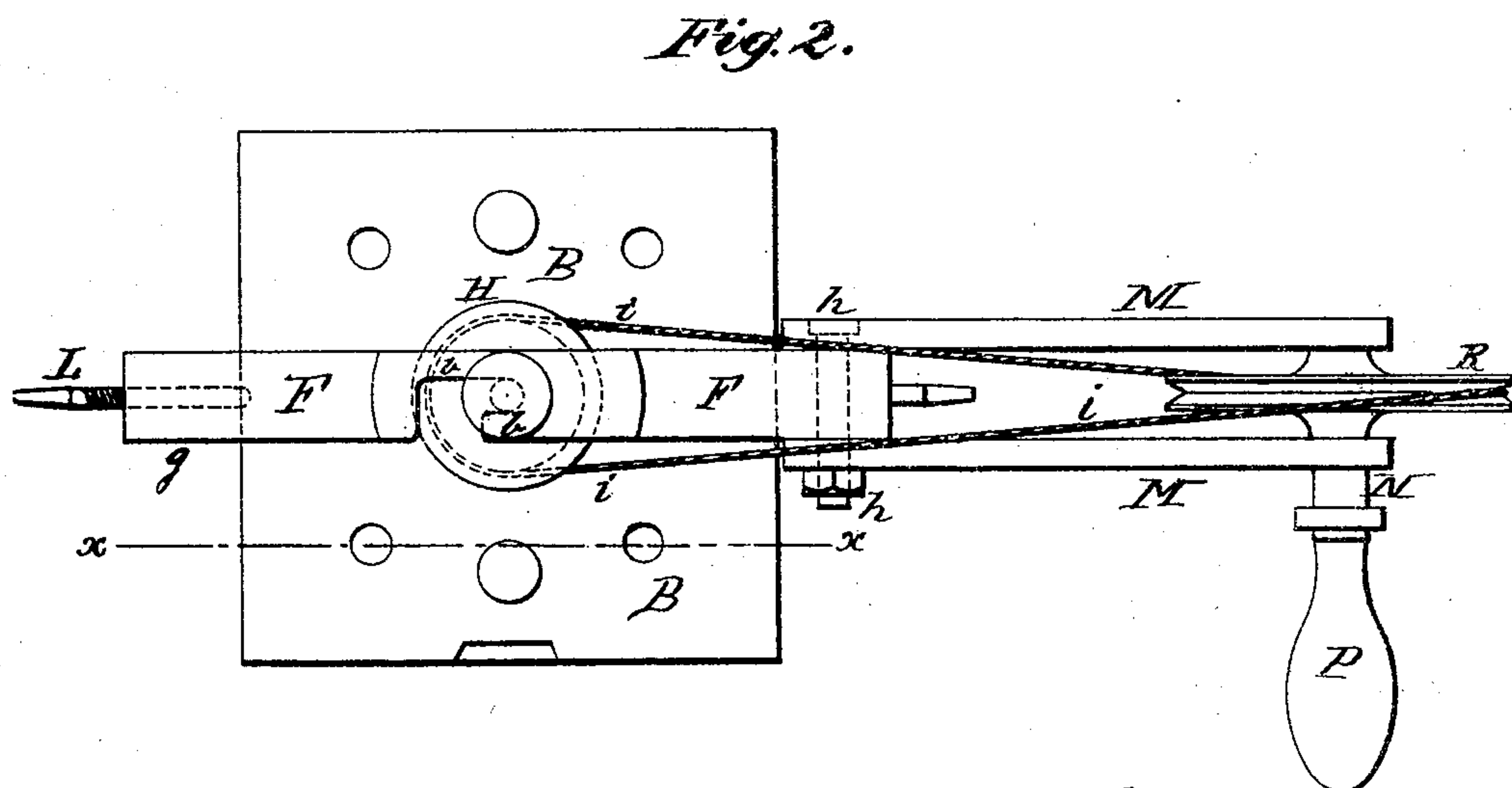
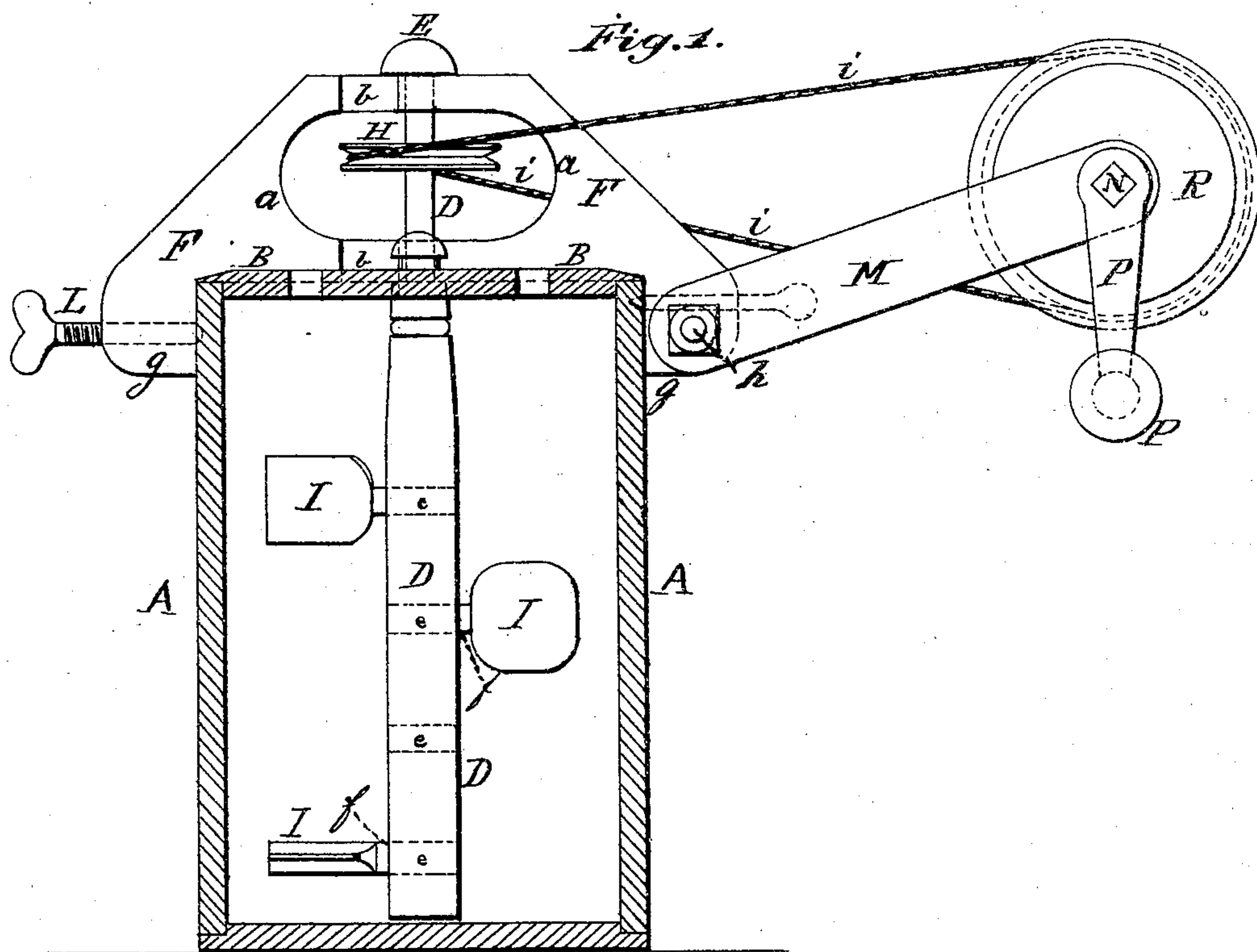


