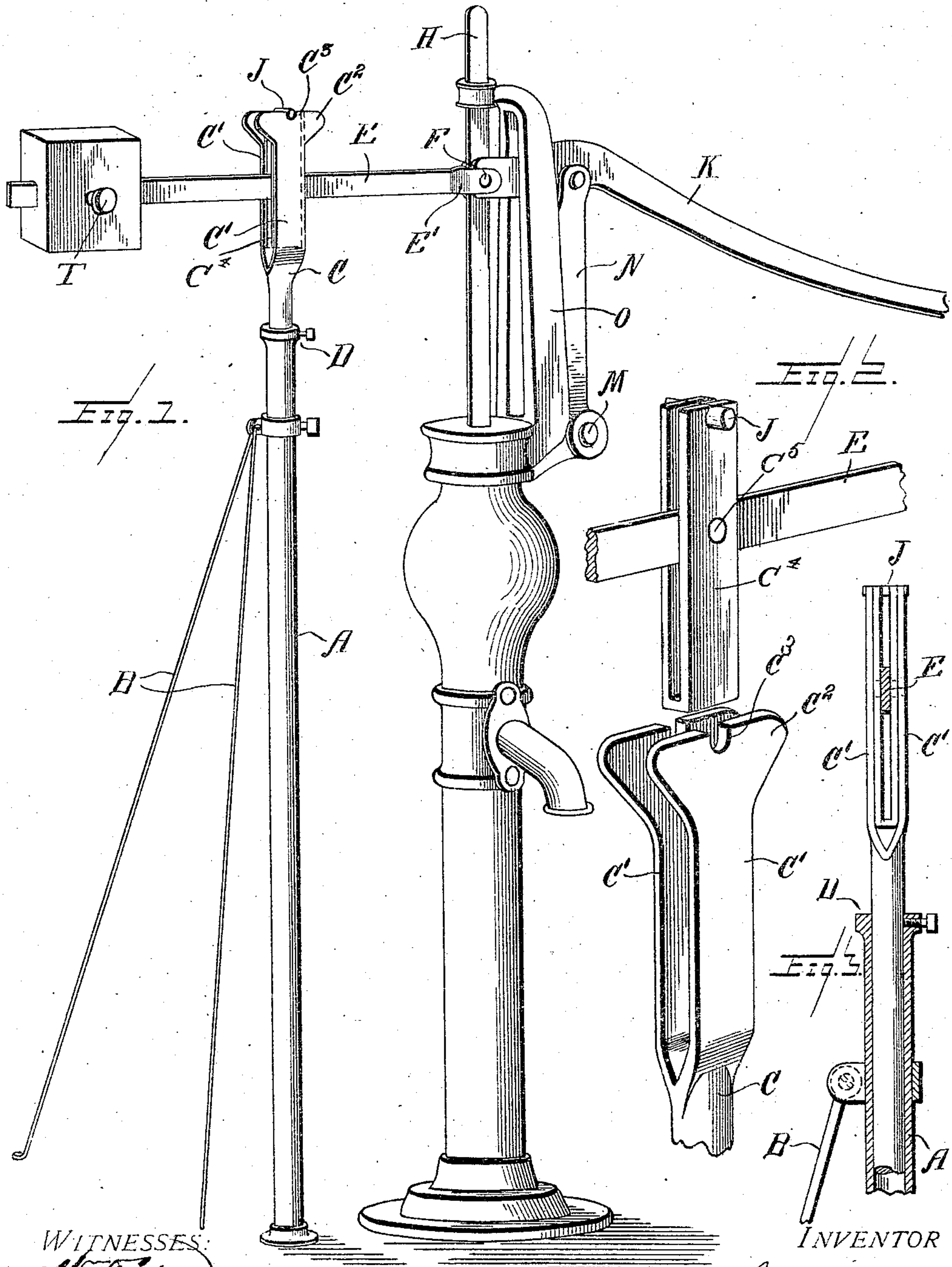


No. 849,802.

PATENTED APR. 9, 1907.

F. C. MARSH.  
COUNTERBALANCE ATTACHMENT FOR PUMPS.  
APPLICATION FILED MAY 5, 1906.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

FRANK C. MARSH, OF TRENTON, NEBRASKA.

