JOHN D. HARRISON.

Improvement in Churns.

No. 126,052.

Patented April 23, 1872.

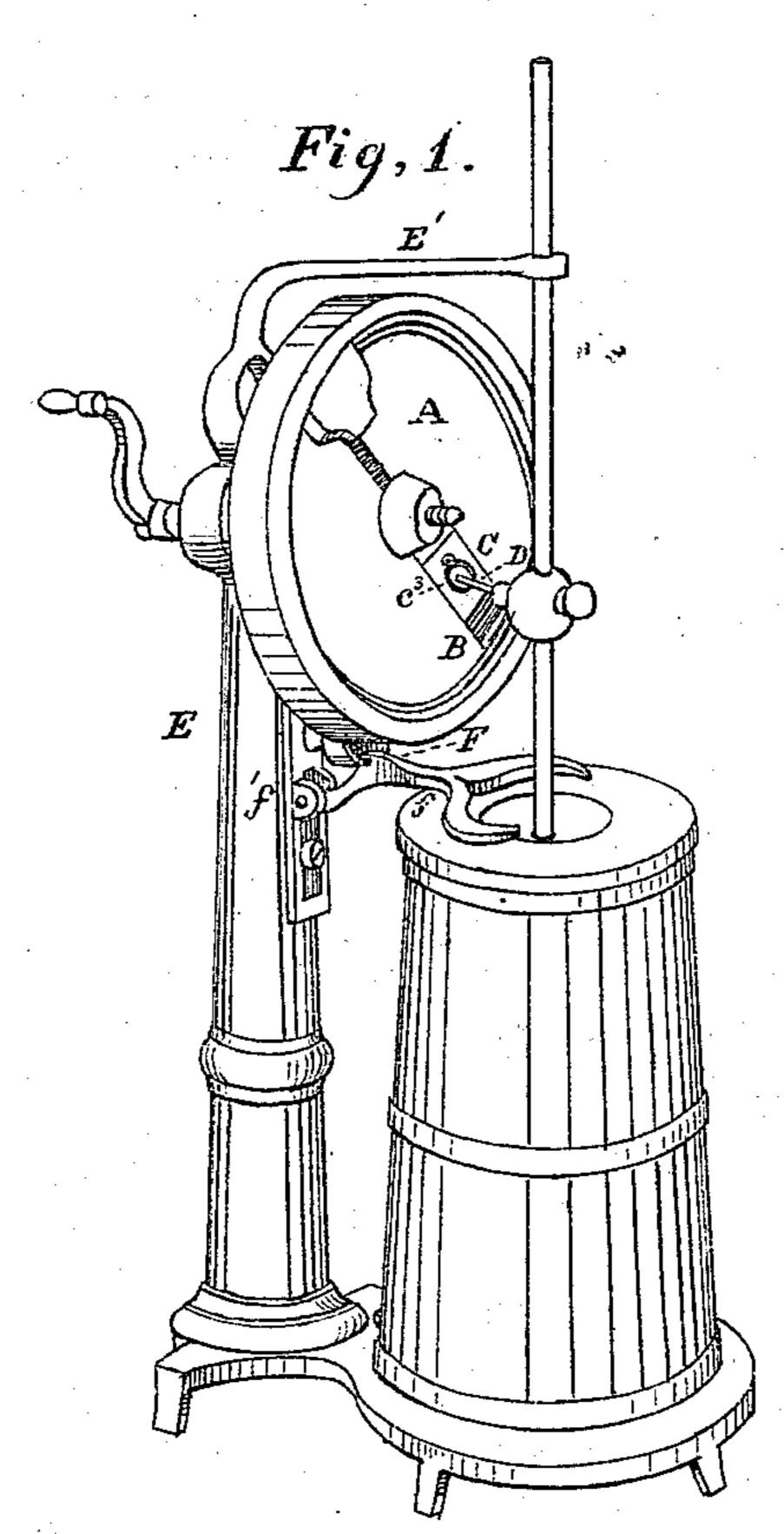


Fig. 2.

