No. 631,557. Patented Aug. 22, 1899.

J. E. CAYOUETTE.

CURD CUTTER.

(Application filed Feb. 4, 1899.)

(No Model.)

Fig. 1.

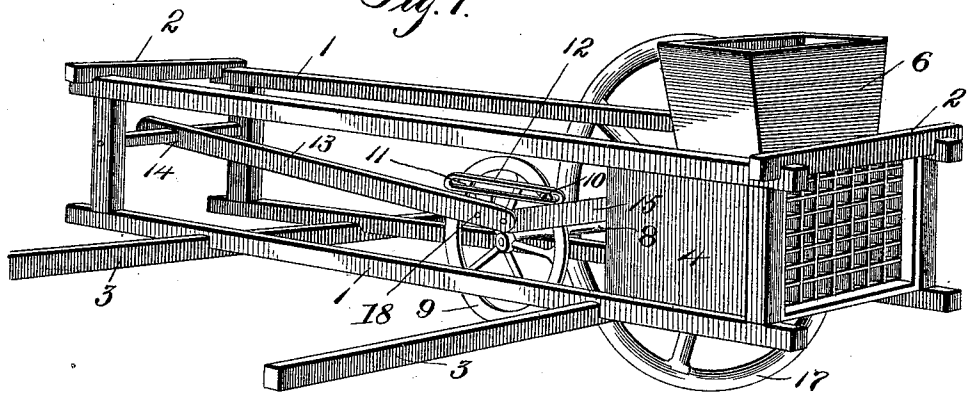


Fig. 2.

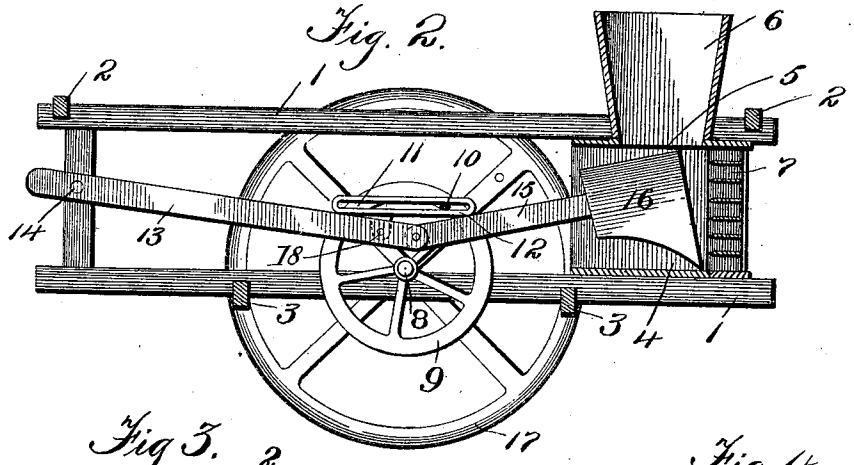


Fig 3.

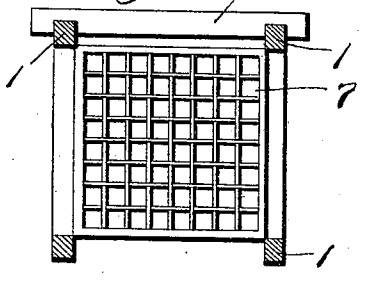
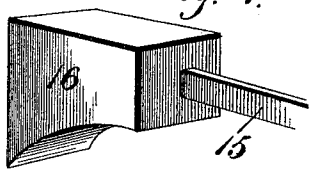


Fig. 4.



Witnesses:
J. Ed. Page.
Horace T. Deitz

Jean Evangeliste Cayouette, Inventor,
By Marion & Marion
His Attorneys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JEAN EVANGELISTE CAYOUETTE, OF STE. CLAIRE, CANADA.

CURD-CUTTER.

SPECIFICATION forming part of Letters Patent No. 631,557, dated August 22, 1899.

Application filed February 4, 1899. Serial No. 704,531. (No model.)

To all whom it may concern:

Be it known that I, JEAN EVANGELISTE CAYOUETTE, a subject of Her Majesty the Queen of Great Britain, residing at Ste. Claire, county of Dorchester, Province of Quebec, Canada, have invented certain new and useful Improvements in Curd-Cutters; 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.

My invention relates to improvements in curd-cutting machines.

The object of my invention is to provide a machine of this character in which the curd will be subjected to a great pressure, which causes milk, &c., to be forced from the curd, and at the same time the pressure causing the curd to be cut into a number of small parts.

