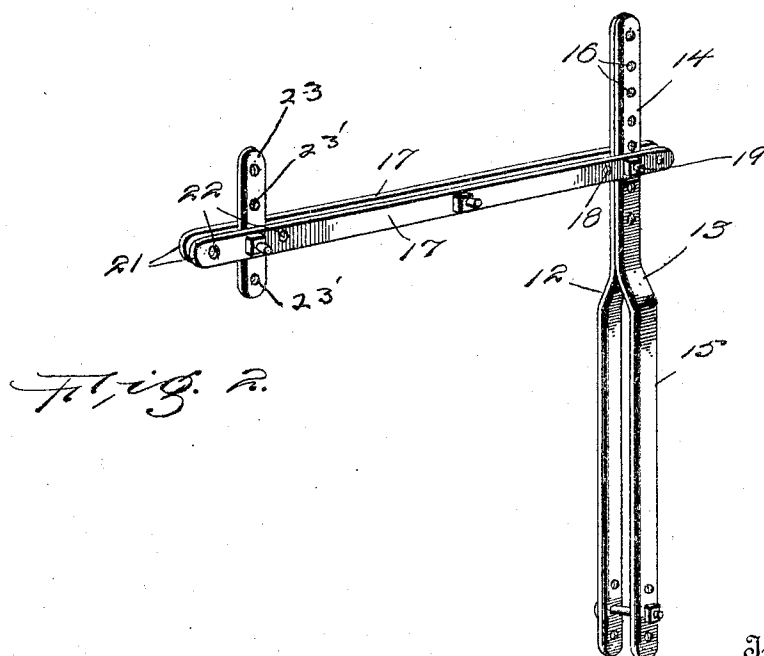
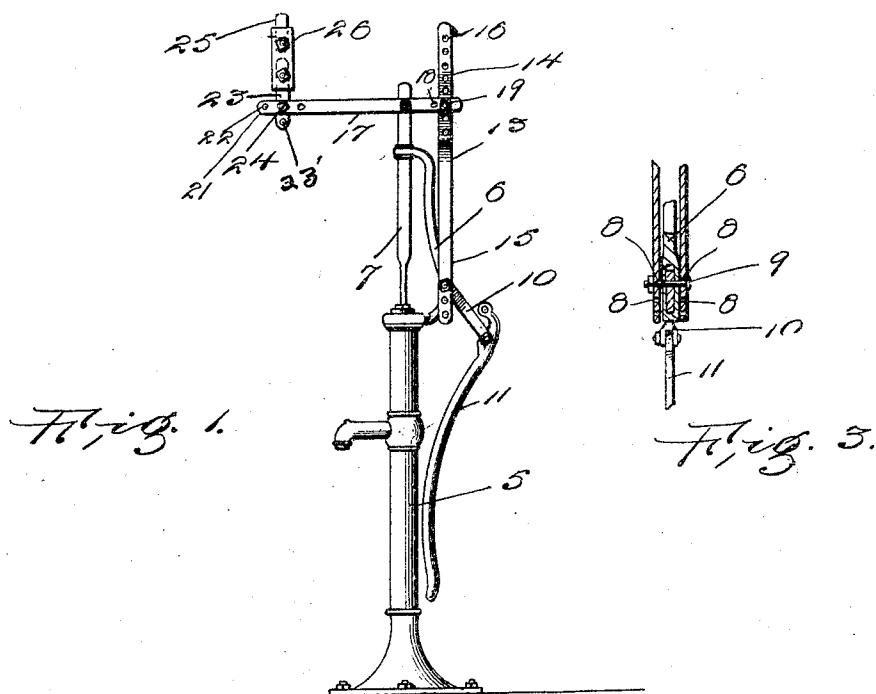


No. 789,018.

PATENTED MAY 2, 1905.

R. E. GREEN.
PUMP MECHANISM.
APPLICATION FILED AUG. 3, 1904.



Witnesses
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UNITED STATES PATENT OFFICE.

RANDALL EVERDELL GREEN, OF FAIRFIELD, IOWA.

PUMP MECHANISM.

SPECIFICATION forming part of Letters Patent No. 789,018, dated May 2, 1905.

Application filed August 3, 1904. Serial No. 219,388.

