(No Model.) 2 Sheets—Sheet 1.

S. D. PALMER.

CHURN.

No. 541,944. Patented July 2, 1895.

Fig. 1.

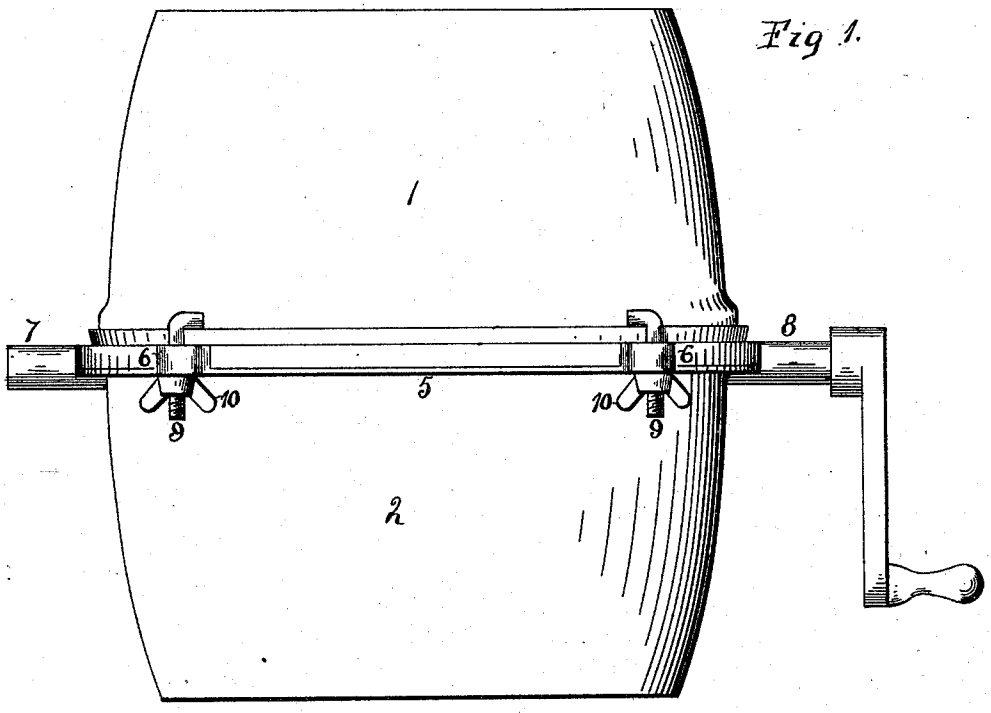
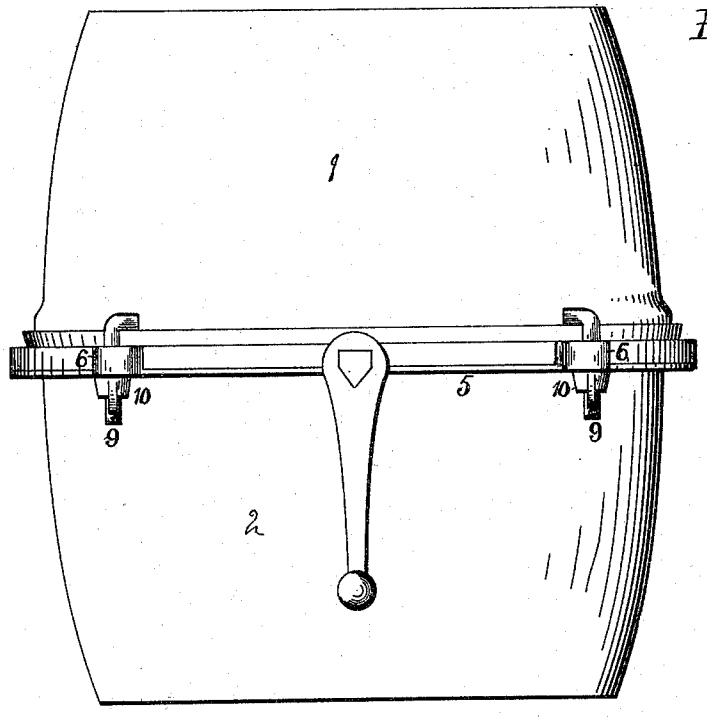


Fig. 2.



Witnesses:
L. A. Clark
E. Behel.

Inventor:
Samuel D. Palmer
By A. O. Behel
Attys.

(No Model.) 2 Sheets—Sheet 2.

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Fig. 3.

