

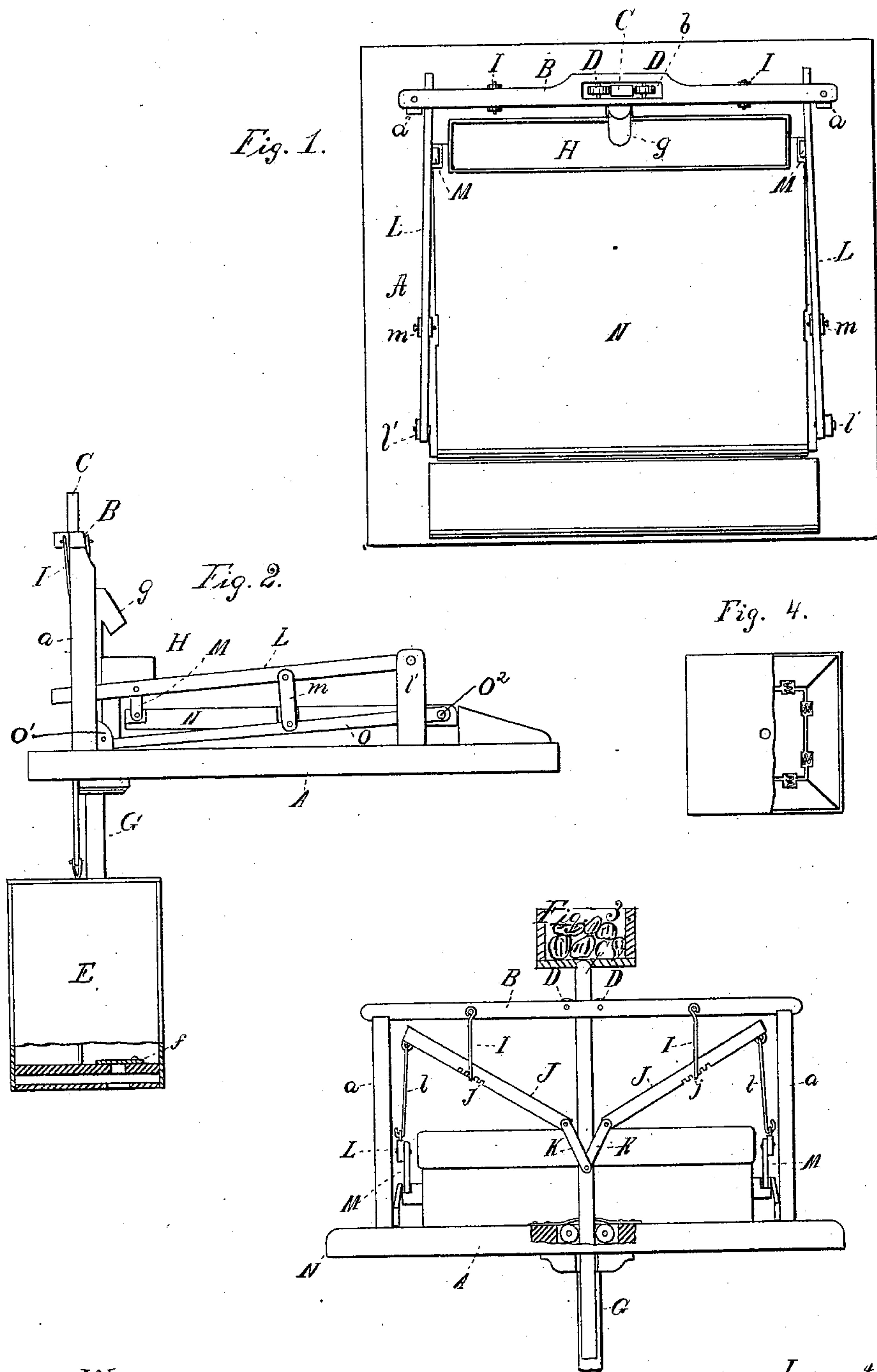
(No Model.)

R. M. BROOKS.

PUMP.

No. 316,004.

Patented Apr. 21, 1885.



Witnesses.  
R. B. Turpin,  
O. M. Kramer

Inventor.  
Rufus M. Brooks  
By R. S. & A. P. Lacey  
Attys.

# UNITED STATES PATENT OFFICE.

RUFUS M. BROOKS, OF GREELEY, KANSAS.

## PUMP.

SPECIFICATION forming part of Letters Patent No. 316,004, dated April 21, 1885.

