

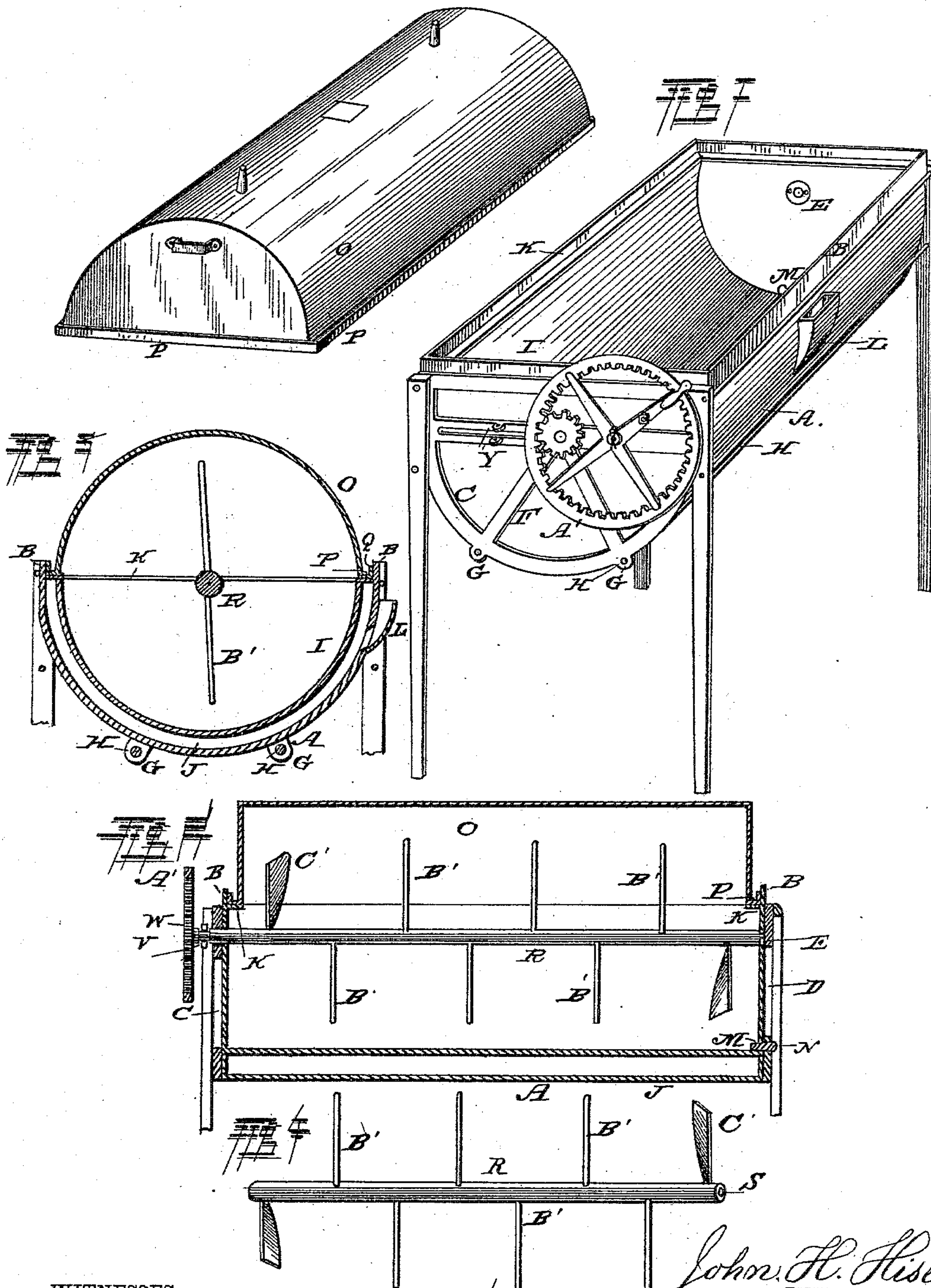
(No Model.)

J. H. HISEY.

CHURN.

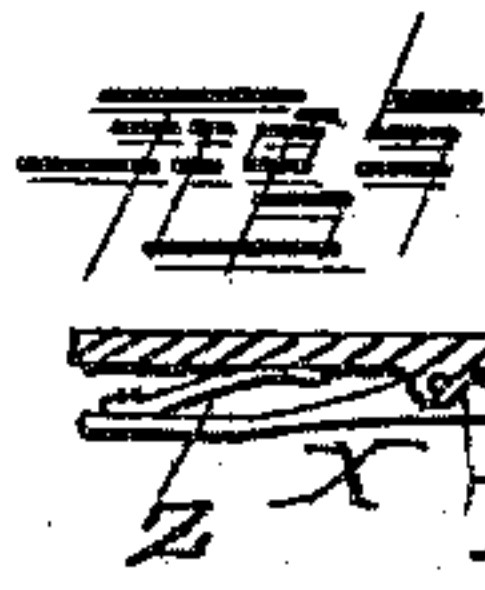
No. 303,159.

