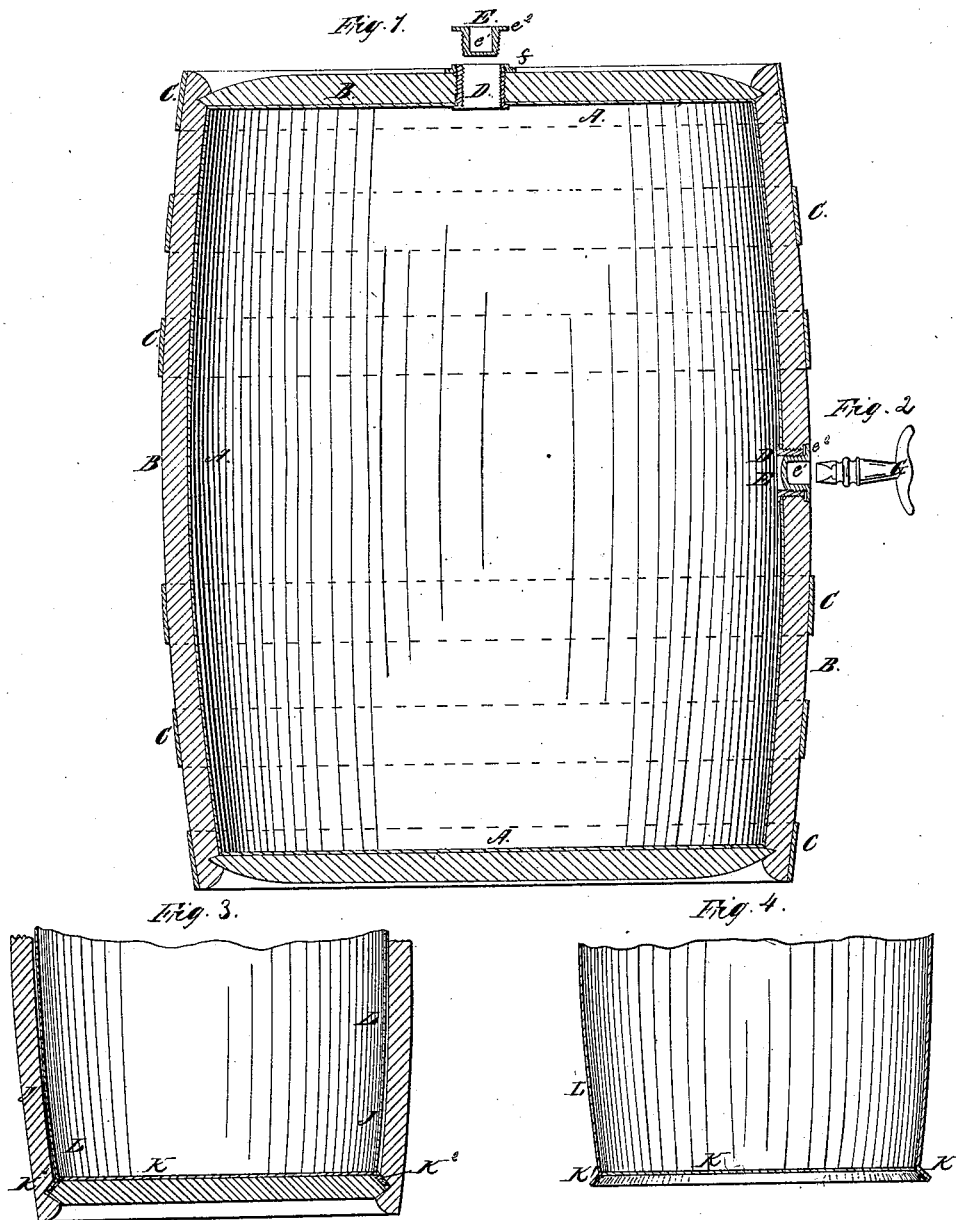


Day & Chapman, Petroleum Barrel.

N^o 50,694.

Patented Oct. 31, 1866.



Witnesses
B. H. Mickle
Geo. M. Wallace

Inventor
Sister Day
Henry Chapman

UNITED STATES PATENT OFFICE.

