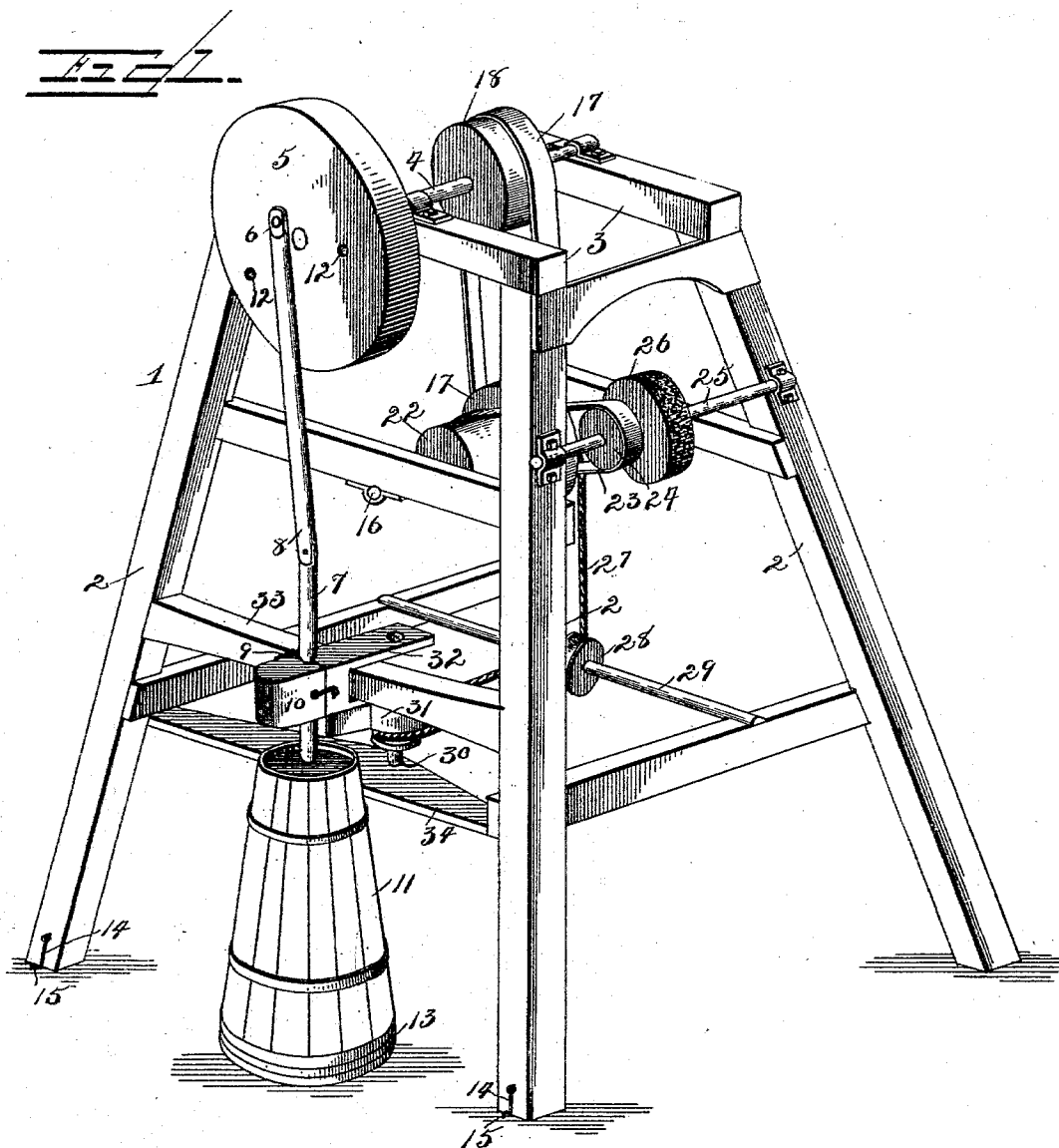


2 Sheets—Sheet 1.

No. 511,056.

Patented Dec. 19, 1893.



