

No. 648,901.

Patented May 1, 1900.

C. L. EATON.
CALF WEANER.

(Application filed Feb. 6, 1899.)

(No Model.)

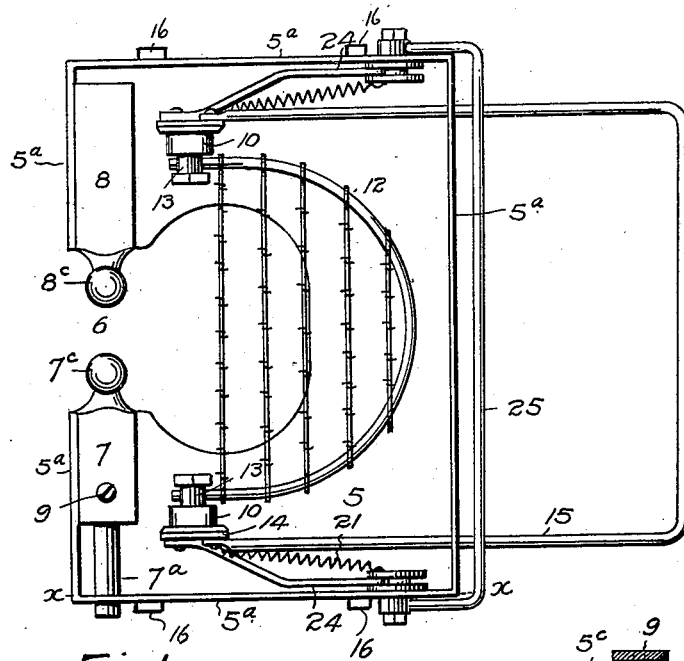


FIG. 1

FIG. 2

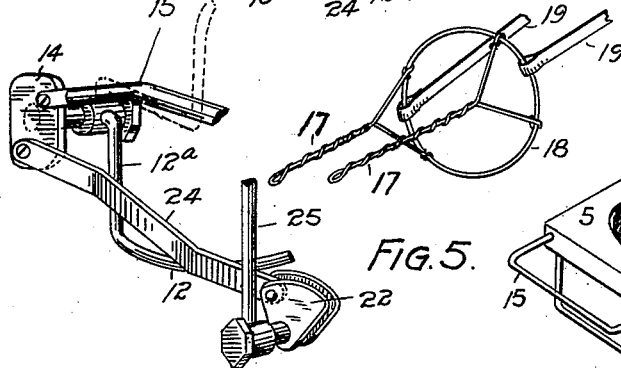
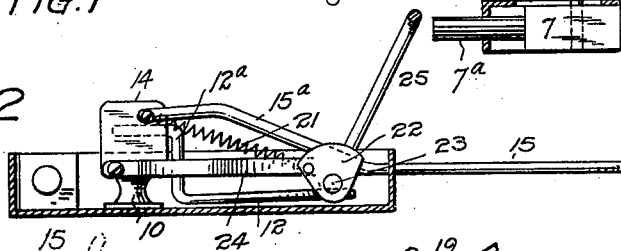


FIG. 3.

FIG. 5.

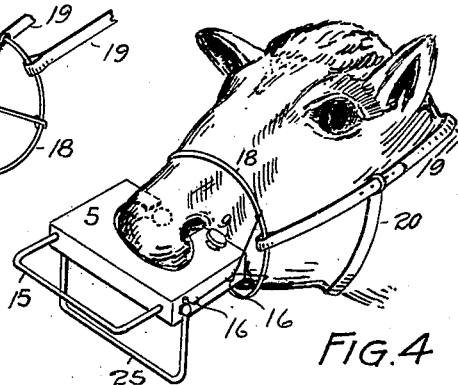
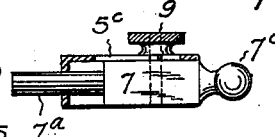


FIG. 4

FIG. 6.



Witnesses
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CHARLES L. EATON, OF DENVER, COLORADO.

CALF-WEANER.

