

(No Model.)

J. W. CLARK.  
PUMP ATTACHMENT.

No. 531,508.

Patented Dec. 25, 1894.

Fig. 1.

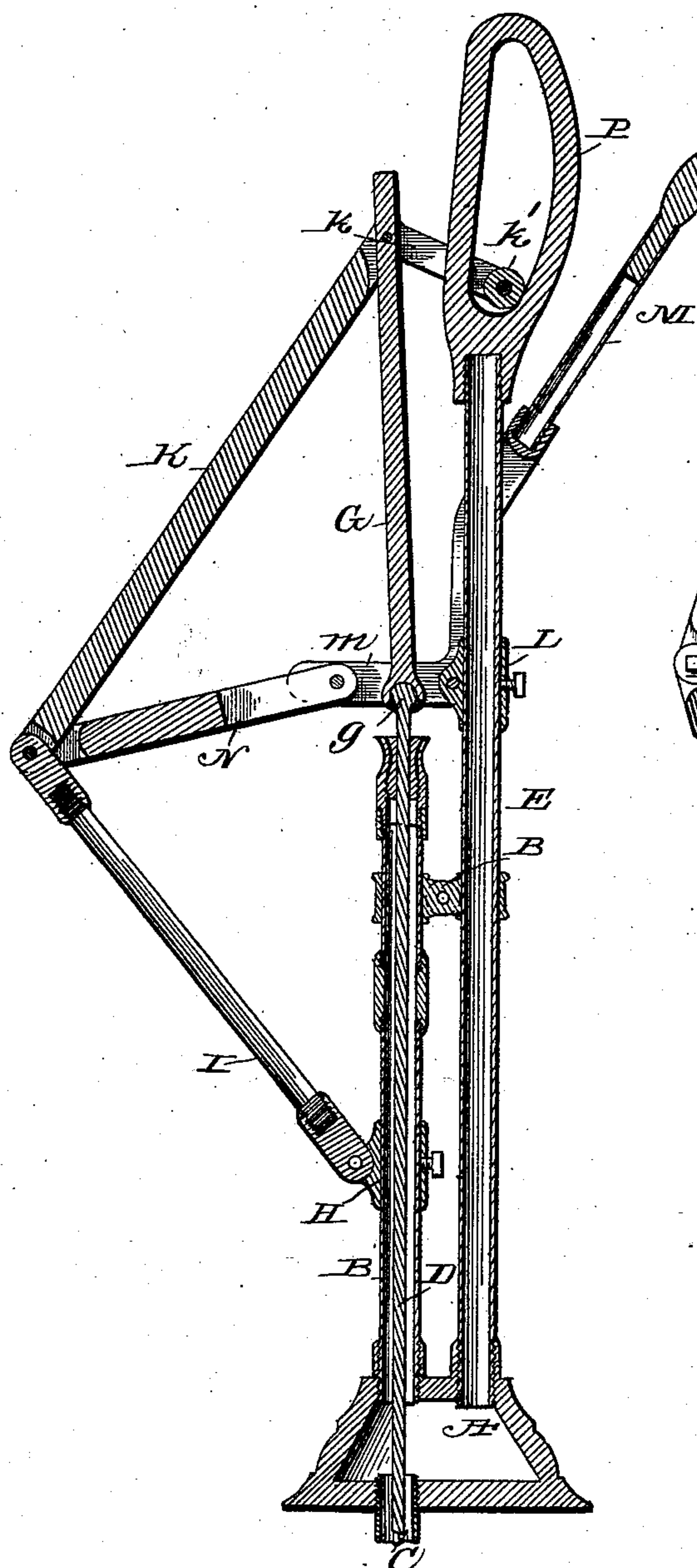
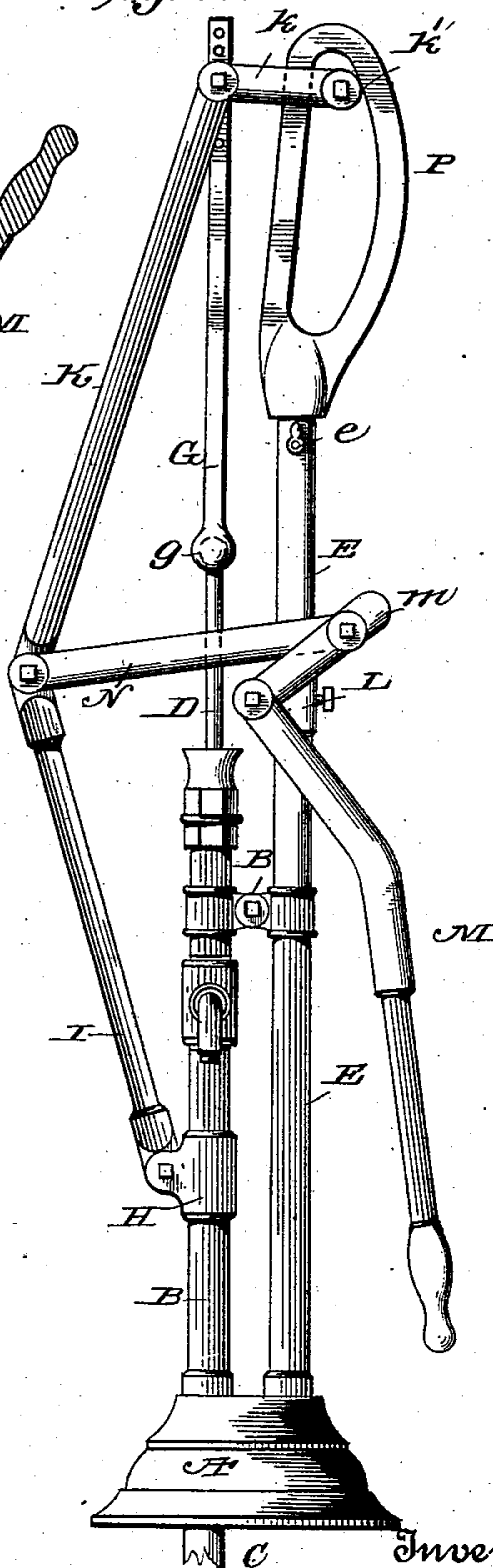


