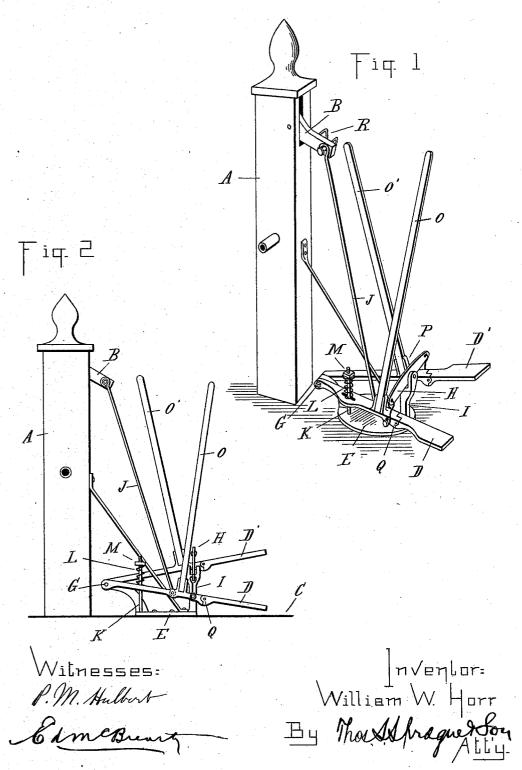
(No Model.)

## $\begin{array}{c} W.\ W.\ HORR. \\ \text{ATTACHMENT FOR PUMPS.} \end{array}$

No. 413,669.

Patented Oct. 29, 1889.



## UNITED STATES PATENT OFFICE.

WILLIAM W. HORR, OF LANSING, MICHIGAN.

## ATTACHMENT FOR PUMPS.

SPECIFICATION forming part of Letters Patent No. 413,669, dated October 29, 1889.

Application filed June 12, 1889. Serial No. 314,017. (No model.)

To all whom it may concern:
Be it known that I, WILLIAM W. HORR, a citizen of the United States, residing at Lansing, in the county of Ingham and State of Michigan, have invented certain new and useful Improvements in Attachments to Pumps, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to new and useful improvements in attachments to pumps; and the invention consists in a treadle-connection attached to the operating-lever of the pump, whereby the operator may use his weight 15 and the power of a spring, in connection with his arms, to assist in operating the pump,

all as more fully hereinafter described. In the drawings which accompany this specification, Figure 1" is a perspective view of 20 my improvements as applied to the ordinary wooden pump. Fig. 2 is a side elevation thereof.

A is the pump-standard, which may be of any construction, either wood or iron.

B is the handle or lever.

C is the platform upon which the standard is supported.

D and D' are treadles pivotally secured at or near the base of the standard.

In the drawings is shown a base E, having a standard carrying the pivotal bolt G, which passes through the ends of the treadles. These treadles are preferably spread into a I shape, with the apex at the pivotal point. 35 At a suitable point at or about their middle each lever is attached to one end of a walkingbeam H, pivotally secured between the two

levers upon the standard I.

J is a rod connecting the pump-handle

40 with the treadle D.

K is a standard which passes through a slot in the treadle D, is secured at its lower end in the base E, and at its upper end provided with a nut or flange M. A spiral spring L is 45 sleeved over the standard, and bearing with its upper end against the nut and with its lower end upon the upper side of the treadle D, all so arranged that the tension of the spring will act to assist in depressing the 50 treadle D.

I preferably cut off the pump-handle B,

making it of suitable length to give the proper leverage.

O and O' are upright levers secured to the upper side of the treadle in any suitable man- 55 ner, preferably by means of sockets P, secured thereto.

I preferably make the treadle in two parts pivoted at Q, so that, if desired, it may be turned up out of the way, permitting the op- 60 erator to stand upon the platform, if desired. A suitable socket R is provided in the short part of the handle B, to receive the pumphandle. The treadles may be operated in connection therewith by removing the up- 65 right levers.

The parts being thus constructed and arranged, they are intended to operate as follows: The operator, standing with a foot upon each treadle, having hold with his hands on 70 the handles O and O', or lever B, as desired, throwing his weight first upon the treadle D', by means of the walking-beam connection, the treadle D is raised and the spring compressed. Then throwing his weight upon the 75 other lever, the power of his hands upon the levers O or lever B, the weight of his body and the power of the spring all aid in pulling down the handle B of the pump, which movement elevates the water in the pump. The 80 levers O and O' assist in allowing the operator to balance himself more readily and to apply a leverage with his hand in depressing the treadles.

This attachment is especially advantageous 85 for deep wells where the work of the pump is very difficult; and by the aid of my device a small boy can do the work with ease which is otherwise hard for a man.

What I claim as my invention is— 1. In combination with a pump, two treadles pivotally connected at one end to the standard G of the base E of the standard I, walking-beam H, connected to the treadles, the standard K, the nut or flange M, the 95 spring L, and the connecting-rod J, the parts being arranged to operate substantially as described.

2. In combination with a pump, two treadles pivotally connected to the base, a 100 walking-beam pivotally secured to said base, the connection between the end of the walking-beam and the treadles, a hinge in said treadles, whereby one end may be turned up out of the way, a spring acting with its tension upon one of the treadles, the connection between the treadle and the pump-handle, and the hand-levers O and O', the parts being arranged to operate substantially as described.

In testimony whereof I affix my signature, in presence of two witnesses, this 21st day of 10 March, 1889.

WILLIAM W. HORR.

Witnesses:
Edwin A. Smith,
Geo. P. Sanford.