

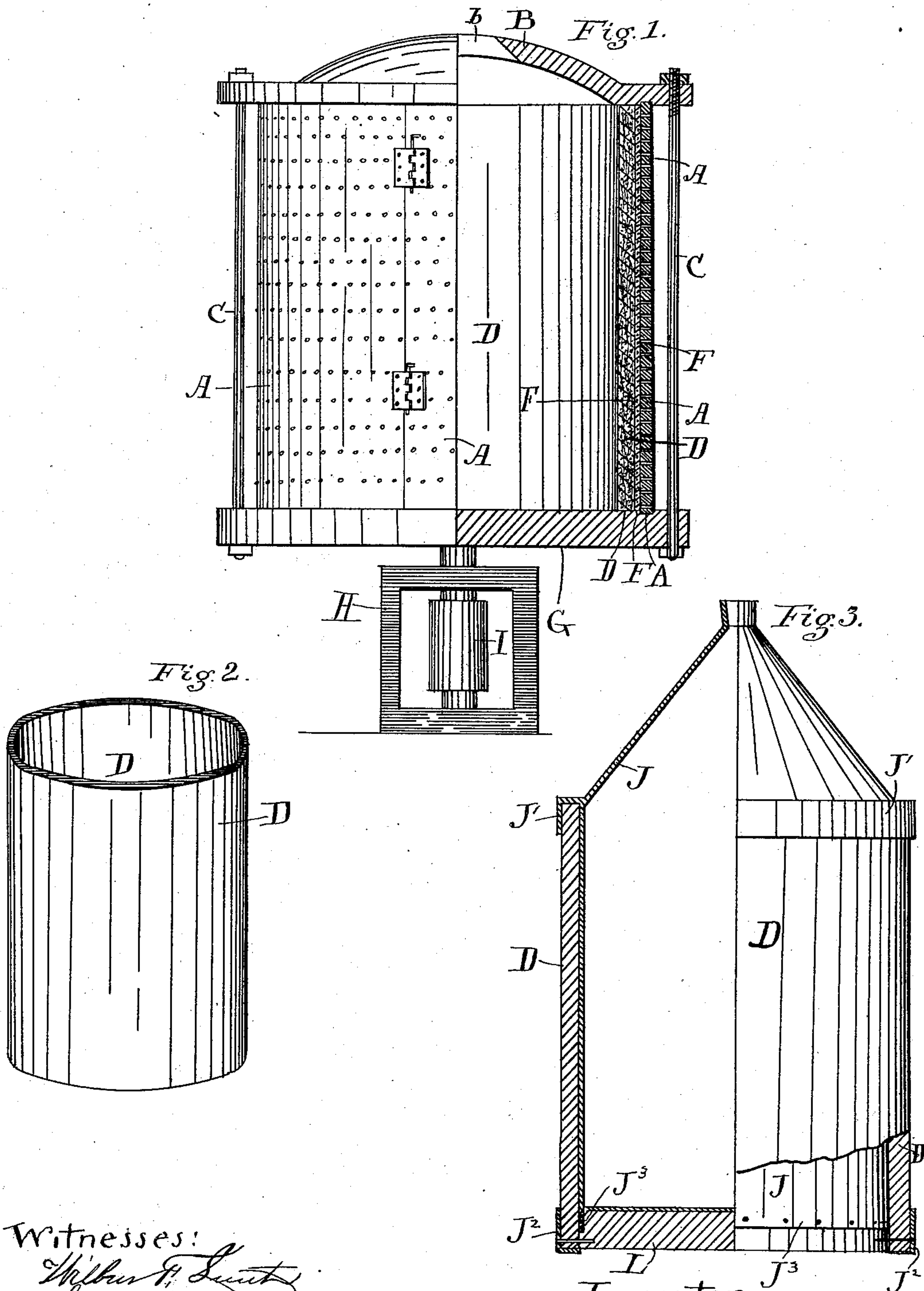
(No Model.)

