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DEVICE FOR ASSISTING PARTURITION OF ANIMALS

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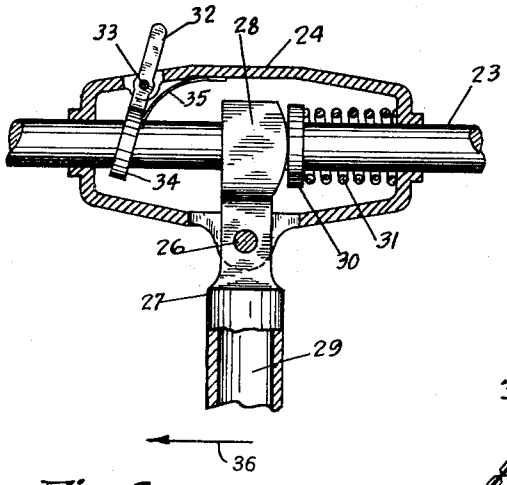


Fig. 3.

Fig. 1.

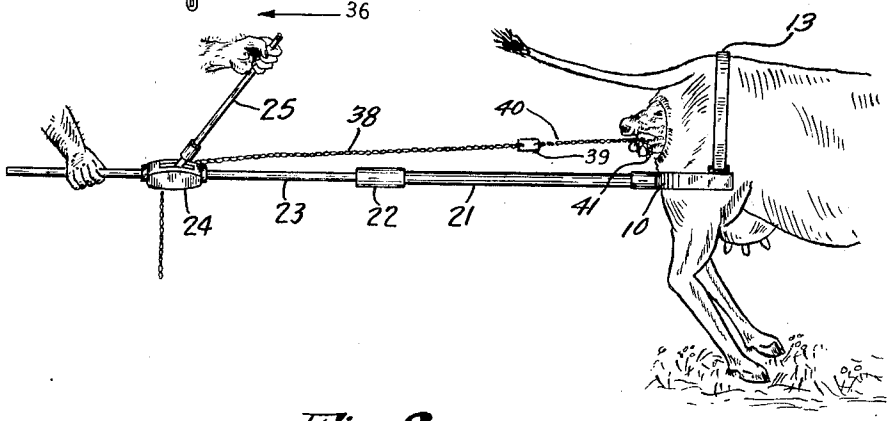


Fig. 2.

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DEVICE FOR ASSISTING PARTURITION OF ANIMALS

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4 Claims. (Cl. 128—352)

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This invention relates to devices for assisting delivery of the young of animals, and more particularly cows in calving.

One of the objects of the invention is to provide a calving device with which pressure may be applied to the cow, during pulling of the calf, in a novel manner such that delivery is facilitated.

Another object is to provide a device of the foregoing type which utilizes a friction jack to effect pulling, the pressure being applied to the rump of the cow in a manner such that its abdomen may be elevated to facilitate delivery of the calf.

A further object is to provide a device which engages the rump of the cow and also its back, and forwardly of the hip bones near the loins, for effecting the elevating movement.

Another object is to provide a light weight device which may be readily disassembled, the parts thereof being compact and readily portable.

Still further objects, advantages, and salient features will become more apparent from a consideration of the description to follow, the appended claims, and the accompanying drawing, in which:

Figure 1 is an exploded perspective of the device which constitutes the subject of the invention;

Figure 2 is a side elevation showing the device in use; and

Figure 3 is an enlarged longitudinal section through a friction jack.

Referring in detail to the drawing, and particularly Figure 1, the device comprises a yoke-like breeching plate 10 which has a generally flat portion at its center and curved ends 11, 12, the shape of the plate being such that it generally conforms to the rump and haunches of the cow. Straps 13, 14, are secured to the forward ends of the breeching in any suitable manner, such as by loops 15, 16 secured to the breeching, the straps being secured thereto by rivets or the like. A buckle 17 is provided on one of these straps which engages any of a plurality of holes 18 in the other strap so that the length of the straps 13, 14 may be adjusted.

A tubular coupling 19 is secured to the breeching plate, as by welding, which coupling detachably receives end 20 of a rod 21. Rod 21 has a similar coupling 22 at its other end which receives the end of another rod 23 in like manner.

