

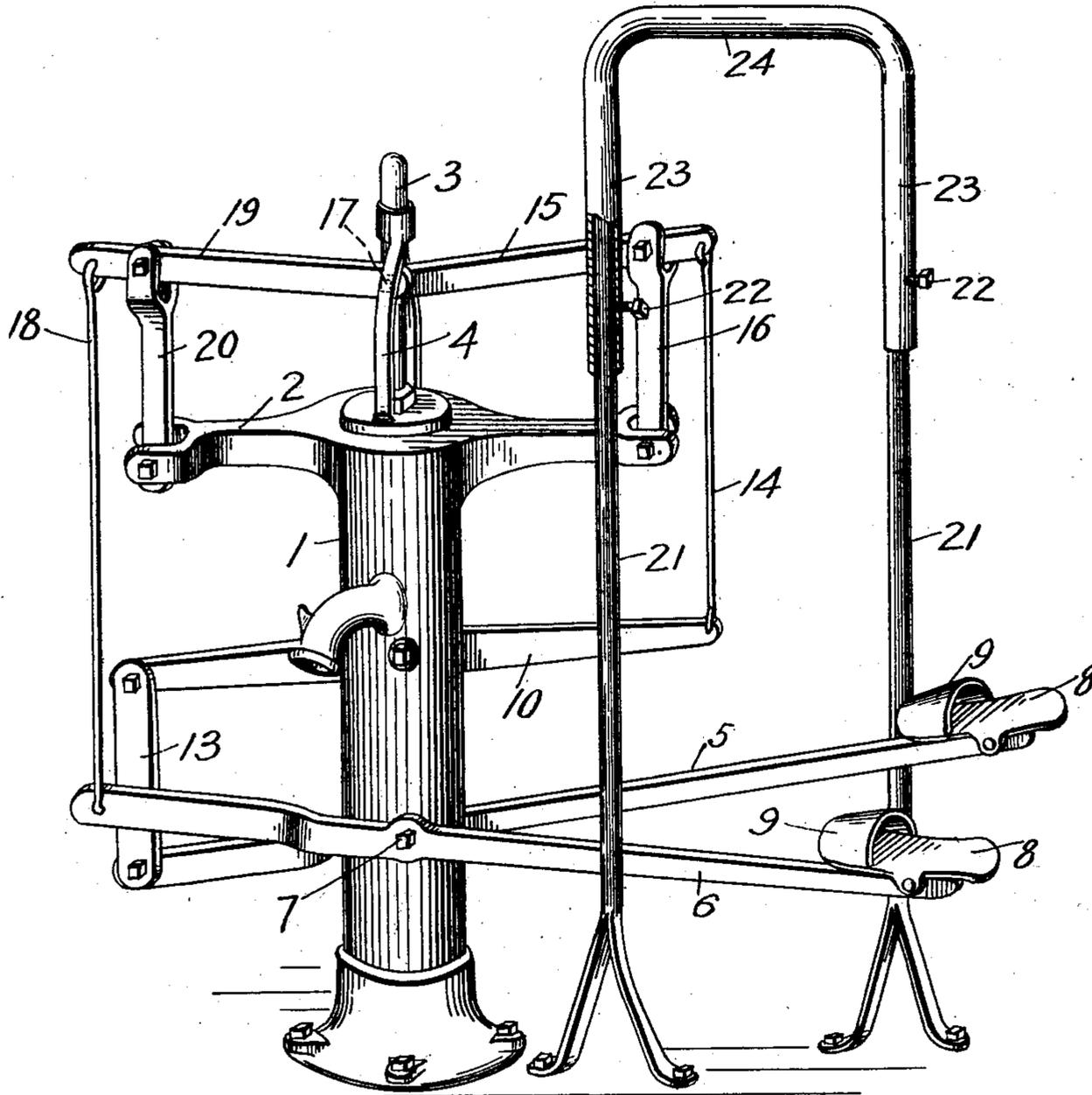
No. 705,425.

Patented July 22, 1902.

B. MUSSER.
PUMP ACTUATING MECHANISM.

(Application filed Sept. 20, 1901.)

(No Model.)



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UNITED STATES PATENT OFFICE.