SPECIFICATION forming part of Letters Patent No. 648,901, dated May 1, 1900.

Application filed February 6, 1899. Serial No. 704,653. (No model.)

To all whom it may concern:

Be it known that I, CHARLES L. EATON, a citizen of the United States of America, residing at Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Calf-Weaners; and I do 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 figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in calf-weaners, my object being to provide a device of this class which shall be simple in construction, economical in cost, reliable, durable, and efficient in use; and to these ends the invention consists of the features hereinafter described and claimed, all of which will be fully understood by reference to the accompanying drawings, in which is illustrated an embodiment thereof.

In the drawings, Figure 1 is a view of the device turned bottom side up. Fig. 2 is a section taken on the line X X, Fig. 1. Fig. 3 is a fragmentary perspective view illustrating the moving parts on one side of the device. Fig. 4 is a perspective view illustrating the device in use. Fig. 5 is a perspective view in detail, illustrating the apparatus for attaching the device to the head of the animal. Fig. 6 illustrates the adjustable nostril-clamp member, the supporting-frame being shown in section.

Similar reference characters indicating corresponding parts in these views, let the numeral 5 designate a suitable rectangular plate having a depending flange 5^a formed around its outer edge. This plate is provided with a front opening 6, into which projects two members 7 and 8, adapted to enter the nostrils at the side and clamp the separating-cartilage. The member 7 is adjustable by means of a set-screw 9, passed through a slot 5^c, formed in the top of the plate. This member is provided with a reduced portion 7^a, adapted to pass through a guide-opening formed in the side part of the flange. The inner or nostril-engaging extremities of these clamp members are rounded or bell-shaped, as shown at

7^c and 8^c, to prevent injuring the nose. These parts may be formed of wood, rubber, or any other desired material.

In front of the clamp members 7 and 8 are located two lugs 10, which are attached to the plate 5 and made stationary thereon. In each of these lugs is journaled a short rock-shaft 13. To these shafts are respectively attached the extremities of a sort of movable muzzle 12, whose ends are provided with bends 12^a, extending from the shafts toward the plate 5 to allow the muzzle part to occupy normally a position in contact with or in proximity to the under surface of the plate 5. This part 12, as shown in the drawings, consists of a piece of stiff wire bent into semicircular shape, to which is attached a wire network or screen. This wire net is provided with short sharp-pointed barbs, which will irritate the face of the animal when the muzzle is thrown down in front of its nose or mouth. This muzzle part when actuated as hereinafter explained is thrown down or turned to a position in front of the mouth of the animal and makes it impossible for it to suck the cow. This movable muzzle part may be actuated by various devices arranged to impart a partial rotation to the rock-shafts upon which it is mounted. To these shafts are attached small plates 14, having the function of cranks, which are pivotally connected outside the shaft center to the extremities of a U-shaped frame 15, whose arms pass through guide-openings formed in the front flange 5^a of the plate 5 and extend a short distance in front of the flange. To bring these arms into line with the openings in the front flange, they are provided with bends 15^a.

The device may be attached to the head of the animal in any suitable manner. As shown in the drawings, (see Fig. 4,) the side flanges 5^a are provided with staples 16, to which are attached wires 17, whose extremities lead to a ring 18, formed around the nose of the animal above the nostril. A strap 19, passing over the head behind the ears of the animal, is attached to this ring for holding the device in place. Another strap 20 attached, to the strap 19, passes under the throat. These features, together with the nostril-clamp, hold the device in place substantially in the position shown in Fig. 4. Thus in the effort to

