

O. H. P. CORNELL.
BARREL.

(No Model.)

(Application filed Dec. 6, 1900.)

Fig. 1.

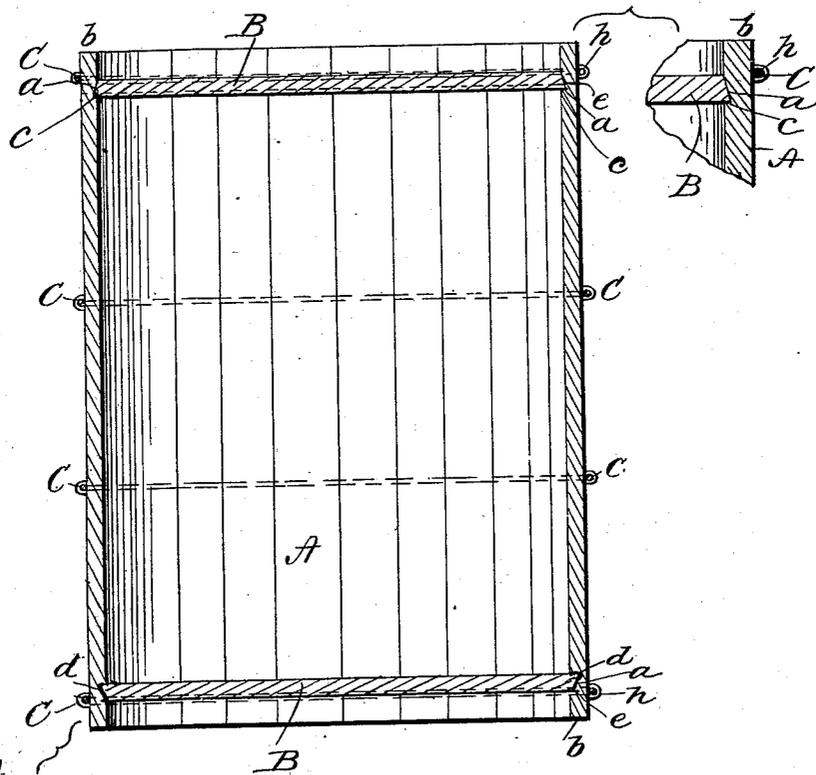
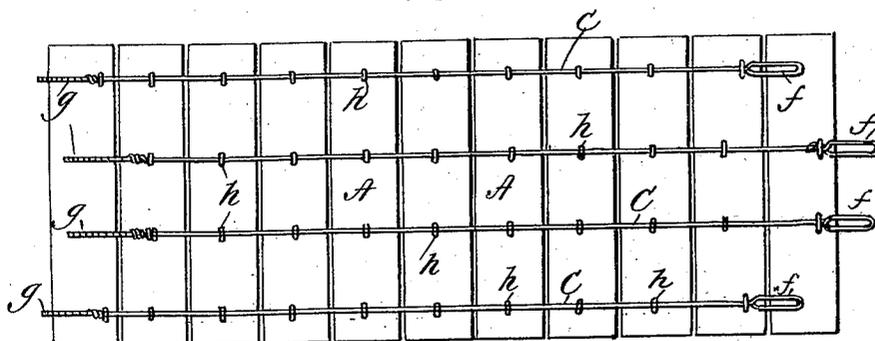
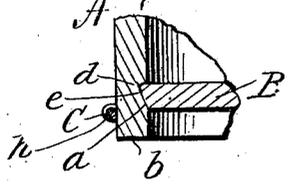


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

OLIVER H. P. CORNELL, OF BROOKLYN, NEW YORK.

BARREL.

SPECIFICATION forming part of Letters Patent No. 679,728, dated August 6, 1901.

Application filed December 6, 1900. Serial No. 38,922. (No model.)

To all whom it may concern:

Be it known that I, OLIVER H. P. CORNELL, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Barrels; 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 10 appertains to make and use the same.

My invention relates to barrels, has especial reference to that class of barrels known to the trade as "knockdown" barrels, has for its object the production of a barrel at a minimum cost, but possessed of a maximum strength, which will resist the wear and tear of transportation and handling when filled to the greatest degree, and consists in certain improvements in construction, which will be 15 fully disclosed in the following specification and claims.