Fig. 2.



Witnesses

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# UNITED STATES PATENT OFFICE.

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## PUMP ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 531,508, dated December 25, 1894.

Application filed May 15, 1894. Serial No. 511,361. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN W. CLARK, a citizen of the United States, residing at Du Bois, in the county of Clearfield, State of Pennsylvania, have invented certain new and useful Improvements in Pump Attachments; and I do hereby 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.

This invention is an improved pump attachment, its purpose being to render the operation of pumping easier, and also, to render it possible to convert an ordinary lift pump into a force pump by simply closing a vent.

My invention consists in certain details of construction and combination of parts, all of which will be fully described hereinafter and pointed out in the claims.

In the drawings, Figure 1 is a vertical sectional view showing my invention. Fig. 2 is a side elevation of the same.

For the purpose of constructing a pump embodying my invention I employ a suitable base A, in which is mounted the delivery pipe B and depending pipe C, which projects into the well, and working through the delivery pipe, base and pipe C is the sucker rod D, and all of these parts may be of any preferred construction. Beside the delivery pipe B, I mount a tubular standard E said standard being supported at its lower end in the base A, and is provided at its upper end with a track or open casting P. It will also be noticed that the standard is closed at its upper end by the said casting, and near said end is provided with a vent *e*. This standard E and delivery pipe B are also connected by a coupling *b*. A pitman rod G is connected with the upper end of the sucker rod by means of a ball and socket joint, *g*. A sleeve H is arranged upon the delivery pipe near its lower end and pivoted thereto is a toggle arm I, said arm being connected at its upper end with another toggle arm K, the upper portion of which is angled at *k* and provided with a roller *k'* at the free end which travels upon the track or casting P. The toggle arm K is connected at its angle with the pitman rod G as clearly shown. A sleeve or collar L is secured to the standard E a short distance above the top of the delivery pipe and pivotally connected

therewith is the handle M having an angular arm or extension *m* to which is connected a link N which connects the said handle with the joint of the toggle arms I and K. By means of this construction the pumping operation is made much easier and the sucker rod is steadied by employing a pitman having a roller which travels upon the closed track.

I construct the casting or track P, in the form shown so that the roller *K'*, will not bind against the side when traveling thereon and by using a casting of this form I can employ a ball and socket joint between D and G, and by these constructions a limited amount of play is allowed the toggle arms and pitman.

By closing the vent *e* in the standard the lift pump can be converted into a force pump and vice versa.

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

1. The combination with the base, delivery pipe, and standard, of the sucker rod, passing through the delivery pipe, the pitman rod, connected with the sucker rod, by means of a ball and socket joint, the collar attached to the delivery pipe, the toggle arms I, K, the arm K, having an angle *k*, and roller *k'*, the open track, or casting P, located upon the upper end of the standard, the collar L, and handle M, and the link N, connecting the joint of the toggle arms with the handle M, substantially as shown and described.

2. The combination, with a standard of the open track or casting located at the upper end of the same, the sucker rod and pitman connected therewith by a ball and socket joint, the toggle arms I and K, the collar L, the angular shaped handle M, and the link N, connecting the handle with the joint of the toggle arms, the arm K, having an angular upper portion *k*, carrying a roller *k'*, which engages the open track or casting, said toggle arm K, being pivotally connected to the upper end of the pitman, substantially as shown and described.

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

JOHN W. CLARK.

Witnesses:

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