

(No Model.)

W. WALTER.
CHURN.

No. 475,097.

Patented May 17, 1892.

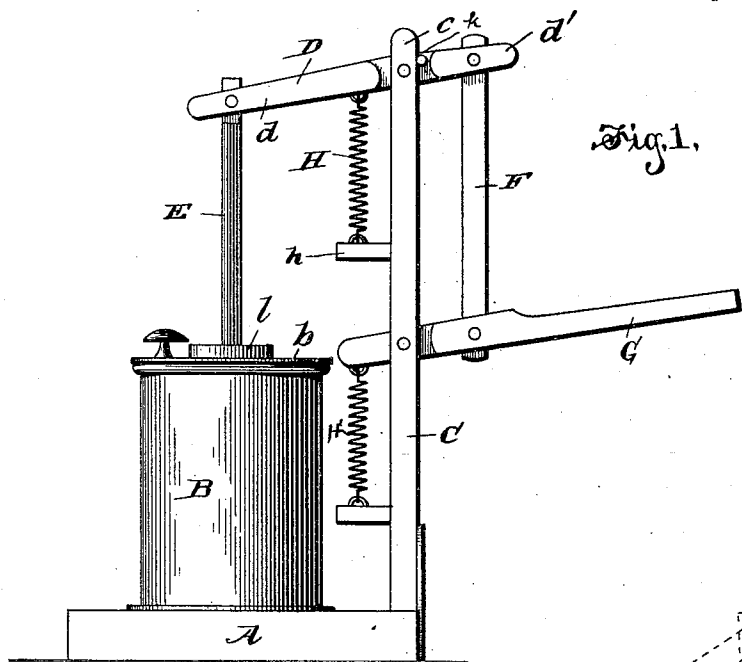


Fig. 1.

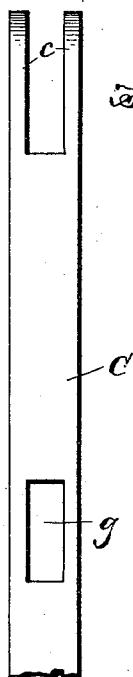


Fig. 3.

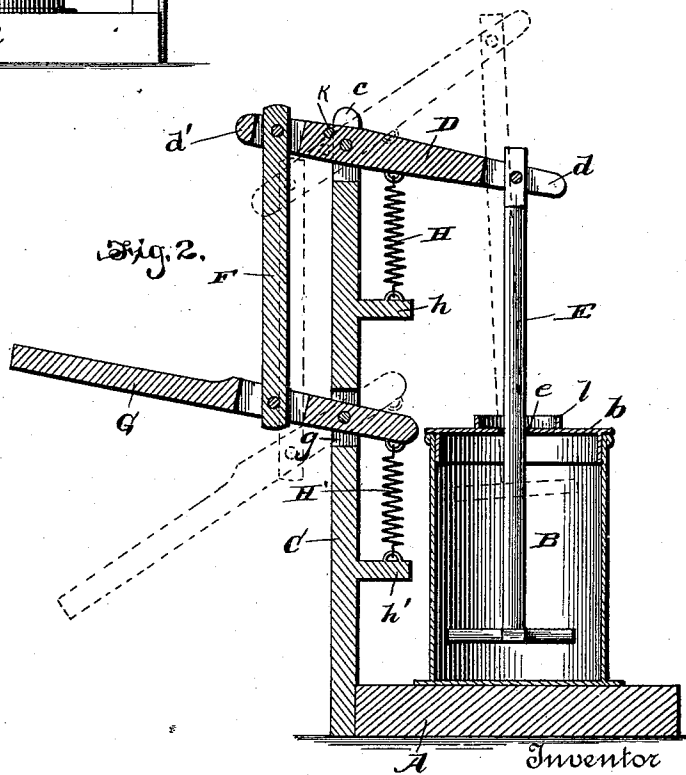


Fig. 2.

