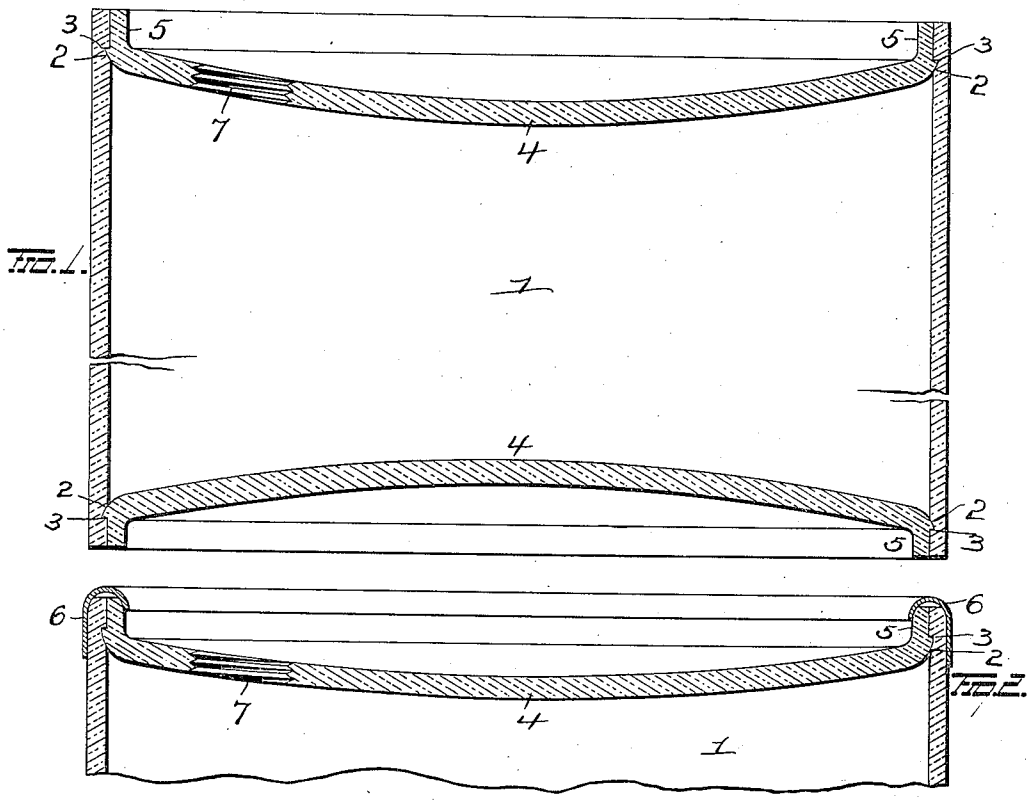
No. 801,382. PATENTED OCT. 10, 1905.

F. E. KEYES.

BARREL OR KEG MADE OF PULP.

APPLICATION FILED FEB. 10, 1904.



WITNESSES

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BARREL OR KEG MADE OF PULP.

No. 801,382. Specification of Letters Patent. Patented Oct. 10, 1905.

Application filed February 10, 1904. Serial No. 192,951.

To all whom it may concern:

Be it known that I, FRANK EUGENE KEYES, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Barrels or Kegs Made of Pulp; 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 appertains to make and use the same.

My invention relates to an improvement in barrels or kegs made of pulp, the object being to construct a barrel or keg that will not be affected by heat or cold or by dampness and one that will be practically water-tight and, if desired, fireproof, thus specially adapting it for holding gunpowder and other explosives.

With these ends in view my invention consists in a barrel or keg made of pulp, the body being without seam or joint and the ends or heads each being of a single integral sheet of the same material and provided with a peripheral rib or projection adapted to be forced or sprung into a croze in the barrel or keg body.

My invention further consists in the details of construction, as will be more fully explained, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in section of a barrel or keg embodying my invention. Fig. 2 shows additional means for locking the heads to the body and for protecting the free ends of the body.

1 represents the body of a barrel or keg made of pulp. This body is formed on the winding-roll of a pulp-machine and is removed therefrom by collapsing the winding-roll or otherwise, thus leaving the body in true cylindrical or tapering form, as desired.

Formed in the inner surface of the body 1 are the grooves or crozes 2 to receive projecting edges or shoulders 3, formed on the heads or ends 4. These grooves may be formed after the body 1 has been dried by a cutting-tool; but I prefer to form them while the pulp composing the body is in its moist condition and preferably immediately after removing the body from the winding-roll of the pulp-machine.

The heads and ends 4 are cut from a moist sheet of pulp and subsequently shaped between dies and dried. In Figs. 1 and 2 the heads or ends 4 are made concavo-convex, with a peripheral flange 5 extending out from the edge of the concave face. The concave surfaces of the heads face outwardly when in position in the barrel or keg body, with the free edge of the flange 5 flush with the end of the barrel. The peripheral projection or rib 3 on the head is located, preferably, on a line with the concave face of the head and, as before stated, rests in a croze 2, formed in the body of the barrel or keg.

I prefer to construct the heads or ends of a concavo-convex shape with the concave surfaces outwardly, for the reason that the internal pressure thereagainst tends to bind them more securely in position.

In the construction shown in Fig. 2 a metal hoop or band 6 embraces the ends of the body 1 and is turned over, so as to overlap the ends of the heads or ends, thus not only protecting these ends from undue wear, but also assisting materially in preventing any expansion of the body after the heads and ends have been secured in place.

In all instances the heads are provided with filling-holes 7, which may be plain or screw-threaded and closed by a plug or stopper of any approved design.

In order to secure the heads or ends in place, the ends of the body are expanded or pressed outwardly, so as to permit the heads or ends to be started, after which pressure is applied to the centers of the heads or ends and the latter forced inwardly until they seat themselves in the crozes. If desired, a cement may be applied at the juncture of the heads or ends to more securely lock them in place.

Barrels or kegs made wholly of fiber or pulp may be impregnated with water and fire proofing substances during the operation of felting the fiber, thus rendering the article made from the pulp specially applicable for storing and transporting explosives.

It is evident that many slight changes might be resorted to in the relative arrangement of parts shown and described without departing from the spirit and scope of my invention. Hence I would have it understood that I do not wish to confine myself to the exact construction shown and described; but,

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A seamless barrel or keg provided near each end with an internal groove, of heads to enter the respective ends of the barrel or keg and having peripheral ribs and peripheral flanges, said heads having such diameter normally that they can be sprung into the body

and the peripheral ribs sprung into the internal grooves in the body, whereby the peripheral flanges of the heads will be normally pressed against the wall of the body and the ribs maintained in the internal grooves.

2. As a new article of manufacture, a barrel or keg comprising a seamless pulp-body having an internal groove near the end, a concavo-convex head or end also made of a single sheet of pulp and provided with a peripheral rib to enter said internal groove and a metal hoop encircling the end of the body of the barrel or keg and overlapping the periphery of the head or end.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

FRANK EUGENE KEYES.

Witnesses:
J. M. LINDSLEY,
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