J. P. FRIEST.

Churns.

No. 144,755.

Patented Nov. 18, 1873.



Witnesses.  
*Chas. C. Wilson*  
*Dennis Timney*

Inventor.  
*John P. Friest*  
 By *Co. & Co.* Attys.

# UNITED STATES PATENT OFFICE.

JOHN P. FRIEST, OF CHILLICOTHE, MISSOURI.

## IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. **144,755**, dated November 18, 1873; application filed April 16, 1873.

*To all whom it may concern:*

Be it known that I, JOHN P. FRIEST, of Chillicothe, Missouri, have invented certain new and useful Improvements in Churns, of which the following is a specification, reference being had to the accompanying drawings.

The invention relates to providing a churn-barrel with a vertical hanging dasher, provided with adjustable paddles, and suspended in the barrel by an open frame having journal-slots, the upper end of the dasher having a head or button to sustain it, while that part which operates in the aperture in the frame is provided with a grooved pulley-wheel, connected by a band with a band-wheel at the end of two arms hinged to the frame. The object of the invention is to provide an adjustable frame and dasher, such as may be used upon vessels of different forms, for the purpose of churning butter.

Figure 1 is a vertical section through the line *x x* of a device embodying the elements of the invention. Fig. 2 is a plan view of the same.

A in the accompanying drawings is a churn-barrel, provided with the removable covers B, on top of which, at their centers, is the coincident arch *a*, between which passes the shaft D, the lower part of which is suspended in the barrel A by the button E, which comes in contact with the upper surface of the hollow frame F, provided, on its upper and under parts, with the journal-slots *b b*, through which the upper part of the shaft D is admitted to its bearings, that part of the shaft which passes through the aperture *a* in the frame F being provided at its center with the pulley-wheel H. The shaft D, below the under side of the frame F, is enlarged, and provided with a shoulder,

which impinges upon the under side of the frame F, and prevents the shaft being elevated too much. The portion of the shaft D which enters the barrel A is furnished with apertures *e*, in which are placed the ends of the arms *f* of the paddles I, the angles of which are adjustable in the apertures *f*, to force the cream up or down. The frame F is provided with a recess. The vertical lips *g* of the frame F fit over the upper parts of the outer surface of the barrel A, and by means of the set-screws L are clamped thereon. Upon the side of the frame opposite the set-screw L are jointed to the frame, by the pivot *h*, the ends of the arms M, which extend parallel to each other a proper distance, their other extremities being provided with the shaft N, operated by the crank P; and rigidly secured upon the shaft N is the band-wheel R, connected by the band *i* with the pulley-wheel H.

One of the covers B being removed, the material to be churned is placed in the barrel A, and the operation is performed by simply rotating the crank P, which operates the dasher-shaft D, causing the paddles I to revolve, and affect the material in the barrel.

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

The adjustable and detachable frame F, provided with the journal-slots *b*, arms M, set-screw L, band-wheel R, and band *i*, in combination with the pulley H on the shaft D, provided with the paddles I, substantially as shown and described.

JOHN PETER FRIEST.

Attest:

JOHN W. COLLINS,  
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GEO. S. REED.