To these ends my invention consists in the improved construction and combination of parts hereinafter fully described, and particularly pointed out in the appended claims.

In the drawings, in which similar numerals of reference indicate similar parts in all of the views, Figure 1 is a perspective view of my improved machine. Fig. 2 is a central longitudinal sectional view of the same. Fig. 3 is a sectional view showing the arm of the removable cutting apparatus. Fig. 4 is a detail of the plunger.

1 designates the frame of my improved machine, having suitable braces 2 for holding it in position. The frame is mounted on suitable supports 3, which are adapted to rest on the receptacle containing the curd. The front end of the machine is provided with a casing 4, having its front and rear ends open and having an opening 5 at its top, said opening communicating with the interior of a hopper 6, as best shown in Fig. 2. A frame 7, having a series of knives arranged transversely and horizontally therein, as shown in Fig. 3, is removably located within the frame 1 in front of the casing 4, as best shown in Fig. 2.

On the shaft 8, mounted transversely of the frame in rear of the casing, is a wheel 9, having on its face a pin 10, which is adapted to have movement within the slot 11 of the arm 12, which arm is secured to a lever 13 by means of a bolt 18, passing through said lever and through a depending tongue integral with said arm; the lever 12 being pivotally mounted, as at 14, within the frame 1. The lever 13 is pivotally connected to the piston-rod 15, the front end of which is provided with a suitable piston 16, which is rigidly attached thereto, as best shown in Fig. 4. The piston 16 is cut away on its lower face, forming a narrow edge upon its lower front face. It will be seen that by reason of the rigid connection between the piston and the piston-rod upon the operation of the machine a longitudinally-reciprocating movement will be imparted to the piston and also a forwardly-tilting movement given thereto, the narrow lower edge operating as a fulcrum. By this means the pressure will be gradually increased from the bottom of the piston to the top at the completion of its forward movement, whereby the liquid will be more effectively and thoroughly separated from the curd than if the movement of the piston were simply in a longitudinal direction. The outer end of the shaft 8 is provided with a suitable wheel 17, having a handle or other suitable driving means. (Not shown.)

It will be apparent that as the wheel 17 is rotated it carries with it the wheel 9 and that by the rotation of the wheel 9 the pin 10 will have movement within the slot 11, causing the arm 13 to move upward and downward on its pivot 14, the upward-and-downward movement of said arm causing the piston-rod and the piston to be drawn rearwardly and pushed forwardly within the casing 4.

In operation the wheel 17 is first turned to bring the arm 13 to its lowest position, which will cause the piston 16 to be moved in rear of the opening 5, whereupon the curd is placed in the hopper and passes downward within the casing and in front of the piston or plunger 16. The wheel is then rotated, causing the piston or plunger to be moved forwardly, which compresses the curd, forcing the milk, &c., out of it, and causes the curd to be forced into contact with the knives and outward through the opening formed between the knives.

It is obvious that in place of the knives I may use wires, as may be desired, said wires being arranged in a similar manner to the arrangement of knives as shown in the drawings.

While I have herein shown a preferred form of carrying my invention into effect, yet I do not desire to limit myself to such preferred detail of construction, but claim the right to use any and all modifications thereof which will serve to carry into effect the objects to be attained by this invention in so far as such modifications and changes may fall within the spirit and scope of my said invention.

Having thus described my invention, what I claim as new is—

1. A curd-cutter, comprising a frame, a cutter-receiving chamber arranged at the front end thereof, a hopper opening into said chamber, a cutting-frame removably mounted within said chamber, a piston operatively mounted in said chamber, a piston-rod rigidly fixed to said piston, a lever pivoted at one end to the frame and pivotally connected at the other end to the said piston-rod, a slotted arm fixed to said lever, a wheel mounted on said frame and having a pin connection with said slotted arm, and means for rotating said wheel, whereby a reciprocating and a tilting movement is imparted to said piston, substantially as described.

2. A curd-cutter, comprising a frame, a cutter-receiving chamber arranged at the front end thereof, a hopper opening into said chamber, a cutting-frame removably mounted within said chamber, a piston operatively mounted in said chamber and having its lower face cut away forming a narrow lower edge on its front face, a piston-rod rigidly fixed to said piston, a lever pivoted at one end to the frame and pivotally connected at the other end to the said piston-rod, a slotted arm fixed to said lever, a wheel mounted on said frame and having a pin connection with said slotted arm, and means for rotating said wheel, whereby a reciprocating and a tilting movement is imparted to said piston, substantially as described.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

JEAN EVANGELISTE CAYOUETTE.

Witnesses:
C. EUG. ROYER,
JAS. BROWN.