A friction jack 24 is mounted on rod 23 and is adapted to be moved therealong by a handle 25. The jack may be constructed in any well-known manner such as shown in the patent to

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Braselmann, No. 1,824,768, granted September 29, 1931, or in accordance with well-known "bumper" jacks for automobiles which are adapted to move on a smooth round rod. In Figure 3 is shown the general details of such type of jack wherein the jack casing pivotally supports, by pin 26, a lever 27 having an offset end with a cam 28 thereon, the lever having a tubular socket 29 at its other end. A washer 30 having a bore slightly larger than the diameter of rod 23 is disposed on the rod and is urged to the left by a spring 31. A latch lever 32 is pivoted to the casing by pin 33 and the end 34 has a bore similar to that of washer 30. A flat spring 35 urges the lower end of the latch lever to the left. The detachable handle 25 telescopes into socket 29 and when this handle is moved in the direction of arrow 36 the cam 28 engages washer 30 on one side thereof and causes it to jam or lock on rod 23. Further movement then moves the casing to the left, along rod 23, the rod sliding through the hole in latch lever 32. After the jack is thus moved along rod 23 the lower end of latch lever 32 is moved to the left by spring 35 and jams on the rod, thus preventing retrograde movement of the jack.

The jack is provided with a hook 37 which engages a link of chain 38. The other end of the chain is connected by a strap or link 39 to the obstetrical chains 40 these having slip loops 41 at their ends which engage the feet of the calf during delivery. If desired, additional chains may be provided for engaging the head of the calf, the particular manner of attaching such chains being well known in the art.

In the use of the device the loops 41 of the obstetrical chains 40 are attached to the feet of the fetus with the latter in the position shown in Figure 3. In some instances, an additional chain will be connected to the head of the fetus or engaging the eye sockets as well known in the art. The breeching is then placed closely beneath the pin bones of the cow and the straps 13, 14, adjusted so that the rods 21, 23, are in substantially the position shown in Figure 2. The jack is then operated applying tension to the chains, the rate of jacking being maintained at the rate of dilation of the pelvic muscles of the cow. A downward pressure should be applied to rod 23, this pressure being transmitted to the rump which forces the legs forwardly toward the abdomen resulting in arching of the cow's back which effects a rearward and downward pressure on the fetus which tends to widen the cow's pelvic bones. By a combination of

pulling force by the jack and downward pressure on rod 23, delivery in even the most difficult cases, is a relatively simple matter. The importance of straps 13, 14, and the manner in which they cooperate with the breeching will now become readily apparent.

While the device has been described for use with cow calving, it will be apparent that it may be employed with other animals such as mares, or any other animals which have similar anatomy which renders the various parts of the device operable in substantially the same manner described for a cow. The term "cow," therefore, as employed in the claims is intended to cover in a generic sense, any animal which has similar anatomy with which the device may be employed. It is also to be understood that the specific details illustrated are exemplary only and that modifications may be made within the purview of the invention, without departure from the spirit thereof and the invention is not intended to be limited to the precise construction disclosed except as defined by the scope of the appended claims.

Having described the invention what I claim as new is:

1. An obstetrical device for assisting calving in cattle, comprising a breeching plate adapted to be placed against the rump of a cow, the breeching plate having portions extending forwardly about the haunches toward the hips of the cow, an adjustable strap member adapted to extend over the back of the cow, having its ends connected to the forwardly extending portions of the breeching plate, a tubular coupling connected to the breeching plate substantially at its center and extending rearwardly thereof, a circular rod adapted to be telescopically received by the coupling to extend rearwardly, a friction jack movably mounted on the rod having a handle adapted to move the jack rearwardly along the rod, the jack also including means for preventing retrograde movement therealong, and a chain, or the like, connected at one end to the jack, its other end being adapted to connect with the calf, the construction being such that downward pressure on the rod tends to arch the cow's back by the cooperation of the breeching plate and strap.

2. An obstetrical device in accordance with claim 1 wherein the rod is formed of a plurality of members telescopically connected at adjacent ends, whereby the device may be disassembled to render it readily portable.

3. An obstetrical device in accordance with claim 2 wherein the plurality of rods are telescopically connected by a tubular coupling member.

4. An obstetrical device in accordance with claim 1 wherein the jack means is provided with a hook for engaging various links of the chain.

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REFERENCES CITED

The following references are of record in the file of this patent:

FOREIGN PATENTS

Number	Country	Date
635,021	France	Dec. 10, 1927