LESTER DAY AND HENRY CHAPMAN, OF BUFFALO, NEW YORK.

IMPROVED BARREL FOR HOLDING PETROLEUM.

Specification forming part of Letters Patent No. 50,694, dated October 31, 1865.

To all whom it may concern:

Be it known that we, LESTER DAY and HENRY CHAPMAN, both of the city of Buffalo, in the county of Erie and State of New York, have invented a new and Improved Barrel for Holding Petroleum-Oil and other like Penetrating Liquids; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure I is a vertical section of said improved barrel, showing also an improved bung in connection therewith. Fig. II is a plan of a key for opening the bung.

The nature of this invention relates to a barrel or cask the outer part of which is made of wood for strength and the inner part is made of thin sheet metal—such as tin, zinc, lead, iron, or other similar metals, (or compounds)—for holding the liquid, the wood and metal forming a compound barrel or cask for holding liquids.

In the order of construction, the inner metal barrel is first made. This is represented in the drawings at A, and is made of thin sheet metal—such as tin, lead, zinc, or the like—and is made in a barrel form in a common manner of working such metals. It is not made straight lengthwise, but is made in a bilge-barrel form, and so proportioned that when the wood part is put around it there will be a slight space between the wood and metal near the ends, as shown at J, Fig. II, Sheet I.

A flange or rim is formed at the joinder of the head K with the body L of the metal barrel, as shown at K', so that this flange may enter the crozing of the outer wood barrel with the head and be firmly held therein, as shown at K², Fig. II. This insures a substantial and firm connection of the metal barrel to the wood barrel and prevents torsion, and at the same time a small space is left between the two, so that the hoops on the wood barrel may be driven on in case of any shrinkage of the wood barrel.

By this construction a very strong barrel is made, peculiarly adapted to its purpose; and the inner metal barrel, although firmly connected with the wood barrel, will not interfere with tightening the hoops thereon.

The wood part B is made of staves and heading in a common manner, and is set up around the formed metal, so that the metal will be completely incased within the wood, the wood fitting closely to the metal, excepting the space J, before described, forming a combination metal and wood barrel, the metal being upon the inside for holding the liquids and the wood being upon the outside for strength and protection.

The outer wood barrel may be wholly made, rapidly and accurately, by machinery, and a cheaper material may be used than would be required if the barrel was to be wholly of wood. Metallic hoops are used, as shown at C.

We have made an improved metallic bung which is particularly designed for this kind of barrel, and may be used to advantage in common wood barrels and casks. It consists of an outer thimble, D, which in length equals the thickness of the stave and metal, and has a flange or rim which laps onto the metal on the inside of the barrel when it is put into place. It is inserted from the inside, and has vertical ribs which enter the wood to keep it from turning when the stopper is screwed in. It is soldered to the metal, so as to make an air and water tight connection. It has an internal screw for the reception of the stopper.

The stopper is represented at E. It has an external screw-thread on its external surface corresponding to the internal screw in the thimble, and screws tightly therein. It also has a depressed socket, as shown at e', for the reception of a key for turning it, and a flange, e², which is embedded in the wood when it is put into place, so that it comes flush with the surface of the barrel.

A packing-ring can be used, if necessary, between the flange of the stopper and the thimble.

We have placed a similar bung in the head of the barrel for the purpose of showing a slight modification, and in order to adapt it to the reception of a faucet for drawing liquid from the barrel when required. This is like the other, with the exception that it has a collar, f, which screws onto the thimble and laps onto the wood on the outside.

A faucet may be inserted in the thimble D when required, and when not required a stopper may be inserted, as in the other.

G represents a key for screwing and unscrewing the stopper.

What we claim as our invention, and desire to secure by Letters Patent, is—

A combined metal and wood barrel made in a bilge-barrel form, the metal part having a flange or rim, K', formed thereon, which, with the wood head, enters the crozing of the

wood barrel, for the purposes and substantially as described.

LESTER DAY.
HENRY CHAPMAN.

Witnesses:

GEO. W. WALLACE,
B. H. MUEHLE.