

No. 731,628.

PATENTED JUNE 23, 1903.

J. W. SPENCER.
BRAKE FOR CREAM SEPARATORS.

APPLICATION FILED MAY 28, 1902.

NO MODEL.

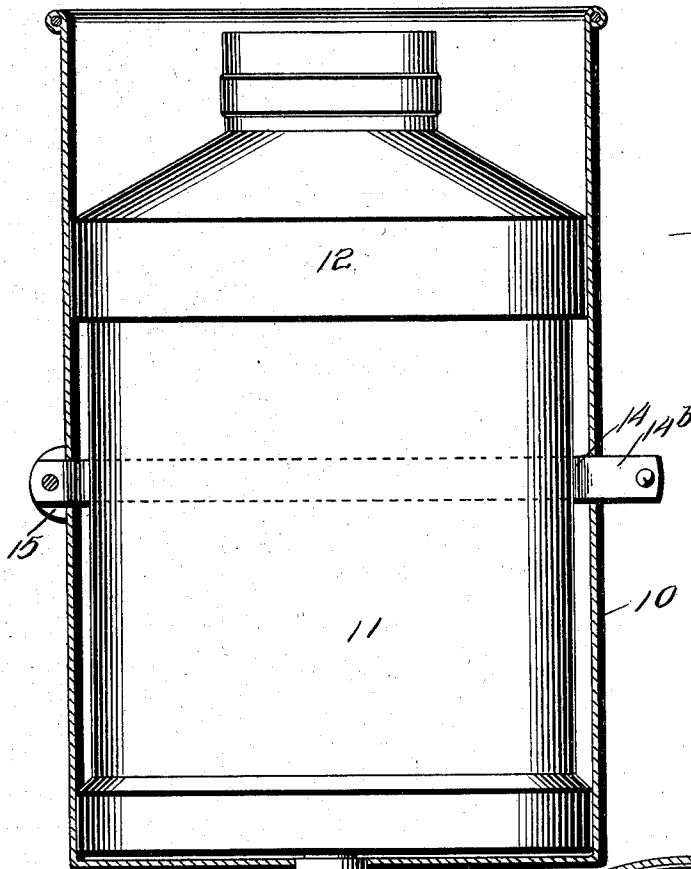


Fig. 1.

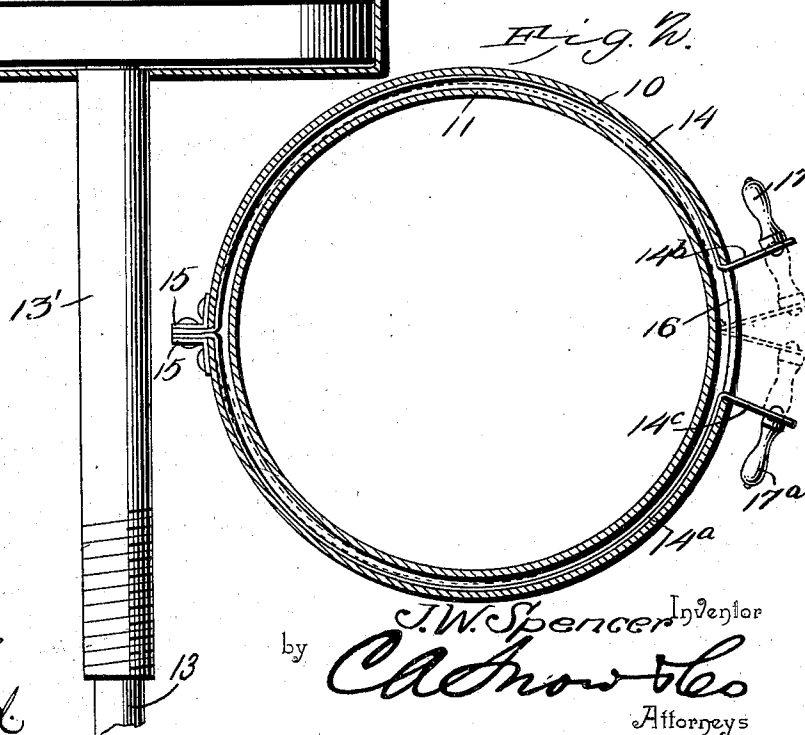


Fig. 2.

Witnesses
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UNITED STATES PATENT OFFICE.

JESSE W. SPENCER, OF LAGRANDE, OREGON.

