W. B. Elliott,

Making Barrels.

No. 101,242. Patented Mar. 29. 1870.

Fig. 1.

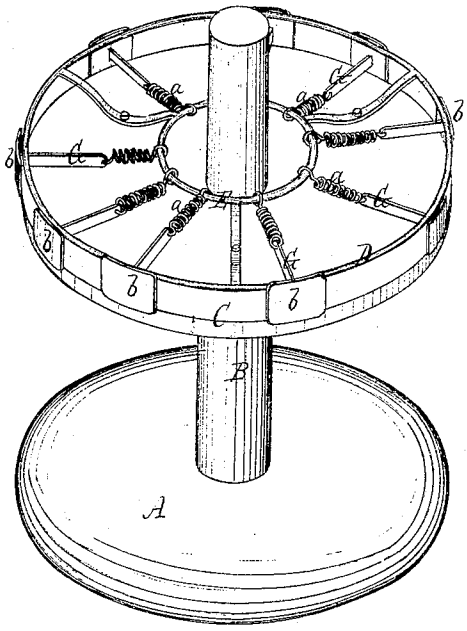
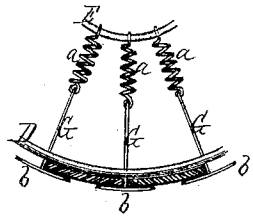



Fig. 2.




Witnesses.

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# United States Patent Office.

WILLIAM B. ELLIOTT, OF CORNING, NEW YORK.

*Letters Patent No.* 101,242, *dated March* 29, 1870.

## IMPROVEMENT IN APPARATUS FOR SETTING UP BARRELS.

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern:*

Be it known that I, WILLIAM B. ELLIOTT, of Corning, in the county of Steuben and State of New York, have invented a certain new and useful Improvement in Apparatus for Setting up Barrels, Casks, Tubs, Pails, &c., of which the following is a specification, referring to the accompanying drawings.

### *Nature of Invention.*

This invention consists in the arrangement of parts in the apparatus whereby the staves are held in place while the head and hoops are being applied, as hereinafter described.

### *General Description.*

In the drawings—

Figure 1 is a perspective view of the apparatus; and

Figure 2, a diagram showing the method of holding the staves.

A is a circular base, of any desired size;

B is a standard rising from the same; and

C is a disk or head, keyed or otherwise attached to the standard.

On the disk is mounted an outer ring, D, and within this an inner ring, E, of smaller size.

To the ring E is attached a series of springs, *a a*, coiled or of other form, and to these, in turn, is attached a series of headed arms, G G, which extend out through the space between the outer ring and the face of the disk, and have their heads *b b* drawn against the peripheries of the same. These heads are made very thin, and in their longest diameter they are made concentric, to fit the circle, while in their shortest diameter they simply serve as flanges, to hold from being drawn through.

The action is as follows:

The arms G G and springs *a a*, being elastic, are drawn out or stretched, one by one, sufficiently to insert the edges of the staves between the heads *b b* and the edge of the disk, as shown in fig. 2.

The staves are set up, one after another, with the lower ends resting against base A, as a guide, and with the heads *b* clasping them in place against the disk C. When the circle is complete, the upper ends of the staves extending above the apparatus are drawn together in a compact circle, embracing the head of the barrel, and one or more hoops are applied and driven. When this is done the unfinished barrel or other vessel is removed, and, being thus connected, is finished without trouble.

By this means barrels or other vessels are very easily and expeditiously put together. The use of the rings D E allow the circular sliding of the arms and springs to any desired position to clasp the edges of wider or narrower staves, as the case may be. This is an important advantage, for if fixed radially in place they would be adapted only to staves of a given width.

Another important feature is the use of thin heads *b* made concentric with the outer circle, and fitting closely thereto. By this means, when all the staves are wide, a portion of the heads may remain unused and be covered by the staves outside, offering no impediment thereto.

The circular base A is also a necessity, used in connection with the clasping arrangement, serving as a guide or guage to keep the stave in place when set up.

If desired, the mechanism connected with the disk C may be located on the under side, instead of the upper.

I design, also, in some cases, to make the outer ring D expansible to different diameters, by making it in sections, and connecting them with a suitable expanding device.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination and arrangement of the disk C, outer and inner rings D E, the headed arms G G, and springs *a a*, the whole operating as described.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

WM. B. ELLIOTT.

Witnesses:

R. F. OSGOOD,

GEO. W. MIATT.