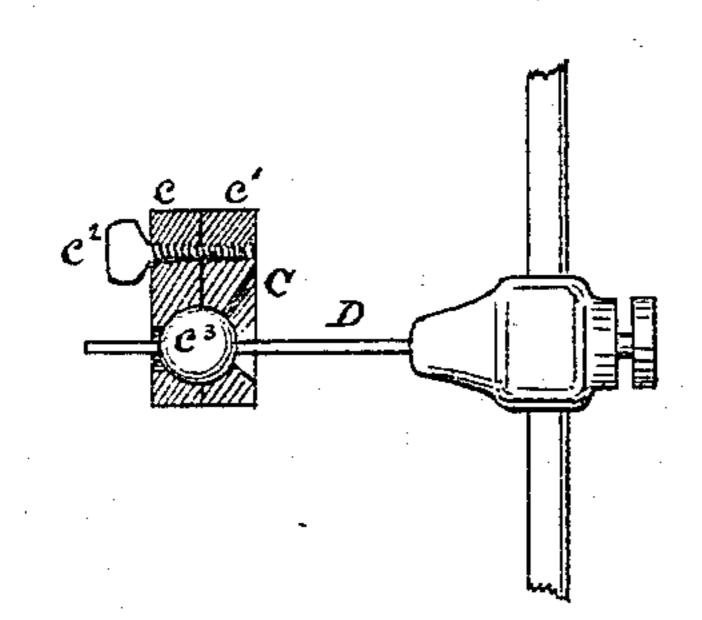
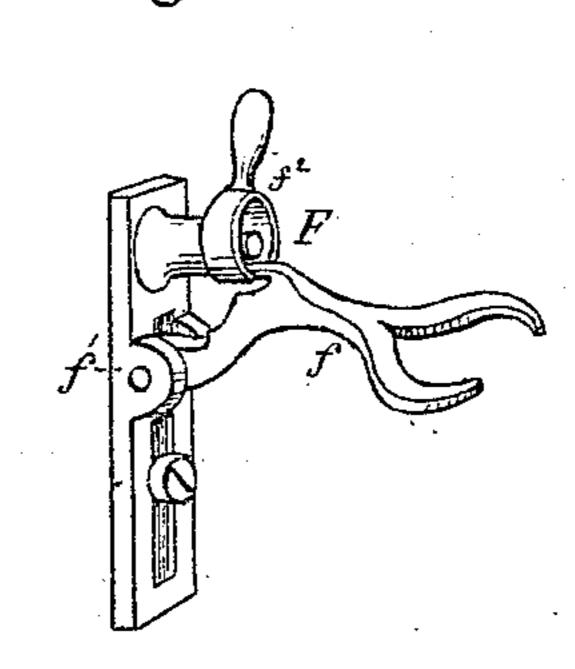


Fig. 3.



Witnesses,

14. a. Daniels

cll. James.

John D. Harrison Inventor, by C. S. Whitman, Attorney

UNITED STATES PATENT OFFICE.

JOHN D. HARRISON, OF MIDDLETOWN, OHIO, ASSIGNOR OF ONE-HALF OF HIS RIGHT TO MIDDLETOWN AGRICULTURAL WORKS.

IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. 126,052, dated April 23, 1872; antedated April 2, 1872.

SPECIFICATION.

To all whom it may concern:

Be it known that I, John D. Harrison, of Middletown, in the county of Butler and in the State of Ohio, have invented an Improvement in Churns; and do hereby declare that the following description, taken in connection with the accompanying plate of drawing hereinafter referred to, forms a full and exact specification of the same, wherein I have set forth the nature and principles of my said improvement, by which my invention may be distinguished from others of a similar class, together with such parts as I claim and desire to secure by Letters Patent.

My invention relates to that class of churns in which the upright dash is used; and the nature thereof consists in providing the balance-wheel by which the dash is operated with an adjustable box containing a ball and socket, by means of which the length of stroke of the dash may be accurately adjusted, and in the provision of means for clamping the churn in position, as hereinafter shown and described.

In the accompanying plate of drawing, which illustrates my invention and forms a part of the specification thereof, in which corresponding parts are illustrated by similar letters, Figure 1 is a view in perspective. Fig. 2 illustrates in detail the adjustable ball-and-socket joint. Fig. 3 represents the device by means of which the churn is locked in position.

Letter A designates the balance-wheel, provided with a radial aperture, B, in which is secured the adjustable box C. The said box consists of the two plates c and c^1 , provided with beveled edges to fit corresponding beveled edges cut upon the sides of the aperture B, and held together and clamped in any required position by the thumb-screw c^2 . Within a socket cut in the said plates the ball c^3 is secured in such a manner that it may be freely revolved in any

direction. The dash of the churn and the said ball are connected together by means of the rod D, which is clamped to the said dash by means of a thumb-screw, and passes through a slot cut in the said ball.

It is obvious from the foregoing description that with each revolution of the balance-wheel a lateral as well as a vertical motion will be imparted to the dash, and that the length of the stroke of the same may be accurately adjusted.

The balance-wheel A has its bearings in the upright metallic standard E, which is provided with an arm, E', through which passes the upper end of the dash-rod. To the said metallic standard E is attached, in such a manner as to be vertically adjustable, the clamping apparatus F, consisting of the prouged arm f, hinged to the traveler f^1 and the cam f^2 , by means of which the said arm is held firmly in contact with the top of the churn.

I am aware that churns have heretofore been invented and even patented (see the patents of William C. Douthell, May 12, 1868, and October 13, 1868) in which a rotary movement of the reciprocating dasher isproduced by means of double oscillating swing joints. I therefore do not claim the same generally; but—

I claim, and desire to secure by Letters Patent—

The specific arrangement herein described of the wheel A provided with a radial aperture, B, the adjustable box C, formed by the combination of the plates c c^1 and thumbscrew c^2 , the ball c^3 , rod D, when operating together as and for the purpose described.

In testimony that I claim the foregoing I have hereunto set my hand this 6th day of February, 1871.

JOHN D. HARRISON.

Witnesses:

CHARLES B. BARNETT, DANL. BOWMAN.