No. 609,833.

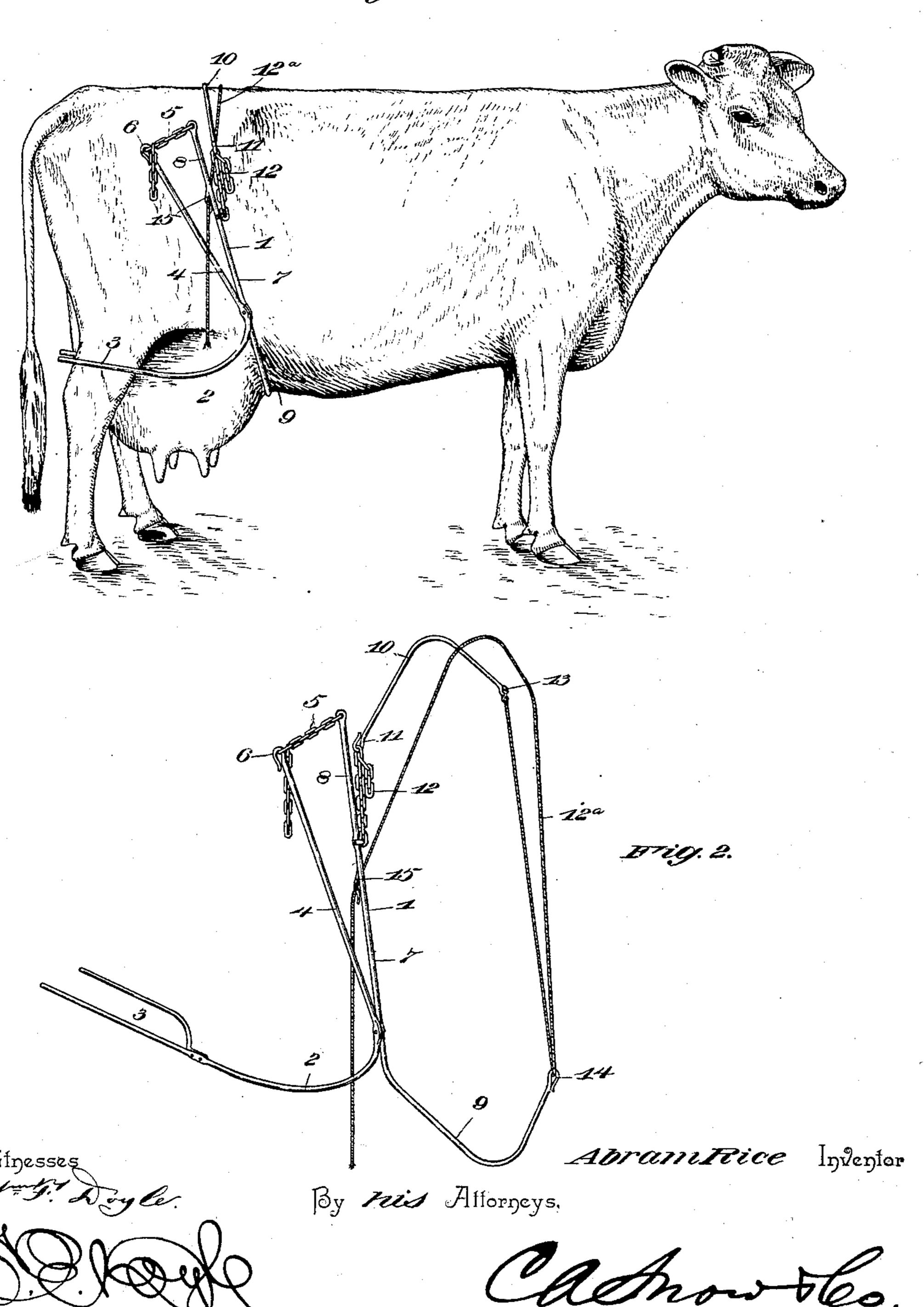
Patented Aug. 30, 1898.

A. RICE. MILKING HOPPLE.

(Application filed Mar. 15, 1898.)

(No Model.)

Frig.L.



United States Patent Office.

ABRAM RICE, OF DANVILLE, IOWA.

MILKING-HOPPLE.

SPECIFICATION forming part of Letters Patent No. 609,833, dated August 30, 1898.

Application filed March 15, 1898. Serial No. 673,951. (No model.)

To all whom it may concern:

Be it known that I, Abram Rice, a citizen of the United States, residing at Danville, in the county of Des Moines and State of Iowa, bave invented a new and useful Milking-Hopple, of which the following is a specification.

My invention relates to a milking-hopple or apparatus for preventing cows from kicking during the milking operation; and the object in view is to provide a simple, comparatively inexpensive, and efficient harness or combination of rods adapted for application with facility to a cow and designed to prevent the forward movement of the leg upon that side of the cow at which the milker is located.

Further objects and advantages of this invention will appear in the following description and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings, Figure 1 is a view of a hopple constructed in accordance with my invention applied in the operative position to a cow. Fig. 2 is a perspective view of the same detached.

Similar numerals of reference indicate corresponding parts in both figures of the drawings.

Mounted upon a suitable attaching-frame 1, so constructed as to embrace the body of a cow, is a hopple-lever 2, having a bifurcated or forked leg-engaging extremity 3 and having an arm 4, by which the position of the 35 leg-engaging extremity may be adjusted. The means illustrated in the drawings for holding the hopple-lever at the desired adjustment consists of a chain 5, connected at one end to the attaching-frame 1 and adapted to engage with a hook 6 at the extremity of the lever-arm 4, any desired link of said chain being adapted to be engaged in order to vary the adjustment of the lever.

