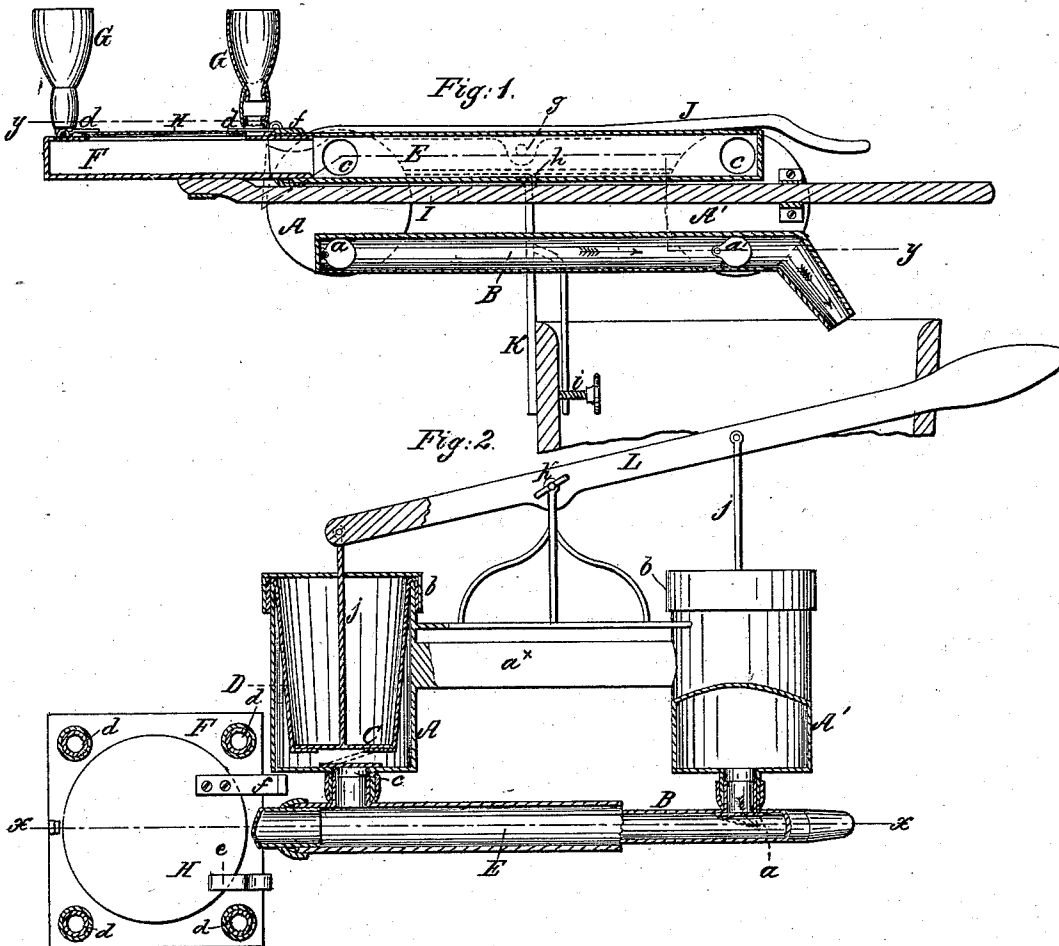


M. L. BAKER.
Milking Device.

No. 32,343.

Patented May 21, 1861.



Witnesses:
J. W. Coombs
R. S. Spencer.

Inventor:
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UNITED STATES PATENT OFFICE.

M. L. BAKER, OF MILFORD, NEW YORK.

APPARATUS FOR MILKING COWS.

Specification of Letters Patent No. 32,343, dated May 21, 1861.

To all whom it may concern:

Be it known that I, M. L. BAKER, of Milford, in the county of Otsego and State of New York, have invented a new and Improved Apparatus or Device for Milking Cows; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a vertical longitudinal section of my invention, taken in the line *x, x*, Fig. 2.; Fig. 2, a horizontal section of the same, taken in the line *y, y*, Fig. 1.

Similar letters of reference indicate corresponding parts in the two figures.

This invention consists in the employment or use of two pumps arranged with a receiving chamber, valves, and conducting tubes, substantially as hereinafter described, whereby cows may be milked with far greater facility than by the manual process, and the device readily detached from the teats of the cow, in case the latter should prove vicious or unmanageable, and the contents of the pail thereby preserved, the latter important feature, so far as I am aware, being novel and not embraced in any other cow milking device.

To enable others skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A, A', represent two cylinders which communicate respectively with a tube B, by means of valves *a, a'*, opening outward, or in the tube B. The cylinders A, A', are each provided with a plunger C, and these plungers are connected to sacks D, of india-rubber, or other suitable material the outer edges of which are secured to the outer ends of the cylinders A, A', by bands or covers *b*, as shown clearly in Fig. 2.

E, is a tube which also communicates with the cylinders A, A', above the tube B. The tube E, communicates with the cylinders by means of valves *c, c*, opening inward or within the cylinders. The front end of tube E, communicates with a reservoir F, which has teat tubes G, attached to it, said teat tubes being of metal and connected to the reservoir by short flexible tubes *d*. The teat tubes G, may be arranged and constructed in the usual way, or as seen in other devices of the kind, and therefore do not require a minute description.

In the top of the reservoir F, there is fitted a valve H, of considerable size. This valve may be of circular form opening upward, and, when not otherwise acted upon, kept closed by a spring *e*.

The reservoir F, has a bar I, attached to it, which bar serves as a handle for the device, and J, is a lever the front end of which fits under a projection *f*, attached to the valve. This lever has its fulcrum at *g*, and it extends back a trifle beyond the front cylinder A, as shown in Fig. 1.

From a bar *a**, which is attached to the cylinders A, A', a pendent clamp K, projects, said clamp being connected to bar A*, by a hinge or joint *h*, and having at its lower part a screw *i*, by which the device may be secured to a pail as shown in red Fig. 1. The plungers C, of the cylinder A, A', are connected by rods *j j*, to a lever L, which has its fulcrum at *k*, shown in Fig. 2.

The operation of the device is as follows: The teat-tubes G, are applied or fitted to the teat of the cow and the device secured to the pail by the clamp K. The operator then works the lever L, back and forth and the milk is drawn by this pumping operation from the cow, the milk alternately entering the cylinders A, A', and being alternately ejected from them. The milk it will be seen enters the cylinders through the tubes B, as the plungers C, are drawn outward within the cylinders and the milk is forced from the cylinders into the lower tube E, and from thence into the pail as the plungers are shoved inward. The fulcrum *k*, of the lever L, being between the two cylinders, the plungers of course move in opposite directions and alternately draw and force. In case the cow becomes unruly and has a propensity to kick or start suddenly, the device may be instantly detached from the animal by depressing the outer end of lever L, and thereby raising the valve H, and admitting air in reservoir F. This of course allows the teat-tubes G, to instantly fall or drop from the teats, and the pail may therefore be quickly removed out of harm's way.

I do not claim the attaching of the plungers C, to india-rubber sacks or bags D, as shown for they have been previously used; but

I do claim as new and desire to secure by Letters Patent,

1. The two cylinders A, A', provided with plungers C, C, sacks D, D, and valves a, a', c, c, in combination with the tubes B, E, and the reservoir F, with teat-tubes G, 5 attached, all being arranged for joint operation as set forth.
2. The valve H, in the reservoir F, ar-

ranged substantially as shown, to effect a ready detachment of the teat-tubes G, from the teats of the animal as set forth.

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Witnesses:

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