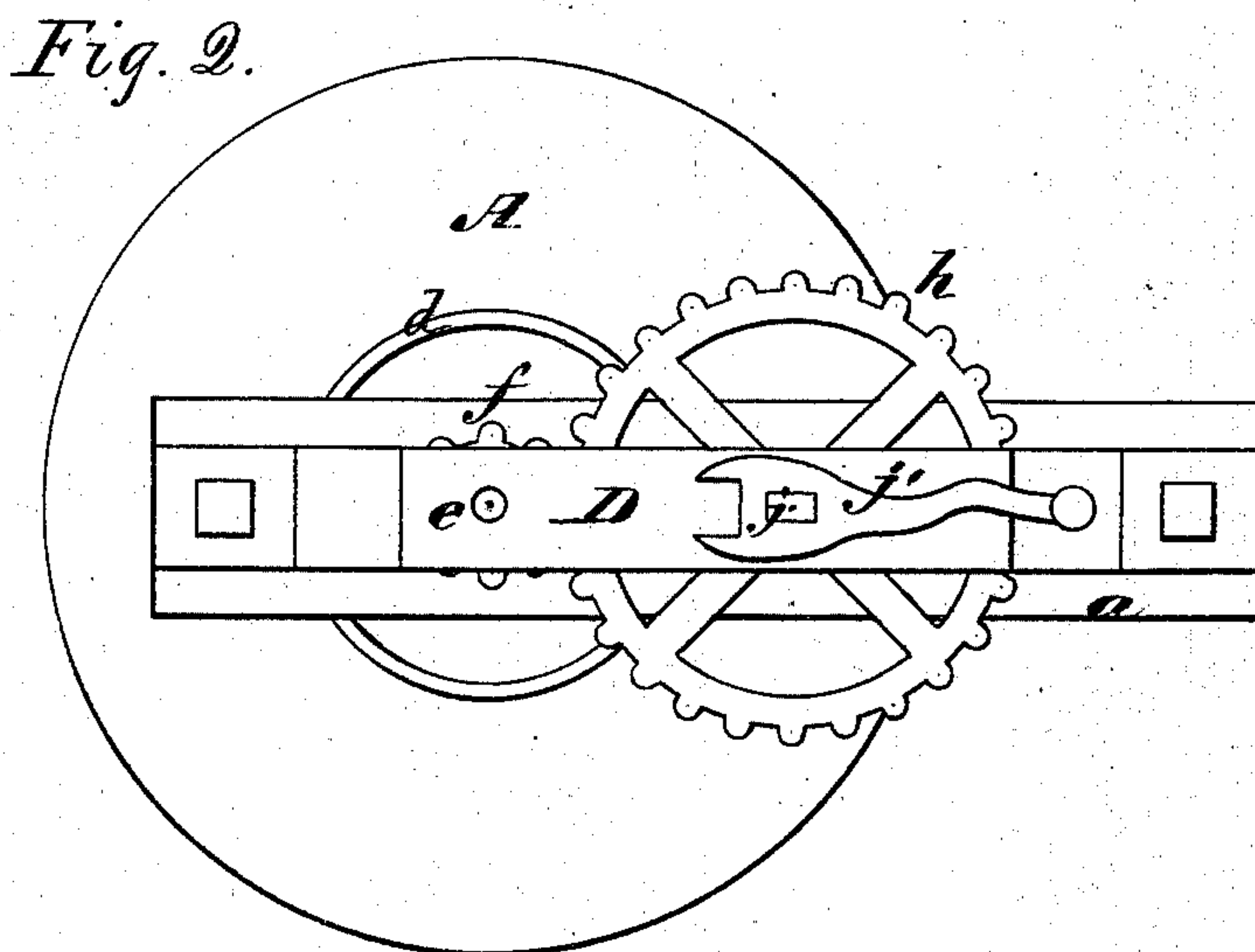
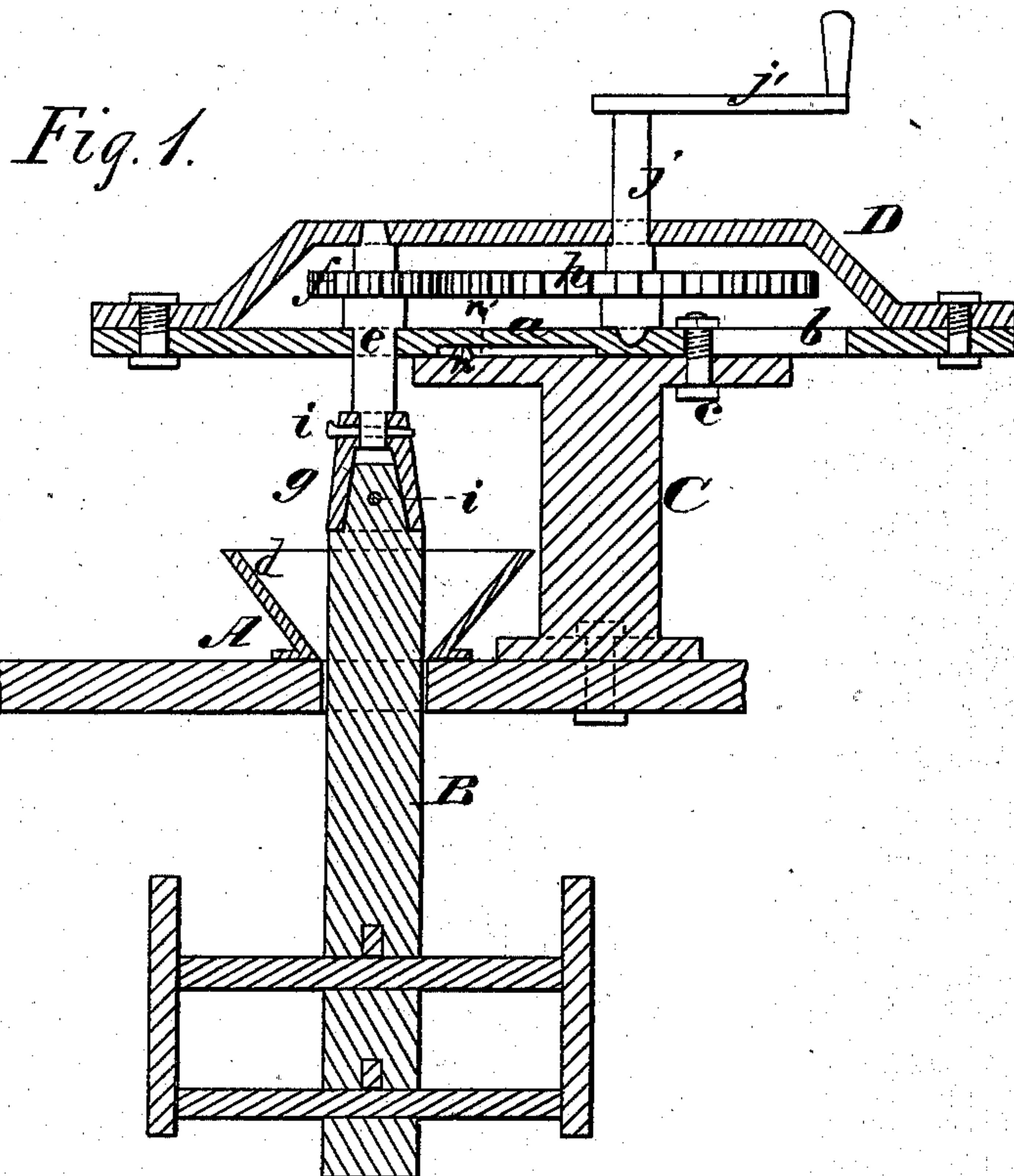


