

H. C. SHEFFIELD.

BARREL.

No. 175,177.

Patented March 21, 1876.

Fig. 1.

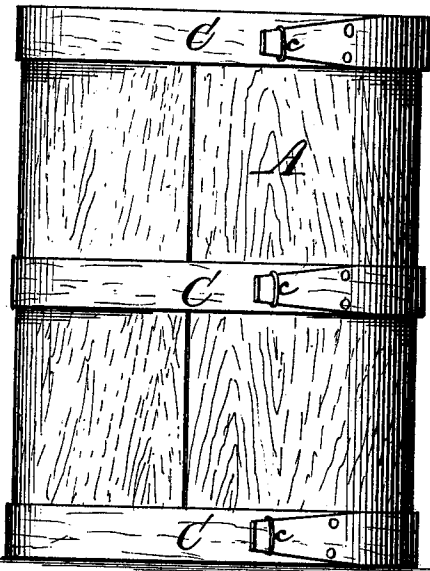


Fig. 2.

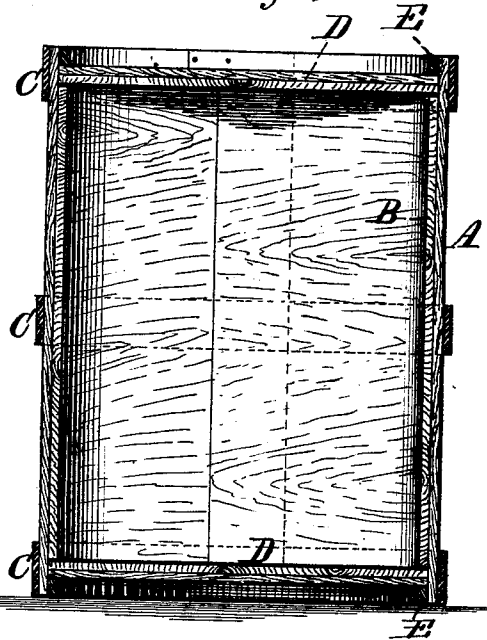


Fig. 3.

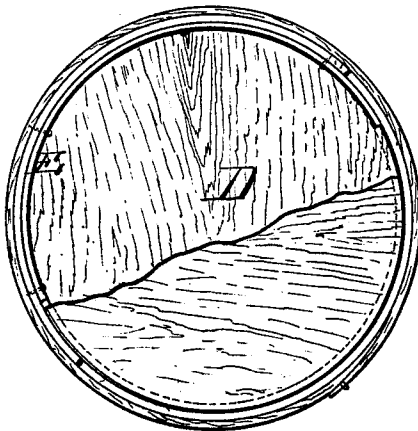
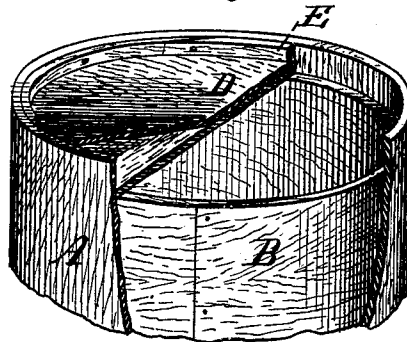


Fig. 4.



Attest:

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UNITED STATES PATENT OFFICE.

HENRY CLAY SHEFFIELD, OF CINCINNATI, OHIO.

IMPROVEMENT IN BARRELS.

Specification forming part of Letters Patent No. 175,177, dated March 21, 1876; application filed January 3, 1876.

To all whom it may concern:

Be it known that I, HENRY CLAY SHEFFIELD, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a certain Improvement in Barrels, of which the following is a specification:

This invention relates to barrels, casks, and similar packages made of thin sheets or veneers of wood.

My improvement consists in making such packages of two hollow cylinders of veneers, rolled one upon the other, and suitably hooped and headed, the exterior cylinder, formed of one or more pieces of veneer, having the grain of the wood running vertically—that is, parallel to the axis of the barrel—while the grain of the wood of the inner cylinder, which consists of a single piece, runs horizontally, or at right angles to that of the outer one.

Double-walled barrels of this kind, as heretofore made, had in some cases the grain of the wood of one cylinder cross that of the other, but in every instance of this kind brought to my knowledge the grain of the exterior cylinder run horizontally or circularly, and the interior cylinder was composed of a series of staves.

A barrel thus made is of very little practical value, because, under the rough usage to which such packages are subjected, the exterior cylinder is apt to split around, which gives an opportunity to the hoops to work loose, causing the barrel to fall to pieces. This and other difficulties are fully overcome by the method of construction adopted by me. It will also be seen that the tendency of the interior cylinder to expand will keep the hoops tight, and that, even should it split around, its efficacy will be maintained, because it is confined at both ends between the heads of the barrel; in fact, it may be formed of several rings without seriously affecting the strength and durability of the barrel, although I prefer to make it of a single piece of veneer, as heretofore stated.

In the annexed drawings, Figure 1 is an elevation of my improved barrel. Fig. 2 is a vertical section of the same. Fig. 3 is a plan

or end view, portion of the upper disk of the head being shown as broken away to illustrate the grain of the wood of the lower or interior disk thereof. Fig. 4 is a sectional perspective view of one end of the barrel, fully showing how the grain of the wood runs in the different parts.

The same letters of reference are used in all the figures in the designation of identical parts.

In constructing this barrel the inner cylinder A is first rolled upon a suitable former, then the outer cylinder B is rolled up on the interior cylinder, and the hoops C applied at the same time, and nails driven through the hoops at proper intervals. The ends of the interior cylinder may be chamfered down, as shown, and made to overlap each other. The ends of the hoops are also lap-jointed, and the exterior point is fastened down by a staple, *e*, as shown in Fig. 1. The interior cylinder has the grain of the wood running circularly at right angles to the vertical grain of the exterior cylinder, which is also somewhat longer, so that the former provides a shoulder at each end on the interior of the barrel. The heads D are placed upon these shoulders, and secured by the linings E. Each head is composed of two circular pieces of veneer, so secured to each other that the grain of one piece crosses that of the other.

I am aware that boxes and similar packages have heretofore been made of several layers of veneers of wood glued together, and the grain of one layer crossing that of the adjacent layers. From these packages my barrel is clearly distinguished, in this, that it is composed of separate layers of veneers merely rolled one upon the other without glueing them together, which is the only practical mode of construction in large packages. Moreover, in the boxes referred to the outer layer of veneers had the grain run invariably in a circular manner, which arrangement would render a barrel or other large package embodying it practically useless, for the reasons already stated.

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

As a new article of manufacture, the barrel, substantially as described, constructed of a separate inner veneer-shell having the grain run circularly, a separate layer of veneer merely rolled upon the inner shell, and having the grain run lengthwise of the barrel, hoops for holding the body of the barrel together, and heads.

In testimony whereof I have signed my name to the foregoing specification in the presence of two subscribing witnesses.

HENRY CLAY SHEFFIELD.

Witnesses:

B. EDW. J. EILS,
JOHN EILS.