Inventor

W. Schneider
N. F. Riley

Amos W. Nanny

By *his* Attorneys,

Chas. Knowlton

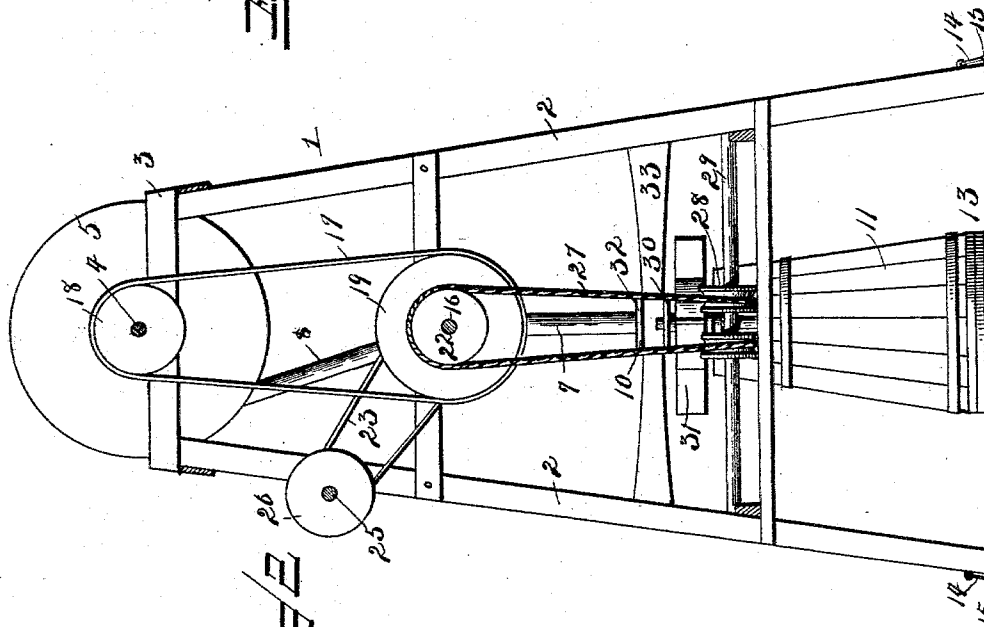
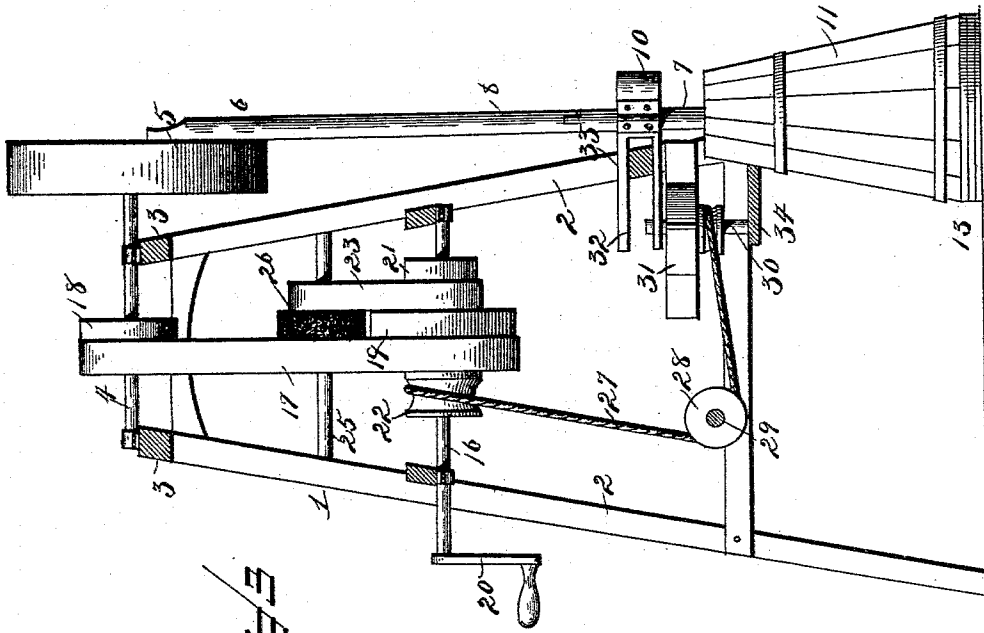
(No Model.)

2 Sheets—Sheet 2

A. W. NANNY.
CHURN.

No. 511,056.

Patented Dec. 19, 1893.



Witnesses

W. E. Schneider
W. H. Piley

Inventor

Amos W. Nanny

By his Attorneys,

C. A. Snow & Co.

311,056

UNITED STATES PATENT OFFICE.

