

# THO'S HANVEY

## IMPT'S IN BARREL'S.

110232

PATENTED DEC 20 1870

Fig.1

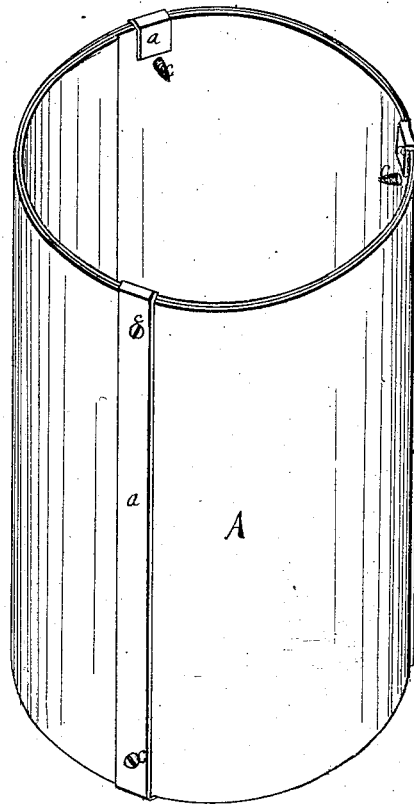


Fig.2

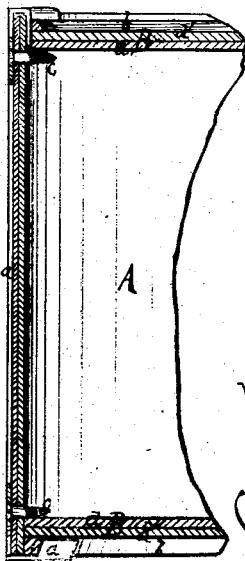
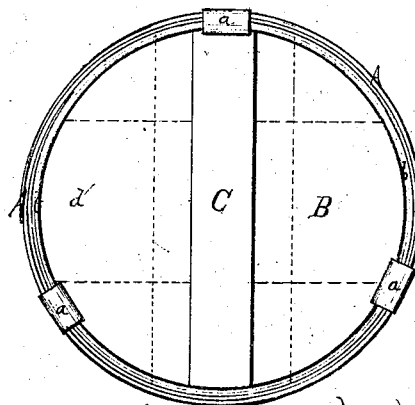


Fig.3



Witnesses.

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THOMAS HANVEY, OF ELMA, NEW YORK.

Letters Patent, No. 110,232, dated December 20, 1870.

## IMPROVEMENT IN BARRELS.

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

I, THOMAS HANVEY, of Elma, in the county of Erie and State of New York, have invented certain new and useful Improvements in "Barrels and similar Receptacles," of which the following is a specification.

### *Nature of the Invention.*

The invention relates to straight barrels, of two or more thicknesses, one overlying another, and consists in putting lengthwise on the outside of such barrels hoops or clamps, secured by screws, said screws also forming the rests for the heads.

It also consists in the formation of the heads of two thicknesses, with the grain crossing, as hereinafter described.

### *General Description.*

In the drawing—

Figure 1 is a perspective view.

Figure 2, a vertical longitudinal section.

Figure 3, a view of the bottom of a barrel.

A is the body of the barrel, made of two thicknesses of cut stuff, which are bent around a cylinder, one overlying the other, the ends overlapping and secured together.

*a a a* are straight metal hoops or clamps, placed lengthwise on the outside of the barrel, the ends bent over the chine of the barrel; the bottom ends inclosing the usual inner hoop *b*, which retains this head in place, shown in fig. 3. The other or top ends of the hoops are simply bent inside the top of the barrel, as shown in fig. 1. These hoops can be made of wood, but metal hoops possess an advantage over wooden ones, for, if the barrel shrinks, the hoops will bend and not pull out, as wooden ones would be apt to do.

*c c* are screws, which fasten the hoops or clamps on the barrel, the upper and lower screws projecting through the barrel, and forming rests for the heads to sit on, as shown in figs. 1 and 2. This I believe to be a novel and important feature of my invention, as it does away with the usual grooves or shoulders in the barrel.

The heads B B' are of two thicknesses, *d d'*, of cut

stuff, (see fig. 2,) made full-sized or square-edged, and not beveled, as is usual. They are secured together with the grain of the wood of the two pieces running in opposite directions, (see dotted lines, fig. 3,) so that shrinkage can have no effect on the circumference.

This is a very important part of my invention, as it prevents warping, and keeps the periphery of the head perfectly round.

A cross-piece, *O*, is nailed on and through the heads, which aids in strengthening them, and keeps the weight of the barrel off the chins, as it comes flush to the edge. All wood shrinks, more or less, sidewise with the grain, but never in its length, and, by thus crossing the grain of the upper and lower thicknesses, a perfect circle of the head is preserved. Its cheapness over others is secured by making it of cut stuff instead of sawed.

The barrels made in this way possess great advantages, viz., simplicity of form, cheapness of construction, and the safety with which they can be packed one on top of the other, the perfect arch of the barrel allowing it to resist very great pressure.

The novelty in my invention consists in the application of these straight hoops with bent ends to a straight barrel, composed of two thicknesses, the fastening-screws forming the seats for the heads.

It also consists in the construction and arrangement of the heads, made of two or more pieces, and fastened together crosswise of the grain, and having square instead of chamfered edges.

What I claim, is—

The two-ply barrel, the heads of which are composed of two or more thicknesses, in combination with the hoops or clamps *a a a*, arranged on the outside, and secured to the barrel by screws *c c*, said screws forming the rests for the heads, the whole constructed substantially as and for the purpose set forth.

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

THOS. HANVEY.

Witnesses:

J. R. DRAKE,

C. N. WOODWARD.