BRAKE FOR CREAM-SEPARATORS.

SPECIFICATION forming part of Letters Patent No. 731,628, dated June 23, 1903.

Application filed May 28, 1902. Serial No. 109,405. (No model.)

To all whom it may concern:

Be it known that I, JESSE W. SPENCER, a citizen of the United States, residing at Lagrande, in the county of Union and State of Oregon, have invented a new and useful Brake for Cream-Separators, of which the following is a specification.

This invention relates to cream-separators and similar apparatus wherein a stationary inclosing casing is employed, with a revolving drum inclosed therein; and the invention consists in a spring-controlled brake mechanism attached to said casing and adapted to be operated upon said revolving drum to check and control its motion, as hereinafter shown and described, and specified in the claims.

In the drawings illustrative of the invention, Figure 1 is a side elevation of the revoluble drum and its inclosing casing, the casing being in section. Fig. 2 is a transverse section on the line 11 11 of Fig. 1.

This invention may be adapted to the various forms of rotary cream-separators and similar devices, and for the purpose of illustration it is shown applied to an ordinary form of separator, in which 10 represents the inclosing stationary casing, which is usually mounted upon a standard which in turn supports the operating mechanism; but as the supporting and operating mechanisms are no part of the present invention they are not illustrated.

Within the casing 10 is supported the drum 11, which contains the usual perforated conical spaced drums; but as these drums form no part of the invention they are not illustrated.

The drum 11 is provided with a cover 12 and a driving-shaft 13, extending from its lower side downward through the casing 10 and through the tubular standard 13', which forms the support for said casing 10, the power for revolving the drum being applied to the shaft 13.

The driving mechanism is of the usual construction employed in similar devices.

The drum 11 runs entirely free from the casing 10, as indicated, leaving a considerable space between the drum and the casing, and within this space are located two flat springs 14 14^a, encircling the drums and

united at one end in ears 15, extending from the side of the casing 10, as shown. The other ends of the springs 14 14^a are turned outward, as shown at 14^b 14^c, through an aperture 16 in the side of the casing 10 and each outturned end provided with a handle 17 17^a, respectively, as shown in Fig. 2. The casing serves to limit the expansion of the springs and prevents them from springing out in the way of the operator.

The springs 14 14^a when in their distended position, as shown in full lines in Fig. 2, will be separated at their free ends a considerable distance, so that when the handles 17 17^a are drawn together the springs 14 14^a will form a brake upon the drum 11 to check and control its motion, as will be readily understood.

The springs 14 14^a will be located, preferably, near the center of the drum 11, as shown in Fig. 1, but may be located at other points, if desired. By this very simple means an easily-operated and efficient brake is provided for the drum, so that its motion may be very readily checked and controlled to regulate the speed or to speedily stop the motion when required.

Cream-separators running at a very high rate of speed acquire considerable momentum, so that they run for a considerable period of time involuntarily after they run "dry," and much valuable time is lost under such circumstances waiting for them to "run down," and by the addition of the simple brake herein illustrated this time can easily be saved, as the drum can be almost instantly stopped after the milk and cream have all been discharged therefrom.

The springs 14 14^a may be lined with leather or some other similar material to not only increase their "gripping" properties, but also to prevent injury to the drum by the friction of the brake.

Having thus described my invention, what I claim is—

1. In a device of the class described, a casing, a tubular support therefor, a drum within said casing, a power-shaft attached to said drum and extending through the tubular support, flexible brake means encircling the drum within the casing, and handles project-

ing from the ends of said brake means through the slots in the side of the casing.

2. A casing, a tubular support for the same, a drum within said casing, a power-shaft for
5 said drum extended through said tubular support, flexible brake means surrounding the drum and attached to the casing, and handles extending from said brake means through a slot in the casing.

10 3. A casing, a drum revoluble in said casing, flexible brake means attached to the casing, and handles for said brake means extending through a slot in said casing.

15 4. A casing, a drum revoluble in said casing, flexible brake means surrounding said drum and attached to said casing, and handles

dles for compressing the said brake means upon the revoluble drum.

5. A casing having lugs extending from one side thereof, and provided with a slot in
its opposite side, a drum revoluble within said casing, and flexible straps attached at their inner ends to the lugs of the casing and projecting at their free ends through the slot in
said casing.

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

JESSE W. SPENCER.

Witnesses:

J. W. KNOWLES,
LOUIS DEPETRIS.