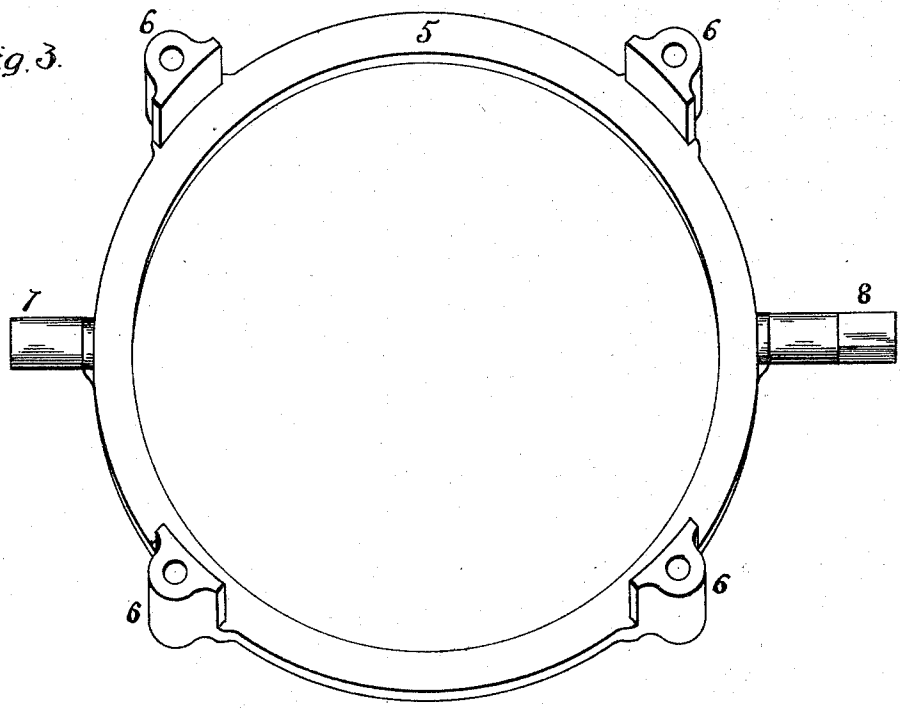
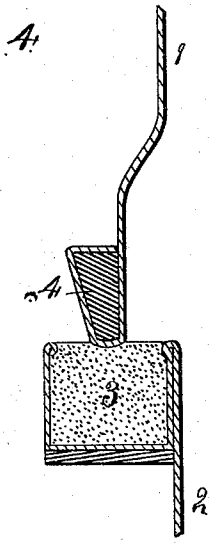


Fig. 4.



Witnesses:
L. A. Clark.
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Samuel D. Palmer
By A. D. Behel
Atty.

UNITED STATES PATENT OFFICE.

SAMUEL D. PALMER, OF ROCKFORD, ILLINOIS.

CHURN.

SPECIFICATION forming part of Letters Patent No. 541,944, dated July 2, 1895.

Application filed September 7, 1894. Serial No. 522,403. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL D. PALMER, a citizen of the United States, residing at Rockford, in the county of Winnebago and State of Illinois, have invented certain new and useful Improvements in Metallic Churns, of which the following is a specification.

The object of this invention is to construct a churn in two sections employing a ring from which extend trunnions, and also means for connecting the sections.

In the accompanying drawings, Figure 1 is a side elevation of a churn embodying my improvements. Fig. 2 is also a side elevation showing a face view of the crank for rotating the churn. Fig. 3 is an isometrical representation of the ring. Fig. 4 is an enlarged vertical section of the sections of the churn-body at their junction.

The body portion consists of two sections 1 and 2. The lower section 2 has the metal of its open end turned back, thence horizontally and finally vertically forming an annular recess within which is located a ring 3 of packing material. The open end of the top or upper section 1 has a ring of metal 4 held thereby, its smaller end being somewhat rounded, and when the sections are placed together will rest upon the packing ring of the lower section, as shown at Fig. 4. The upper or enlarged end of the ring 4, held in the open end of the upper section, forms a ledge upon which rests the means for holding the sections together.

A ring 5 is provided at four equidistant points with ears 6, the opening in the ears extending at right angles to the face of the ring, and from opposite sides of the ring extend trunnions 7 and 8. The trunnion 8 has its end sided and receives a crank or wrench, having an opening corresponding to the end of the trunnion in order that the crank must always be placed upon the trunnion so that it will stand in the lengthwise direction of the churn body, thereby acting to hold the ring in a horizontal plane when free to assume such position.

The lower section of the churn body is placed within the ring 5, the under face of the annular recess containing the packing resting upon the upper face of the ring, and the inner faces of the ears 6, forming supports for its outer surface. Within the perforations of the ears are located screw threaded bolts 9, having their upper ends bent at right angles, and upon the screw threaded ends are turned thumb nuts 10. After the upper section of the churn body has been placed in position upon the lower section, the upper ends of the bolts are turned inward until they overlie the enlarged upper end of the ring 4, and are then drawn down by means of the thumb nuts 10, firmly clamping the sections together.

When it is desired to separate the sections the thumb nuts are loosened allowing the upper ends of the bolts to be turned free of the upper section.

By the employment of the ring 5 a support is formed for the under face of the annular packing recess and supports the fastening means for holding the sections together. The ring being a separate part and independent of the sections forming the churn body, the lower section may be removed therefrom, and when from any cause its usefulness is impaired it may be replaced by a new one without renewing the other parts, and after the churning has been completed the upper section will form a very serviceable receptacle within which the butter may be worked.

The wedge shaped ring herein referred to is not claimed in this application, but is claimed in an application filed by me August 24, 1894, Serial No. 521,241.

I claim as my invention—

In a churn, the combination of a churn body, in two sections, the lower section having an annular recess at its open end formed from the material composing the section, the upper section having an annular ledge, a ring located beneath the recess supporting the lower section and provided with perforated ears, screw threaded hooks supported by the ears engaging the annular ledge, and thumb-nuts clamping the hooks in connection with the section.

SAMUEL D. PALMER.

Witnesses:
A. O. BEHEL,
E. BEHEL.