Patented Aug. 5, 1884.



WITNESSES:

*Wm. S. Dieterich*  
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INVENTOR.

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# UNITED STATES PATENT OFFICE.

JOHN HENRY HISEY, OF EMPORIA, KANSAS.

## CHURN.

SPECIFICATION forming part of Letters Patent No. 303,159, dated August 5, 1884.

Application filed January 19, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN HENRY HISEY, a citizen of the United States, residing at Emporia, in the county of Lyon and State of Kansas, have invented certain new and useful Improvements in Churns; and I hereby declare that the following is a full, clear, and exact description of the same, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved churn, showing the lid removed. Fig. 2 is a longitudinal vertical section of the same. Fig. 3 is a cross-section. Fig. 4 is a perspective view of the dasher detached, and Fig. 5 is a horizontal sectional detail view of the mechanism for engaging and releasing the dasher-shaft.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to churns having a horizontal rotary dasher, and having a jacket surrounding the body of the churn, for the purpose of holding either hot or cold water for raising or lowering the temperature of the contents of the churn; and it consists in the improved construction and combination of parts of the same, as hereinafter more fully described and claimed.

In the accompanying drawings, the letter A indicates the outer jacket, which is preferably of sheet metal and has a semi-cylindrical bottom, and forms an upwardly-projecting flange, B, at its upper edges. The ends of this jacket are re-enforced by metallic frames C and D, formed with straight upper and side edges and with semi-circular lower edges, and provided with bearings E for the ends of the dasher-shaft, from which bearings radial arms F extend to the semicircular sides of the frames, which are provided with outwardly-projecting perforated lugs G for the passage of long nutted bolts or rods H, which secure the end frames together and the jacket between them. The body I of the churn is formed by a semi-cylindrical sheet of metal secured at a distance from the sides of the jacket, forming a space, J, and the upper edges of the body-sheet are

connected to the upwardly-projecting flanges of the jacket by horizontal flanges K, forming shoulders inside the said flanges. The jacket is provided at one side with a funnel, L, through which hot or cold water may be poured into the space between the jacket and the churn-body, and the churn-body has an aperture, M, at one end at the bottom, into which aperture a plug, N, is removably inserted, the said aperture affording an outlet for the fluid contents of the churn.

O is the cover, which is semi-cylindrical and provided at its lower edges with laterally-extending flanges P, adapted to rest upon the shoulders formed by the flanges of the jacket, and the outer edges of these flanges are provided with upwardly-projecting flanges, Q, adapted to fit inside the flanges of the jacket, the said horizontal and vertical flanges forming a gutter or channel around the lower edge of the lid, for the purpose of receiving any impurities which may settle upon the lid, and catch the same when the lid is removed from or placed upon the churn, preventing them from falling into the churn.

R is the dasher-shaft, which is journaled at one end in the bearing E, formed in the end frame, passing through the end piece of the jacket, and the other end of the shaft has a polygonous recess, S, into which the correspondingly-shaped reduced end T of a short shaft, U, fits, the said short shaft turning and sliding in the bearing of the other end frame through the end piece of the jacket, and formed with a circumferential groove, V, inside a pinion, W, secured upon the end of the short shaft. The bifurcated inner arm of a lever, X, engages the groove in the shaft, and the lever is pivoted between two lips, Y, upon the end frame, and has a spring, Z, secured to the end frame and bearing with its outer end against the outer arm of the lever, forcing its inner arm and through it the short shaft inward. A cog-wheel, A', provided with a crank or other suitable means for revolving it, is journaled upon the end frame meshing with the pinion. The dasher-shaft is provided with a number of round radiating beaters, B', and at its ends with radiating beaters C', shaped like the wings of a screw-propeller, being twisted or turned in such a plane that they will force



the contents of the churn toward the middle of the same when the dasher is rotated.

It will now be seen that the temperature of the contents of the churn may be raised or lowered, as desired, by pouring hot or cold water into the space between the jacket and churn-body, and that the gutter or channel around the lower edges of the cover will prevent impurities from dropping into the churn in removing the cover or putting it in place. It will also be seen that the dasher may be easily removed or put in place, the polygonous end of the short shaft being withdrawn from the recess in the end of the dasher-shaft by pressing the outer arm of the bifurcated lever in toward the end of the churn, and the end frames will serve to strengthen the ends of the churn, which are of sheet metal like the jacket and churn-body, all bearings and fastenings being formed in the said frames.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

The combination of the jacket having its upper edges projecting straight upward, the churn-body formed with shoulders inside and below the upper edges of the jacket, and the cover provided with outwardly and vertically projecting flanges, forming a channel or gutter around its lower edges, fitting inside the upper edges of the jacket and resting upon the shoulders of the body, as and for the purpose shown and set forth.

JOHN HENRY HISEY.

Witnesses:

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WILLIAM H. KERR.