suck the cow the calf will first push the frame 15 against the cow, forcing the said frame inwardly sufficiently to actuate the rock-shafts 13 and throw the muzzle part 12 in front of the animal's mouth, thus preventing it from sucking. As soon as the pressure on the frame 15 is released the said frame, the rock-shafts 13, and the muzzle part 12 will be returned to their normal position by two springs 21, attached to the screws which hold the extremities of the frame 15 in place, the opposite extremities of the springs being attached to a suitable support. As shown in the drawings, the forward extremities of the springs are attached to segmental plates 22, mounted on the rock-shafts 23, journaled in the side flanges 5^a, near their front extremities. The plates 22 are connected with the plates 14 by links 24 in such a manner that the turning of the shafts 23 will also actuate the shafts 13 and throw the part 12 to the muzzling position. To the shafts 23 are attached the extremities of an auxiliary U-shaped frame 25, located in front of the muzzle part 12 and forming a further safeguard against sucking. If this frame is moved to the position indicated by the arrows in Figs. 2 and 4, it will turn the rock-shafts 23 and the plates 22 and through the instrumentality of the links 24 operate the plates 14, turning the shafts 13 and throwing the muzzle to the position indicated by dotted lines in Fig. 3. This auxiliary frame may be operated if the calf throws its head up and brings it down against the cow, as sometimes happens. In applying the device the clamp parts 7 and 8 are applied to the nostrils, the part 7 being adjusted as tightly as may be necessary to hold the apparatus securely in place. The manner of attaching the device to the head of the animal, as illustrated in Fig. 4, has already been described.

The rectangular plate 5 when attached to the animal occupies a horizontal position in the plane of the nostrils, thus allowing the animal to eat and drink when its head is in the normal position for that purpose—that is to say, extended downward to the trough or ground, as the case may be.

It must be understood that my improved device may be employed on other animals than that herein described and for other purposes, though it is considered specially advantageous as a calf-weaner.

Having thus described my invention, what I claim is—

1. In a calf-weaner, the combination with a plate adapted to be attached to the head of the animal, of a nostril-clamp mounted on the plate, a movable muzzle also mounted on the plate, a spring connected with the muzzle and normally holding it in a position substantially parallel with the plate and above the mouth of the animal and a suitable device mounted on the plate and projecting therefrom, for actuating the muzzle, whereby the latter is

thrown downwardly to a position substantially at right angles to the plate in front of the animal's mouth when pressure is applied to the actuating device.

2. The combination with a plate having a central front opening, of clamping devices attached to the plate and projecting into said opening, one of its members being adjustable, lugs fast on the plate, spring-held rock-shafts journaled in said lugs, a muzzle mounted on the rock-shafts and normally held in contact, or approximately in contact, with the under surface of the plate, a movable frame mounted on the plate and projecting forward therefrom, and a suitable connection between said frame and the shafts, whereby, as pressure is applied to the frame, the shafts are actuated in opposition to the springs, and the muzzle thrown downwardly in front of the nose-clamp.

3. The combination with a supporting-plate provided with depending lugs, of rock-shafts journaled in said lugs, crank-plates attached to the rock-shafts, springs connected with a suitable support at one extremity and with the crank-plates at the opposite extremity, a muzzle mounted on the rock-shafts, and a movable frame connected with the plates and projecting forward of the supporting-frame, whereby, as pressure is applied to the movable frame, the muzzle is actuated for the purpose set forth.

4. The combination, with a supporting-plate provided with depending lugs, of spring-held rock-shafts journaled in the lugs, a muzzle device connected with the rock-shafts, and a shaft-operating frame connected with the rock-shafts and projecting beyond the supporting-plate.

5. The combination, with a supporting-plate, of spring-held rock-shafts mounted thereon, a muzzle connecting with the shafts, an operating-frame also connected with the shafts and projecting beyond the plate, an auxiliary frame, rock-shafts upon which said frame is mounted, and a connection between the two sets of rock-shafts whereby the muzzle is actuated by applying power to either frame.

6. The combination, with a supporting-plate, of spring-held rock-shafts mounted thereon, a muzzle connected with the shafts, an operating-frame also connected with the shafts and projecting beyond the plate, an auxiliary frame, rock-shafts upon which said frame is mounted, and links connecting the two sets of rock-shafts, whereby the muzzle may be actuated by applying pressure to either frame.

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

CHARLES L. EATON.

Witnesses:

ISHAM R. HOWZE,
NELLIE G. DANIELS.