Application filed April 29, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, RUFUS M. BROOKS, a natural born citizen of the United States, residing at Greeley, in the county of Anderson and State of Kansas, have invented certain new and useful Improvements in Pumps; 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 letters and figures of reference marked thereon, which form a part of of this specification.

My invention relates to that class of pumps known as "cattle-pumps," and has for its object efficient, simple, and durable means whereby the cattle, sheep, horses, or other animals, on going to the watering-trough, will pump water thereinto. To this end it consists in the construction hereinafter described.

In the accompanying drawings, Figure 1 is a plan view; Fig. 2, a side elevation. Fig. 3 is a rear elevation of a machine constructed according to my invention, and Fig. 4 is a detached cross-sectional view of the preferred form of piston.

In carrying my invention into effect, I usually employ the cover A, which serves as a cover for the well or other water-supply, and as a supporting-base for the several parts presently described. On this base, near its rear end, I mount standards *a*, near the opposite sides of the base. The upper ends of these standards are connected by the cross-bar B, and support said cross-bar, as shown. This cross-bar is provided midway its length with a vertical mortise, *b*, for the passage of the piston-rod C, and is preferably provided with anti-friction-rollers D D, arranged on opposite sides of rod C, within the mortise *b*, as shown in Figs. 1 and 3. The piston-rod extends below the base and into a suitable box or cylinder, E, and is connected with a piston, F, and operates said piston within the box, as will be understood from Fig. 2. The piston F is supplied with a suitable valve, *f*, so constructed as to permit passage of water through the piston on the downward stroke of the latter. The upstroke of the piston will force the water above it up through stock G, whence

it will pour through spout *g* into the trough H, supported on the base and slightly in front of the standards, as shown most clearly in Fig. 2. The box E, it will be understood, is submerged in the water whether in a well, cistern, or other source of supply, as will be obvious.

It is evident that the piston F could be adapted and arranged to operate in the lower end of stock G where so desired.

Links I I are suspended from the cross-bar on opposite sides of the piston-rod, and serve as pivotal supports for the levers J, which are provided with a series of notches, *j*, into either of which the links I may be adjusted to vary the length of stroke of piston, the force of operation, &c., as will be understood. The inner ends of these levers J are connected with the piston-rod, preferably by means of straps K, and their outer ends are connected by rods or links *l* with one end of levers L, the opposite ends of which are pivoted on suitable elevated supports, *l'*.

Hangers M are secured to the lever L near rear end of same, and support one end of the platform N. Hangers *m* are suspended from the levers L, midway the ends of the latter, and are secured at their lower ends to the levers O, at about the middle of said levers, as shown. The rear ends of these levers O are pivoted on suitable support, O', and their opposite ends are pivoted at O<sup>2</sup> to the platform.

By this combination or system of connected levers I support platform N in such manner that it is always in a true horizontal plane, and is equally depressed throughout whether the weight be equally or unequally disposed thereon. When this platform is depressed, it will be seen that the piston-rod, by means of lever L and the before-described connection, is raised and the water pumped into the trough. This is effected by the cattle, sheep, or horses going onto the platform N. On the animal leaving the platform the piston-rod will be depressed to the position shown in Figs. 2 and 3 by means of weights connected therewith. These weights may consist of stones held in a box mounted on the upper end of the piston-rod, as shown in Fig. 3, or may be suspended elsewhere on said rod, or the weights may be dispensed with in case the piston or its rod



is made sufficiently heavy to fall of its own weight when the weight on the platform is removed.

5 The piston is provided with filling which is distended by coil-springs, to compensate for wear, as most clearly shown in Fig. 4.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

10 1. In a cattle-pump, the combination of the piston, the platform, the levers L and O, the hangers M and *m*, and means for connecting the platform and the piston, substantially as and for the purposes specified.

15 2. The combination of the piston-rod, the supporting-bar B, the depending links I, the suspended levers J, having their inner ends connected with the piston-rod, and provided on their under sides with a series of notches, *j*, the platform, means, substantially as de-  
20 scribed, for connecting said platform and the

outer ends of the levers J, whereby the depression of the platform will effect the operation of the said levers, substantially as and for the purposes specified. 25

3. The herein-described cattle-pump, consisting of the pump-stock, the piston with filling distended by springs, and piston-rod, the supporting cross-bar provided with depending links, the levers pivotally suspended in said links and provided with a series of notches whereby their pivots may be varied, the levers L, the links *l*, the levers O, hangers M *m*, and the platform, substantially as set forth. 30

In testimony whereof I affix my signature in presence of two witnesses. 35

RUFUS M. BROOKS.

Witnesses:

A. W. BROOKS,

D. W. SMITH.