DELAWARE.

## BARREL.

SPECIFICATION forming part of Letters Patent No. 779,863, dated January 10, 1905.

Application filed April 30, 1904. Serial No. 205,770.

To all whom it may concern:

Be it known that we, John T. Melson and Joshua D. Marvil, citizens of the United States, residing at Laurel, in the county of Sussex and State of Delaware, have invented new and useful Improvements in Barrels, of which the following is a specification.

This invention relates to barrels, and particularly to that kind known as "collapsible" or "knockdown" barrels, the object of the invention being to provide a device of such character that is simple in construction, capable of easy manufacture, and that can be readily set up for use in the shipment of various kinds of articles and as readily collapsed when empty for return shipment.

Our improved barrel involves a plurality of staves and a band surrounding and fastened to said staves, two substantially diametrically opposite pairs of staves having registering recesses in their side edges crossed by said band and the remaining staves being unrecessed, the structure being one that can be inexpensively and readily made.

In the drawings accompanying and forming a part of this specification we represent clearly one simple adaptation of the invention, which we will set forth in detail in the following description; but we do not restrict ourselves to the precise showing thus made, for certain variations as to some points may be adopted within the scope of our claims succeeding said description.

Referring to the drawings, Figure 1 is a sectional side elevation of a barrel including our invention and showing the same set up for the shipment of various kinds of articles. Fig. 2 is a bottom plan view of the barrel collapsed. Fig. 3 is a detail perspective view 40 of a portion of said barrel.

Like characters refer to like parts in the several views.

The barrel shown in the drawings is represented as including a plurality of staves of any desirable number and made from the material usually employed for the formation of barrels. The staves are surrounded by one or more bands. We have shown two of such

bands, each being denoted by 5. Said bands are preferably made from sheet metal in order that they can be easily flexed to flatten down or collapse a barrel. The two bands 5 in the present case are adapted to be flexed at diametrically opposite places, as shown, for example, by Fig. 2, and to readily bring 55 about such flexing we show staves, as 6, of a peculiar formation. Each of the other staves is denoted by 7.

All of the staves hereinbefore mentioned are permanently connected with the bands or 60 hoops 5, and for this purpose nails, as 8, may be provided, said nails being driven through the bands and staves from the outside of the barrel and clenched on the inside thereof.

As previously indicated, the staves 6 are of 65 peculiar construction. There are represented four of these staves 6, arranged in coöperating pairs, and each is shown as having in an edge at the opposite ends thereof recesses or notches, as 9, and it will be seen that the 70 bendable or flexible bands or hoops extend across said recesses or notches and that the latter are located in the adjacent edges of the two pairs of staves 6. The latter are represented as being situated at diametrically op- 75 posite sides of the barrel, whereby the bands which surround the several staves will present at diametrically opposite places free portions, which serve as effective hinges to quickly assure the collapsing or flattening 80 down of the barrel. The barrel is represented as collapsed in Fig. 2, and when in such condition the recesses or notches 9 in the several staves 6 receive the bent or hinged portions of the two bands 5.

To set up the barrel, the same is initially shaped to an approximately cylindrical position, during which the two pairs of staves 6 will be sprung into the spaces between the staves 7 at opposite sides of said staves 6. 90 After the barrel is set up it may be provided with heads, only the bottom head being represented and the same being denoted by 10. Said head 10 is fitted in a chime in the barrel. The head, however, may be associated with 95 the barrel in any other desirable way.

After the barrel is set up we may introduce thereinto a hoop, as 13, which is driven in place thereinto in order to expand the barrel centrally outward as well as separate the staves from each other to provide a ventilated "bulge barrel." On the exterior of the barrel we may drive a hoop, as 14. The two hoops 13 and 14 are preferably, though not necessarily, made of wood. As a matter of fact, they may be omitted and other means may be provided for holding the barrel securely in its working relation.

To collapse the barrel, the hoops 13 and 14 are removed, as is the head 10. When the hoops and head are removed, the several notched staves 6 can be easily sprung out of the spaces they occupy, and when this is done the bands 5 can be flexed, the flexure occurring in said bands at the places where they cross the respective opposing notches or recesses 9. By reason of the provision of the two pairs of staves 6 having notches in their adjacent edges it will be apparent that the barrel can be collapsed practically to a flattened containing the said of the provision, as indicated best in Fig. 2, so that

when in such collapsed condition it will occupy as small a space as possible.

We claim—

1. A barrel consisting of a plurality of staves, and a band surrounding and fastened to said 3° staves, two substantially diametrically opposite pairs of staves having registering recesses in their side edges crossed by said band, the remaining staves being unrecessed.

ct, they may be omitted and other means may a provided for holding the barrel securely in sworking relation.

To collapse the barrel, the hoops 13 and 14 re removed, as is the head 10. When the boops and head are removed, the several said bands, the remaining staves being unre-40

cessed.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

JOHN T. MELSON. JOSHUA D. MARVIL.

Witnesses:
CHARLES G. OTWELL,
IRA H. MELVIN.