Witnesses
Samuel Lee
Philip H. Wasi.

Inventor
Wm. Walter
By C. W. Anderson
his Attorney

UNITED STATES PATENT OFFICE.

WILLIAM WALTER, OF SALTSBURG, PENNSYLVANIA.

CHURN.

SPECIFICATION forming part of Letters Patent No. 475,097, dated May 17, 1892.

Application filed July 31, 1891. Serial No. 401,306. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM WALTER, a citizen of the United States, and a resident of Saltsburg, in the county of Indiana and State of Pennsylvania, have invented certain new and useful Improvements in Churns; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a side elevation. Fig. 2 is a vertical section, and Fig. 3 is a detail view.

This invention has relation to certain new and useful improvements in churns; and it consists in the novel construction and combination of parts, as hereinafter specified.

In the accompanying drawings, illustrating the invention, the letter A designates a suitable base or support, on which is secured or supported the receptacle or churn proper B, having a tightly-fitting cover b.

Rising from the base or support to one side of the churn is a vertical arm or upright C, having a fork c at its upper end and suitably held or braced. In this fork a lever D is pivoted intermediate of its ends in such a manner as to allow its arms a movement in a vertical plane. To the longer arm d of this lever is pivoted the upper portion of a vertical dasher or piston-rod E, which extends downwardly and loosely through an aperture e in the cover b into the churn and carrying a suitable piston or dasher at its lower end. To the opposite or short arm d' of the lever D is pivoted one end of a link or bar F, parallel with the dasher-rod E, and pivotally connected at its opposite end to the intermediate portion of the operating-lever G. This lever G is pivoted near its forward end in a slot g in the upright C, and it is between this pivotal point and the opposite end of the said lever that the link F is connected.

H is a coiled or helical spring, connected at its upper end to the under side of the lever D in front of the pivot of said lever and at its lower end to a projection h in the upright C.

H' represents a similar spring, connected at its upper end to the lever G in front of its pivot, and at its opposite end to a second lug or projection h' of the upright, or it might be to the base or support. It will be seen that when the lever G is reciprocated through a vertical plane it will impart a corresponding parallel movement to the lever D through the link F, and thereby effecting a vertical reciprocation of the dasher-rod and dasher. It will also be apparent that when the dasher has been raised to the limit of its upward movement the action of the springs H H' will throw it downwardly shortly and quickly upon the cream, which has been found to be the most effective stroke. While the spring H, if made sufficiently strong, might be sufficient to cause the quick downstroke of the dasher, yet I prefer to use the two springs, arranged as shown and described, whereby a direct action is exerted by them upon the levers D and G, as this arrangement is superior in accelerating the stroke, for the reason that the operating-lever G, as well as the lever D, is acted upon by a spring connected directly to it, instead of through the medium of several connected parts. This downward stroke of the dasher is limited by means of a stop-pin k in the lever D coming into engagement with the upright C or by other suitable means.

I preferably inclose a space around the aperture e in the cover by the circular upwardly-projecting flange l in order to retain any cream which may be brought to the upper surface of the cover by the action of the dasher-rod.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The churn comprising the base or support having the receptacle supported thereon, an upright rising therefrom, a lever D, pivoted intermediate of its ends in a fork at the upper portion of said upright, the dasher-rod pivoted to the longer arm of said lever, the rod or link F, connected to the short arm of said lever at the rear of the upright, the operating-lever G, pivoted at its forward end to said upright and having said link connected

thereto at the rear of its pivot, and the springs
H and H', connected, respectively, to the le-
vers D and G forward of their pivots and to
lugs on the upright, whereby each lever is
5 acted upon by a spring directly connected
thereto, substantially as and for the purpose
specified.

In testimony whereof I affix my signature in
presence of two witnesses.

WILLIAM WALTER.

Witnesses:

E. R. WALTER,
W. O'HARA.