## COUNTERBALANCE ATTACHMENT FOR PUMPS.

No. 849,802.

Specification of Letters Patent.

Patented April 9, 1907.

Application filed May 5, 1906. Serial No. 315,404.

*To all whom it may concern:*

Be it known that I, FRANK C. MARSH, a citizen of the United States, residing at Trenton, in the county of Hitchcock and State of Nebraska, have invented certain new and useful Improvements in Counterbalance Attachments for Pumps; 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in counterbalance attachments for pumps for assisting the operator or windmill in operating the plunger, and comprises a simple and efficient means which may be easily and quickly attached to any ordinary force-pump, and comprises, essentially, a standard adapted to be positioned adjacent to the force-pump and having a removable yoke in which a weighted lever is fulcrumed, one end of said lever being attached directly to the plunger-stem of the pump.

The invention comprises various details of construction and combinations and arrangements of parts, which will be hereinafter fully described and then specifically defined in the appended claims.

I illustrate my invention in the accompanying drawings, in which—

Figure 1 is a perspective view showing the application of my device to a pump. Fig. 2 is a detail view of the yoke in which the rod is fulcrumed, and Fig. 3 is a detail sectional view through the standard.

Reference now being had to the details of the drawings by letter, A designates a standard which is preferably hollow and held by means of braces B.

C designates a yoke having arms C', the free ends of which are widened, as at C<sup>2</sup>, and each is provided with a recess C<sup>3</sup>, formed centrally therein. The shank portion of said yoke is adapted to telescope within the standard A and is held in an adjusted position by means of a set-screw D. E designates a bar which has a forked end E', through which a bolt F passes, whereby said bar may be pivotally connected to the plunger-stem H of a pump. K designates the handle of the pump, pivotally connected by

means of the link N to a pin M upon the bracket-arm O of the force-pump, the end of said handle being pivotally connected to the plunger-stem by means of the pin F, which holds said bar E. Between the arms C' of said yoke is mounted the U-shaped member C<sup>4</sup>, having a pivot-pin C<sup>5</sup>, passing through registering apertures in the walls thereof and upon which the bar E is pivotally mounted, and at the upper ends of said member C<sup>4</sup> are laterally-projecting pins J, which are adapted to rest in said recesses C<sup>3</sup>, formed in the upper ends of said arms C'. R designates a weight which is adjustably held upon said bar and adapted to regulate the device for the particular work which may come upon it. A set-screw T is carried by said block and is adapted to hold the same in an adjusted position upon said bar.

From the foregoing it will be noted that by the provision of the device shown and described a simple and efficient means is afforded which may be easily and quickly attached to any ordinary force-pump operated either by hand or machine power and so arranged that the work of pumping water from deep wells may be greatly assisted.

If desired, the device may be readily detached from the pump should it not be desired to use the same in such cases in which the pump may be operated easily without the assistance of the attachment, as would be the case in shallow wells.

What I claim is—

1. A counterbalance attachment for pumps comprising, in combination with the plunger-stem of a pump, a handle pivotally connected upon the casing of the pump and having pivotal connection with said stem, a standard separate from the pump, a yoke adjustably held upon said standard, a weighted bar pivotally connected to said handle, and a U-shaped member held by said yoke and having pivotal connection with said weighted member, as set forth.

2. In combination with the plunger-stem of a pump, a handle pivoted to the casing of the pump, a standard separate from the pump, a yoke adjustably held upon said standard and provided with arms which are spaced apart, a removable U-shaped member mounted between said arms, means for supporting the member upon the yoke, and a pivotal weighted bar connected to said handle and having pivotal connection with the member carried by the yoke, as set forth.

3. In combination with the plunger-stem  
of a pump, a handle pivoted to the casing of  
the pump, a standard separate from the  
pump, a yoke adjustably held upon said  
5 standard and provided with arms which are  
spaced apart, a removable U-shaped mem-  
ber mounted between said arms, pins pro-  
jecting one from each face of said member  
supported in grooves in the arms of said

yoke, and a weighted bar pivotally con- 10  
nected to the handle and having pivotal con-  
nection with said member, as set forth.

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

FRANK C. MARSH.

Witnesses:

LENA J. BENEDICT,  
S. EDNA NEWELL.