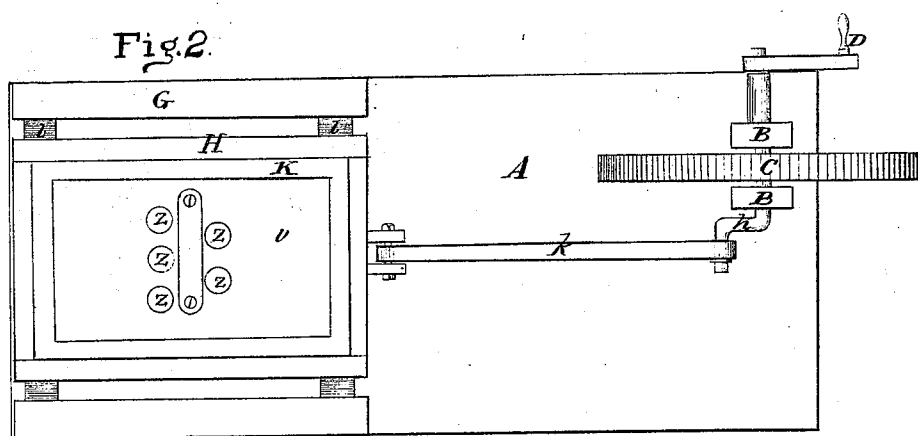
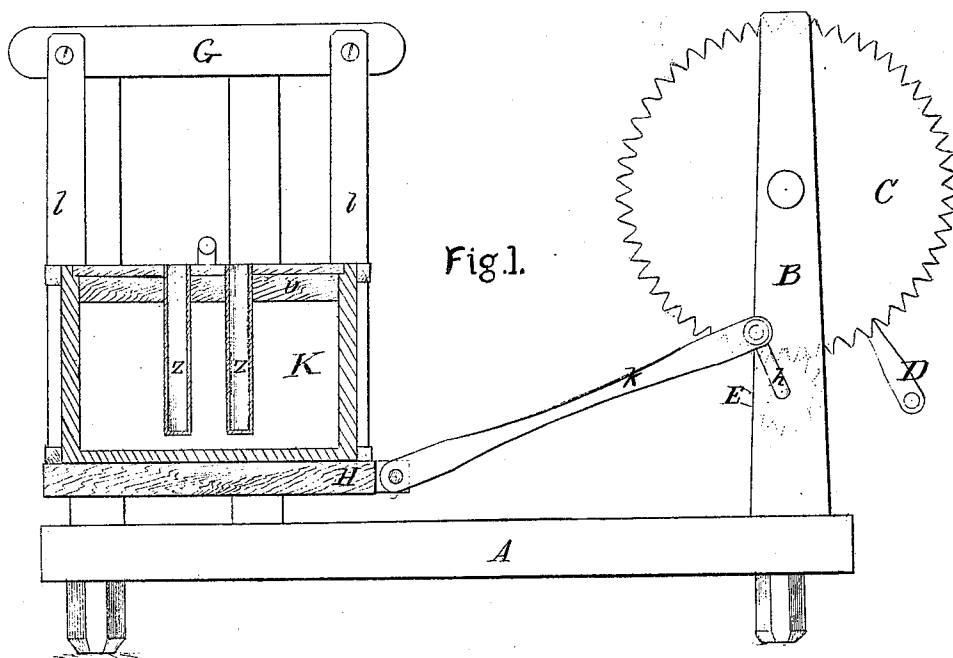


B. J. Smith,

Chmn.

No. 109,556.

Patented Nov. 22, 1870.



Witnesses.
Villette Anderson.
Chas. Kenyon.

Inventor.
B. J. Smith.
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Attorneys.

United States Patent Office.

BENEDICT J. SMITH, OF OSAGE MISSION, KANSAS.

Letters Patent No. 109,556, dated November 22, 1870.

IMPROVEMENT IN CHURNS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, BENEDICT J. SMITH, of Osage Mission, in the county of Neosho and State of Kansas, have invented a new and valuable Improvement in Churns; 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 drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a central vertical longitudinal section of my invention.

Figure 2 is a top view of the same.

My invention relates to churns, and consists, mainly, in the construction and novel arrangement of hollow tubes descending from the churn-cover, designed to regulate the temperature of the cream, and to operate in an efficient manner to break the butter capsules, and, in connection therewith, the vibrating case and removable churn-box.

The letter A of the drawing designates the bed of my invention, to which is attached the support B.

C designates the drive-wheel, operated by the handle D, and arranged to engage with the teeth of the vertical pinion E below it.

The shaft of the pinion E ends in a crank, *h*, which is pivoted to the pitman *k*, attached to the swinging

case H, which is suspended between the supporting-frames G G by the arms *l l*.

The churn-box K, which contains the cream, is placed within the case H, and can readily be removed therefrom when necessary.

The cream is agitated by the hollow tubes *z z*, attached to the cover *v* of the churn-box, and so arranged that the vibratory motion of the box will throw the cream against and between them.

These hollow tubes are closed at the bottom, and adapted to hold hot or cold water in case it should be desired to raise or lower the temperature of the cream.

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

In combination with the vibrating platform H, suspended by the pivoted arms *l* to the frame G, the removable churn-box K, provided with the cover *v* having the hollow descending tubes *z z*, when constructed and arranged to operate as and for the purposes herein shown and described.

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

Witnesses:

WILLIAM CAREY,
JOHN MOFFITT.

B. J. SMITH.