

UNITED STATES PATENT OFFICE.

WILLIAM SANDERS, OF SPRINGFIELD, MISSOURI.

VIBRATORY CHURN.

No. 923,375.

Specification of Letters Patent.

Patented June 1, 1909.

Application filed December 28, 1908. Serial No. 469,647.

To all whom it may concern:

Be it known that I, WILLIAM SANDERS, a citizen of the United States, residing at Springfield, in the county of Greene and State of Missouri, have invented certain new and useful Improvements in Vibratory Churns; and I do hereby 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 the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in churns and especially to the vibratory body movement churn and comprises a rack upon which the churn body is suspended by means of pivotal arms adapted to swing back and forth, the ends of the body being adapted to contact with buffers upon the standards of the rack.

The invention comprises various details of construction, combinations and arrangements of parts which will be hereinafter fully described and then specifically defined in the appended claim.

My invention is illustrated in the accompanying drawings, in which:—

Figure 1 is a perspective view of the churn. Fig. 2 is a detail perspective view showing the churn body set upright. Fig. 3 is a detail view on line 3—3 of Fig. 2, and Fig. 4 is a detail sectional view.

Reference now being had to the details of the drawings by letter, A and A' designate two plates or boards which are hinged together and upon each of said boards is a socket member B, preferably having threaded walls adapted to engage the lower threaded ends of the standards C which may be of gas pipe or any other suitable material. To the upper ends of each standard is fitted an elbow D and horizontally disposed tubular portions D' are connected to the adjacent ends of said elbows and a union E connects the adjacent threaded ends of the tubular sections D', as shown clearly in Fig. 1 of the drawings, thus affording means whereby the frame may be taken apart and reduced to a compact form.

Each of the horizontally disposed tubular

sections D' is provided with a diametrically disposed opening for the reception of the angled end of one of the rocking members H, there being two of said members mounted in each section D' as shown and each held in place by means of nuts N. Said members H are adapted to have a swinging movement and their lower ends are L-shaped adapted to receive the body portion K of the churn. A handle L is fitted to the top of the churn body whereby the same may be swung back and forth, and buffers O are fastened to the standards and against which the end and closure J of the churn are adapted to contact as it is swung back and forth. Said closure is provided with recesses S in the two opposite edges thereof, and eyes G are fastened to the opposite sides of the body portion of the churn and to which eyes the rods G' are connected, the free ends of which are threaded to receive the winged nuts I affording means whereby the closure may be securely held to the body portion of the churn. A suitable gasket M rests upon a shoulder in the body portion of the churn and against which the closure rests in order to make a hermetically sealed joint in the manner shown in Fig. 3 of the drawings.

In operation, when the parts are assembled as in Fig. 1, the operator by grasping the handle and causing the body portion of the churn to swing backward and forward will cause the contents of the churn to be violently agitated and this will be augmented by the end of the churn and closure alternately striking against the buffers upon the standards. When it is desired to remove the contents of the churn, said body portion may be removed from the swinging members and placed upon the end, as shown in Fig. 2, thereby giving ready access to the same. When it is desired to reduce the apparatus to a compact form for storage or shipment, the base portions of the rack and parts may be placed within the body portion of the churn and the handle utilized for carrying the same.

What I claim to be new is:—

In combination with the base boards hinged together, a standard rising from each of said boards, a buffer upon each standard, cross pieces connecting the upper ends of

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said standards, swinging angled members
pivotally mounted one in each of said cross
pieces, the lower end of each member being
L-shaped, a churn body resting upon said
5 L-shaped portions, a handle upon the churn
body, a closure, and means for holding the
same in place, as set forth.

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

WILLIAM SANDERS.

Witnesses:

GUS BENNERT,
OSCAR COLE.