G. M. STEVENS.

PROCESS OF MANUFACTURING JACKETED CASES.

No. 372,242.

Patented Oct. 25, 1887.



Witnesses:  
Wilbur F. Smith  
Charles S. Cook

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# UNITED STATES PATENT OFFICE.

GRENVILLE M. STEVENS, OF PORTLAND, MAINE.

## PROCESS OF MANUFACTURING JACKETED CASES.

SPECIFICATION forming part of Letters Patent No. 372,242, dated October 25, 1887.

Application filed January 6, 1887. Serial No. 223,546. (No model.)

*To all whom it may concern:*

Be it known that I, GRENVILLE M. STEVENS, a citizen of the United States, residing at Portland, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in Processes of Manufacturing Jacketed Cases; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to crated or jacketed cans, where cans or vessels of tin, glass, and the like are supplied with an external jacket or covering to protect them from accidental breakage or other injury.

My invention consists, first, in the method of forming jacketed vessels by the application to a tin or other vessel of a pulp jacket in a moist and expanded condition and then allowing said jacket to shrink on, thereby clasping the vessel solidly and expelling the air from between the jacket and the vessel.

In the accompanying drawings I have illustrated one manner of carrying out my invention.

Figure 1 represents a part sectional view of the centrifugal former. Fig. 2 is a perspective view of a pulp jacket of cylindrical form. Fig. 3 is a half-elevation and half-section of a jacketed can as completed by my method.

G is a rotating base, on which is placed the perforated cylindrical former A. A cover, B, having a central aperture, is bolted to the top of cylinder A by means of bolts or rods C, passing downward through the base G. The cylinder A is formed in sections secured together by suitable hinges, so that it can be opened laterally for the purpose of removing the contents. The cylinder A is lined with a felt drainer, F.

D represents the pulp cylinder after it is formed.

J is a tin can having around its upper edge a rim or shoulder, J', forming a downward-opening recess just sufficient to receive the upper edge of the pulp jacket. An annular flange, J<sup>2</sup>, projects below the bottom of the can, this flange being tacked to the sides of a wood bottom of the same diameter as the can.

J<sup>2</sup> is a metal flange which is to be secured to the lower edge of the completed can. 55

In making the pulp jacket I rotate the base G and the parts attached thereto at a high rate of speed, and introduce liquid pulp through the aperture b. The water is thrown through the pervious lining F and the perforated cylinder A, forming a cylinder of great porosity and strength. This cylinder or jacket is then removed, and while yet moist is slipped over the can J, the latter having the wood bottom L secured thereto. The upper edge of the jacket enters and fills the recess formed by the flange J'. The flange J<sup>2</sup> is now put on around the lower edge and tacked through into the wood bottom, thus holding the parts solidly together. The jacket is then allowed to shrink, when it will tightly inclose the can and make an article which is practically integral. 60 65 70

Pulp jackets formed, as I have described, by the use of a centrifugal machine are peculiarly adapted to be shrunk onto vessels to form envelopes for the same, because the fiber is very strongly knit together, causing great strength, and it possesses at the same time great porosity and lightness, thus giving it the power of contracting very materially in bulk as it dries, so that it fits tightly to the jacketed article. 75 80

This method can be applied to the jacketing of other kinds of articles besides tin cans—as, for instance, glass bottles and the like. These jackets are not necessarily cylindrical in form so long as they are of such forms as to be slipped over the vessel to be jacketed. 85

The flange J' may be soldered to the upper edge of the can after the pulp jacket is put on, thereby making a tighter joint. 90

I claim—

The herein described method of manufacturing jacketed cases, which consists in forming a pulp jacket or cylinder having a fibrous and laminated structure, then introducing into said jacket while moist the vessel to be covered, and then allowing said jacket to dry and shrink on, substantially as described. 95 100

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

GRENVILLE M. STEVENS.

Witnesses:

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