To all whom it may concern:

Be it known that I, RANDALL EVERDELL GREEN, a citizen of the United States, residing at Fairfield, in the county of Jefferson, State of Iowa, have invented certain new and useful Improvements in Pump Mechanism; 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 relates to pumps, and more particularly to the operating-lever mechanism thereof, and has for its object to provide a lever mechanism particularly adapted for use in connection with windmill-operated pumps by which the efficiency and power of the windmill will be increased, a further object being to provide a mechanism of this nature which will be simple of construction and cheap of manufacture and which may be attached to any pump of the type in common use in connection with windmills.

Other objects and advantages will be apparent from the following description, and it will be understood that any suitable materials may be used and changes may be made in the specific construction shown and described without departing from the spirit of the invention.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a side elevation of a pump provided with the present invention. Fig. 2 is a perspective view of the lever mechanism detached. Fig. 3 is a vertical section through the pump-bracket and parts connected thereto.

Referring now to the drawings, there is shown a pump 5, having the usual upwardly-extending bracket 6 at one side, which acts as a guide for the pump-rod 7, as illustrated. The bracket has an opening therethrough adjacent to its bottom, and formed through the bracket at the sides of the opening are alining perforations 8, in which is engaged a pivot-bolt 9 for the link 10, to which the handle 11 of the pump is pivoted, the handle being thus arranged for movement into and out

of position for attachment to the pump-rod. In the present instance the pivot-bolt 9 extends outwardly beyond the sides of the bracket 6 and has engaged with its ends the lower ends of a pair of upwardly-extending parallel plates 12 and 13, which extend above the bracket and thereabove are bent inwardly to lie against each other, as illustrated, to form a stem 14 and lower spaced portions 15. Formed through the stem are perforations 16, there being a series of such perforations extending longitudinally of the stem, and disposed at either side of the stem is a plate 17, these plates having alining perforations 18 therein, which are alined with one of the perforations of the stem for their reception of a pivot-bolt 19. Adjacent to their perforations 18 the plates 17 are provided with other alining perforations, 20, and these two sets of perforations are arranged for interchangeable engagement with the bolt 19. The plates 17 extend at opposite sides of the pump-rod 7 and are pivoted thereto, and at their free ends 21, which lie beyond the pump-rod, the plates 17 are provided with longitudinal series of perforations 22, the perforations of the two plates alining in pairs, and disposed between the ends of the plates is a plate 23, which extends upwardly and which has perforations 23' therein arranged for alinement with the pairs of the perforations 22 interchangeably for the reception of a pivot-bolt 24, and at its upper end the plate 23 is attached to the power-rod 25 of a windmill by means of a sleeve 26. It will thus be apparent that an arrangement of levers is provided which will increase the power of the mill, enabling it to operate the pump with a much lighter wind than when connected directly thereto. It will also be apparent that the mechanism may be adjusted to vary the leverage and that by reason of its being all formed of metallic plates, which may be stamped from sheet metal, may be manufactured at low cost.

What is claimed is—

1. A lever mechanism comprising parallel plates having alining perforations adjacent to their upper ends, plates having perforations therein disposed one at each side of

said parallel plates with their perforations in alinement with those of the parallel plates, a pivot-bolt engaged in the alining perforations, and a plate pivoted between the free
5 ends of the second-named plates, the third-mentioned plate being arranged for connection with a source of power and the second-named plates being arranged for connection with mechanism to be operated.
10 2. A lever mechanism, comprising two plates disposed against each other for a portion of their lengths and being offset in opposite directions therebeyond to form spaced portions, the mutually-engaging portions of
15 the plates having a plurality of alining pairs of perforations therein, a pair of plates disposed one at each side of the first-named pair of plates and having a plurality of alining pairs of perforations adjacent to each
20 end one of said pairs being alined with a pair

of the perforations of the first-named plates, a pivot-bolt engaged in the alining perforations and arranged for interchangeable engagement in the remaining perforations, and a plate having a perforation therein disposed with its perforation alined with one of the pairs of perforations at the free ends of the second-named plates a pivot-bolt engaged in the last-mentioned perforations, the third-named plate being arranged for connection with a source of power, the second-named plates having alining perforations adjacent to their centers.

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

RANDALL EVERDELL GREEN.

Witnesses:

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