AMOS WILLIAM NANNY, OF CLEBURNE, TEXAS.

CHURN.

SPECIFICATION forming part of Letters Patent No. 511,056, dated December 19, 1893.

Application filed May 25, 1893. Serial No. 475,502. (No model.)

To all whom it may concern:

Be it known that I, AMOS WILLIAM NANNY, a citizen of the United States, residing at Cleburne, in the county of Johnson and State of Texas, have invented a new and useful Churn, of which the following is a specification.

The invention relates to improvements in churns.

The object of the present invention is to improve the construction of churns and to enable the same to be readily operated, to prevent flies from collecting around the top of the churn and to keep dust therefrom.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings and pointed out in the claim hereto appended.

In the drawings—Figure 1 is a perspective view of a churn constructed in accordance with this invention. Fig. 2 is a central vertical sectional view. Fig. 3 is a similar view taken at right angles to Fig. 2.

Like numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a pyramidal supporting frame having inwardly inclined corner posts 2 and provided with a cap or top pieces 3, which are arranged transversely of the frame, and which have journaled on them in suitable bearings a drive shaft 4. The drive shaft 4 carries a crank disk or wheel 5, which is provided with a removable wrist pin 6; and motion is communicated from the crank disk or wheel to a dasher-rod 7 by a pitman 8. The dasher-rod is arranged in a guide opening 9 of a bearing block 10, and may be provided with any suitable dasher, and it reciprocates vertically in a churn body 11. The crank disk is provided at different distances from its center with sockets 12 to regulate the stroke of the dasher-rod by arranging the wrist pin in different ones. The churn body is supported at the proper elevation to correspond with the stroke of the dasher, by blocks 13. When the wrist pin is arranged in the socket nearest the center of the crank disk, the stroke is the shortest and all of the blocks are employed in supporting the churn body as illustrated in the drawings; and as the stroke is increased

the churn body is lowered by removing one or more of the blocks.

The frame 1 of the churn is rigidly connected with the floor during the operation of churning by hooks 14 of the corner posts and eyes 15 of the floor or supporting surface.

The drive shaft 4 receives motion from a power shaft 16 by a belt 17 and pulleys 18 and 19 arranged respectively on the power and drive shafts. The power shaft is provided with a crank handle 20, and also carries pulleys 21 and 22. The pulley 21 has arranged on it a belt 23, which communicates motion through a pulley 24 to a counter-shaft 25 on which the pulley 24 is mounted, and which carries a grindstone 26. The counter-shaft 25 is journaled in suitable bearings at one side of the frame and is in convenient position for use. The pulley 22 has arranged on it a belt 27, which passes over guide pulleys 28 of a transverse shaft 29 and around a vertical fan shaft 30. The vertical fan shaft 30 is arranged adjacent to the dasher rod and carries a fan 31 which is located near the top of the churn body and is adapted to keep dust and flies therefrom, and after the operation of churning is completed, the belts 17 and 23 being disconnected, the fan only may be operated. During the operation of churning the belt leading to the countershaft which carries the grindstone need not be in position, and when grinding the other belts may be removed.

The bearing block 10 is provided with parallel plates 32, which are secured to a cross-piece 33 at the front of the supporting frame; and the vertical fan shaft is journaled in a bearing opening of the lower plate 32 and a lower cross-piece 34.

It will be apparent that the churn is simple and inexpensive in construction, that it is capable of effecting a rapid production of butter, and that it may be readily adjusted to suit the amount of cream to be churned to enable the same to be operated on to the greatest advantage.

Changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention, such as employing sprocket chains

instead of leather belts and other forms of equivalent gearing.

The bearing block 10 is provided with a hinged section, which is held closed by a catch, and which is adapted to be opened to enable the dasher-rod to be readily detached.

What I claim is—

In a churn, the combination of a supporting frame provided with cross-bars 33 and 34, a bearing block having a guide opening and provided with plates secured to the cross-bar 33, a vertical fan shaft journaled in bearing openings of the lower one of said plates and

in the cross-bar 34, and carrying a pulley, a fan mounted on the fan shaft, a dasher-rod arranged in the guide opening, a power-shaft, and means for communicating motion therefrom to the dasher rod and to the fan shaft, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

AMOS WILLIAM NANNY.

Witnesses:

T. H. GRIFFIN,
S. G. GRAHAM.