G. W. RENNOLDS.
Churn-Powers.

No. 146,474.

Patented Jan. 13, 1874.



WITNESSES

Mary J. Wiley.
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UNITED STATES PATENT OFFICE

GEORGE W. RENNOLDS, OF WALDRON, MISSOURI.

IMPROVEMENT IN CHURN-POWERS.

Specification forming part of Letters Patent No. 146,474, dated January 13, 1874; application filed October 25, 1873.

To all whom it may concern:

Be it known that I, GEORGE W. RENNOLDS, of Waldron, in the county of Platte and State of Missouri, have invented a new and valuable Improvement in Churn-Powers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a sectional view of my churn-power. Fig. 2 is a plan view of the same.

The object of my invention is to obtain a churn-power which can be adjusted upon or removed from a supporting-standard secured permanently to a churn-cover, for the purpose of allowing the said power to be easily detached from a standard on a small churn-cover and properly adjusted on a corresponding standard fixed to a larger cover, thereby utilizing a single power for any number and kind of churns. The nature of my invention consists in the combination of a T-shaped standard, permanently secured to a churn-cover, with a horizontally-adjustable frame carrying a large spurred driving-wheel on a pinion, on the shaft of which is a removable socket for receiving the upper end of a dash-rod, as will be hereinafter explained.

The following is a description of my improvement:

In the annexed drawings, A represents a churn-cover, through the center of which is a hole surrounded by a funnel, *d*, through which a vertical dasher-rod, B, passes freely. C designates a standard, which is shaped like the capital letter T, and which is permanently secured to the top of the cover at any point thereon. D represents a horizontal frame, composed of two plates arranged in planes parallel to each other, and securely united at their ends by bolts and nuts. The frame D is secured rigidly, but adjustably, upon the T-shaped standard C by means of a bolt and nut, *e*, which bolt passes through an oblong slot, *b*, through the bottom plate *a* of this

frame, as shown in Fig. 1. Lateral displacement of the frame D is prevented by means of a tenon, *n*, on the standard C, fitting into an oblong groove, *n'*, in the bottom of the plate *a*. The frame D affords bearings for the shafts *j e* of two spur-wheels, *h f*. The shaft *j* of wheel *h* is stepped into the plate *a*, and has a crank-handle, *j'*, applied on its upper end. The shaft *e* of the pinion *f* is shouldered and supported by the plate *a*, and receives on its lower end a cap-socket, *g*. This socket receives the upper end of the dash-rod B. Two pins or keys, *i i*, connect the socket to the shaft *e*, and also the rod B to the socket, and allow them to be detached from each other.

It will be seen that, by loosening the nut on bolt *e*, the frame D, with its wheels and shafts, can be adjusted longitudinally, and that, by removing the said nut, frame D can be detached from the standard C. A very nice adjustment can thus be made. It is important to set the shaft B exactly perpendicular to the cover A, and to maintain this shaft in such position. It is also important to have the frame D adjustable, as set forth, for the purpose of using it on standards applied to different churn-covers where the standards are fixed at different distances from the holes through such covers.

By my improvement the standards C can be secured at the most desirable points on covers, and compensation can be made for the shrinking and swelling thereof.

What I claim as new, and desire to secure by Letters Patent, is—

The frame D, carrying spur-wheels *h f*, crank *j'*, and dash-rod socket *g*, and adjustably secured by a slot and a bolt to a T-shaped standard, which is permanently secured to a churn-cover, as herein described and shown.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

GEORGE W. RENNOLDS.

Witnesses:

GEO. W. NOLAND,
JOHN FLEMING.