The attaching-frame illustrated in the drawings is of sectional construction, including a
body-rod 7, having an approximately straight
side arm 8 and a bowed or hooked lower arm
9, adapted to engage the body of the cow in
front of the udder. Upon the body portion
or side arm of this body member is fulcrumed
the hopple-lever by means of interlocking

eyes or any equivalent devices. The other section of the attaching-frame consists of a back-rod 10, arched to approximately fit the back of the cow in the plane of the body rod 55 or section 7 and having a terminal hook 11 for engagement with either of the links of an adjustable chain connection 12, which is attached to and carried by the side arm 8. This connection 12 is preferably attached to the 60 arm 8 at an intermediate point to enable the desired extent of adjustment to be attained, while not affecting the position of the flexible connection 5, which serves as the means, hereinbefore described, for maintaining the hop-65 ple-lever at the desired adjustment.

The apparatus as thus far described occupies a position mainly upon the near side of the cow, or that side which is contiguous to the milker, and in order that the remote ex- 70 tremities of the body and back rods 7 and 10 may be connected and at the same time in order to facilitate the application of the attaching-frame to the body of the cow I extend a flexible connection 12^a from an eye 13 75 on the off end of the back-rod 10 downwardly to and through a hook 14 on the off end of the body-rod 7, and thence carry said connection (which may consist of a rope or heavy cord) up to and over the back of the cow and 80 connect it in any suitable manner, as by means of an eye 15, with the side arm of the bodyrod 7. It is obvious that by the adjustment of this flexible connection or cord the relative positions of the off or remote ends of the 85 back-rod and body-rod may be adjusted, while the near portions of said members may be correspondingly adjusted by means of the connection 12.

In applying the apparatus to a cow the 90 looped intermediate portion of the connection 12^a may be disengaged from the terminal 14 of the body member and thrown over the cow, after which the milker by reaching under the cow may engage said looped end with the 95 hook 14, and thus in one operation fasten the frame securely in its operative position.

From the above description it will be seen that the apparatus is not only easily applied to the body of the cow, but that the rear- 100 ward strain upon the near leg of the cow may be varied to insure the proper position of

such leg and prevent such forward movement thereof as would interfere with the milker or disturb the receptacle. It will be understood, however, that while the described 5 combination of devices constitutes a simple means whereby the desired object may be attained the construction is susceptible of various changes as to form, proportion, and minor details without departing from the 10 spirit or sacrificing any of the advantages of this invention.

Having described my invention, what I

claim is—

1. A milking-hopple having an attaching-15 frame adapted to engage the body of a cow, and a leg-engaging rod extending rearwardly from said frame to prevent forward movement of the engaged leg, substantially as

specified.

2. A milking-hopple having an attachingframe for engaging the body of a cow, and a terminally-bifurcated leg-engaging arm extending rearwardly from said frame, to receive the near leg of the cow and prevent 25 forward movement thereof, substantially as specified.

3. A milking-hopple having an attachingframe for engaging the body of a cow, and an adjustable leg-engaging arm extending rear-30 wardly from said frame to receive and maintain the near leg of the cow in the desired position against forward movement, substan-

tially as specified.

4. A milking-hopple having an attaching-35 frame adapted to be engaged with the body of a cow, a hopple-lever fulcrumed upon said frame and provided with a rearwardly-extending bifurcated arm for engaging a cowleg, and means for securing said lever at the 40 desired adjustment, substantially as specified.

5. A milking-hopple having an attachingframe for engagement with the body of a cow, a hopple-lever fulcrumed upon said frame and having a bifurcated rearwardly-extend-45 ing arm for engaging the near cow-leg, and adjusting devices, consisting of a chain, extending rearwardly from the attaching-frame for engagement with a terminal hook on the lever, substantially as specified.

6. In a milking-hopple, the combination with a hopple-arm for engaging a cow-leg, of an attaching-frame for supporting said arm, and having a body-rod, for extending under the body of a cow, a back-rod, and adjust-

able connections between said rods, substan- 55

tially as specified.

7. In a milking-hopple, the combination with a leg-engaging arm, of an attachingframe of sectional construction having body and back members connected at their near 60 extremities, and a flexible connection between the off or remote ends of said rods, substantially as specified.

8. In a milking-hopple, the combination with a leg-engaging arm, of an attaching- 65 frame having body and back rods connected at the near side of a cow, and a flexible connection depending from the back-section and having a detachable engagement with the end of the body-rod at the off side of the cow, sub- 70

stantially as specified.

9. In a milking-hopple, the combination with a leg-engaging arm, of an attachingframe having a body-rod and a back-rod connected together at the near side of a cow, and 75 a looped connection attached to the off end of the back-rod, detachably engaged with a terminal hook on the off end of the body-rod, and adjustably engaged with one of the rods contiguous to the point of connection thereof, 80 substantially as specified.

10. In a milking-hopple, the combination with a leg-engaging arm, of an attachingframe having a body-rod provided with a side arm and a curved lower arm, a back-rod, an 85 adjustable connection between the near end of the back-rod and the side arm of the bodyrod, and a flexible connection between the off ends of the back and body rods, substan-

tially as specified.

11. In a milking-hopple, the combination with a leg-engaging arm, of an attachingframe having a body-rod comprising a side arm and a lower body-arm, a back-rod provided at its near end with a hook, an adjust- 95 able connection consisting of a chain attached to the side arm of the body-rod and engaged with said hook of the back-rod, and a flexible connection between the remote or off ends of the back and body rods, substantially as 100 specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in

the presence of two witnesses.

ABRAM RICE.

Witnesses:

A. H. NICKELL, M. A. KIRKPATRICK.