BENJAMIN MUSSER, OF NEW WHATCOM, WASHINGTON.

PUMP-ACTUATING MECHANISM.

SPECIFICATION forming part of Letters Patent No. 705,425, dated July 22, 1902.

Application filed September 20, 1901. Serial No. 75,978. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN MUSSER, a citizen of the United States, residing at New Whatcom, in the county of Whatcom and State of Washington, have invented certain new and useful Improvements in Pump-Actuating Mechanisms; 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.

The invention relates to pump-actuating mechanism whereby the weight of a person may be utilized and transmitted to a system of levers and links for actuating the pump-rod for elevating water from wells, for irrigating gardens and lawns, for extinguishing fires, for spraying fruit-trees and shrubbery, and pumping liquid from vats, and, in fact, for all general purposes too numerous to mention.

The object of the invention is to provide a machine of this character which shall be simple of construction, durable in use, comparatively inexpensive of production, and efficient in action, and which will transmit a maximum amount of power at the sacrifice of a minimum amount of labor.

With this and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, which will be hereinafter more fully described, and particularly pointed out in the appended claims.

In the accompanying drawing I have illustrated my invention in perspective, certain parts being broken away to more clearly illustrate the invention.

Referring to the drawing, 1 denotes the stock of a force-pump, having a cross-head 2, a pump-rod 3, and a pump-rod guide 4.

5 and 6 denote pedal-levers pivoted at 7 on opposite sides of the pump-stock and having at their inner ends pivoted pedals 8, provided with toe-clips 9.

10 denotes a lever pivoted centrally of its ends to the pump-stock and having one end connected by a pivoted link 13 to the outer end of the lever 5 and having its other end connected by a pivoted link 14 to one end of the lever 15, which is pivoted intermediate its ends to a fulcrum-post 16, which in turn is

pivoted to one end of the cross-head 2, while the opposite end of the lever 15 is pivotally connected at 17 to the pump-rod. A downward pressure of the pedal end of the lever 6 will force the pump-rod 3 downwardly.

The outer end of the lever 6 is connected by a link 18 to a lever 19, which is pivoted to a fulcrum-post 20, pivoted to the outer end of the cross-head 2, and has its inner end pivoted to the pump-rod 3 at the point 17. A downward pressure of the pedal end of the lever 5 will elevate the pump-rod 3.

It will thus be seen that as the levers are moved up and down in alternation the pump-rod will be reciprocated to elevate and force the liquid from its source of supply.

To render the operation less tiresome, I provide a support which consists of two posts 21, suitably secured in upright position, and upon these posts, which are preferably in the form of tubes, are vertically adjustably secured by set-screws 22 sleeves 23, which are connected at their upper ends by a cross rod or handle 24, which is adapted to be grasped by the operator in the working of the pedals. By making the tubes vertically adjustable they may be raised or lowered to suit the height or convenience of the operator.

From the foregoing description, taken in connection with the accompanying drawing, the construction, mode of operation, and advantages of my invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and details of construction may be made within the scope of the invention without departing from the spirit or sacrificing any of the advantages thereof.

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

1. The combination with a pump-stock provided with a cross-head and a pump-rod, of pedal-levers pivoted to the pump-stock, levers pivotally connected to the cross-head and to the pump-rod, an intermediate lever, a link connecting one end of the intermediate with one of the pedal-levers, a second link connecting the other end of the intermediate lever to one of the levers connected to the pump-rod, and a third link for connecting the end

of the other pedal-lever to the other lever which is connected to the pump-rod, substantially as set forth.

2. The combination with a pump-rod; of le-
5 vers suitably fulcrumed and pivoted to the rod, pedal-levers, an intermediate lever, a link connecting one end of the intermediate lever with one of the pedal-levers, a second
10 link connecting the other end of the intermediate lever to one of the levers pivoted to the

pump-rod, and a third link connecting the other pedal-lever to the other lever pivoted to the pump-rod, substantially as specified.

In testimony whereof I have hereunto set my hand in presence of two subscribing wit- 15
nesses.

BENJAMIN MUSSER.

Witnesses:

J. W. ROMAINE,
JOHN R. CRITES.