In the accompanying drawings, which form part of this specification, Figure 1 represents an elevation showing the outside of the staves 25 of a barrel assembled and connected to the hoops, and Fig. 2 is a vertical section of a barrel on an enlarged scale.

Reference being had to the drawings and the letters thereon, A indicates the staves 30 of the barrel, which are of uniform width and preferably provided with straight parallel sides, beveled inwardly to form a cylindrical body. The staves may, however, be swelled in the center to form a bilge, if desired. At 35 each end of each stave is a croze *a*, which is inclined from the inner end of the chime *b* or from the surface of the stave to a depth of about an eighth of an inch and may form a right-angled shoulder *c*, or it may be concave, 40 as at *d*.

The heads B B are turned on their periphery *e* to match or correspond with the incline and contour of the croze.

C C C C indicate the hoops of the barrel, 45 which are made of wire, with a loop *f* formed at one end, and at the opposite end is a hook *g*, provided with teeth or serrations with which the loop engages. The hoops are secured to the staves by loops *h*, formed by 50 staples driven into the staves astride the hoops, so that the hoops slide freely on the

staves as the hoops are drawn taut and the edges of the staves brought together to form tight joints. The hooks *g* of the end hoops project beyond the first stave at one end of 55 the barrel-mat, and the loops *f* are set back upon the last stave at the opposite end, and the hooks of the two intermediate hoops are set back on the first stave and the loops thereof projected beyond the last stave at the opposite end, as shown in Fig. 1, the object of 60 which is to break the joints of the hoops and to enable each end stave to be secured to two of the hoops at opposite quarters of the staves—that is to say, the first stave at one 65 end of the mat is stapled to the end hoops and at the inner quarter, and the last stave at the opposite end is stapled to the intermediate hoops and at the outer quarter of the stave. 70

The end hoops C are applied opposite the outer face of the heads to provide for the insertion of the heads and to afford strength to the chime of the barrel in handling with grappling-irons and in "up-ending" the barrel. 75 It will be observed that the chime is the full thickness of the stave, and thereby avoids the necessity of applying a filler to strengthen the chime, and the hoop is applied so that it draws toward the center of the barrel evenly 80 throughout its circumference, thereby preventing the accidental displacement of the head, and produces a strong and durable barrel capable of resisting rough usage, such as cement, lime, and other barrels receive in 85 handling.

The barrels are designed to be made by assembling the staves on the hoops provided with heads and shipped flat, as shown in Fig. 1, and then put together by unskilled labor 90 wherever they are to be filled.

When empty, the interlocking ends of the hoops are disconnected, the body again flattened, and returned for refilling.

Having thus fully described my invention, 95 what I claim is—

1. An improved article of manufacture, a knockdown barrel composed of staves and a plurality of hoops having interlocking ends, one of said ends having an elongated loop and 100 the opposite end provided with a hook, and loops connecting the hoops to the staves to

slide thereon, the loops and the hooks of the hoops being arranged to break joints, as and for the purpose described.

2. An improved article of manufacture a
5 knockdown barrel, composed of staves and a plurality of hoops with interlocking ends, one of said ends having an elongated loop and the opposite end provided with a hook, and loops connecting the hoops to the staves to
10 slide thereon, two of the hoops being secured by loops at the outer quarter of one stave and two hoops secured by loops at the inner quarter of the adjacent stave.

3. An improved article of manufacture, a
15 knockdown barrel, composed of staves having a croze at each end inclined from the inner end of the chime or the surface of the stave, the length of the croze being equal to

the thickness of the barrel-head, and heads having the periphery beveled to the incline 20 of the croze; in combination with wire hoops movably connected to the staves, the end hoops being applied opposite the outer face of the heads and secured by loops at the inner quarter of a stave at one end thereof and 25 at the outer quarter of a stave at the opposite end thereof, and hoops secured to the staves at the outer quarter of one stave at one end and to the second stave therefrom at the opposite ends. 30

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

OLIVER H. P. CORNELL.

Witnesses:

ANDERSON PRICE,
NEAL H. EWING.