

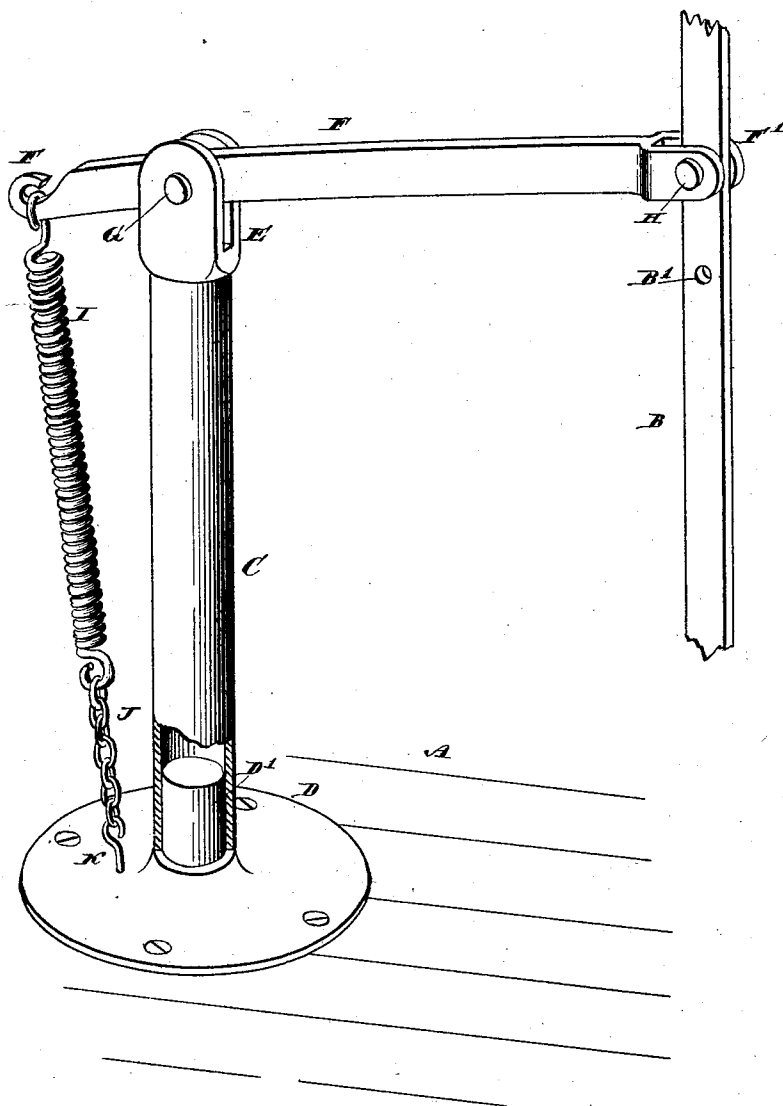
No. 749,236.

PATENTED JAN. 12, 1904.

R. R. SMITH & G. McTURK.
PUMP ROD COUNTERBALANCE.

APPLICATION FILED OCT. 26, 1903.

NO MODEL.



Witnesses

F. J. Kubiček
L. A. St. John

Inventors

Robert R. Smith
Gilbert G. Turk
By *J. Mc St. John*
Atty.

UNITED STATES PATENT OFFICE.

ROBERT R. SMITH, OF TRAER, AND GILBERT McTURK, OF CRYSTAL,
IOWA.

PUMP-ROD COUNTERBALANCE.

SPECIFICATION forming part of Letters Patent No. 749,236, dated January 12, 1904.

Application filed October 26, 1903. Serial No. 178,666. (No model.)

To all whom it may concern:

Be it known that we, ROBERT R. SMITH, residing at Traer, and GILBERT McTURK, residing at Crystal, in the county of Tama and State of Iowa, citizens of the United States, have invented certain new and useful Improvements in Pump-Rod Counterbalances, of which the following is a specification.

This invention relates to pumps, and more particularly those operated by a windmill; and the object of the invention is to equalize the stroke of the pump-rod, so that there is not a great excess of work to be done by the windmill on the upstroke, and whereby the objectionable jumping and pounding of the pumping mechanism is prevented.

The nature of the invention will fully appear from the description and claims following, reference being had to the accompanying drawing, in which a device embodying my invention is shown in perspective as in use, the pump not being shown.

In the drawing, A designates a platform over the well, on which the pump is supposed to stand, being in line with the pump-rod B. This is supposed to connect in the usual way with a windmill, which gives it a vertical reciprocating movement. On the platform a little distance from the pump is mounted a standard C, having a base D, by which it is secured to the platform. The upper end of the standard is forked, and in this forked standard-head E is pivoted a lever F by a pin G. One end of this lever F' is forked and in this is secured the pump-rod by a pin H. The other end of the lever has a hook F², and to this is connected a strong spring I, which at the other end connects by a chain J with a hook K, secured to the base. By means of the chain the tension of the spring may be varied at will by hooking into different links.

In practice the body of the standard is made

of tubing, and to this the base and head connect in the same way, each having a stud like the central base-stud D' fitting the inside of the tube.

It is to be understood that the lever F connects with the pump-rod above the pump, the handle of which is supposed when in use to connect with the hole B'.

The device is simple and inexpensive and when connected with a pump-rod serves to very greatly relieve the operating mechanism of unequal strains and prevent the shock and jar common to a pump connected with a windmill in the ordinary way.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination with a pump-rod, of a lever pivoted thereto, a standard to which said lever is also pivoted, and having a base adapted for attachment to a well-platform, and a spring having a connection at one end with said base and at the other end with the free end of the lever, substantially as and for the purpose set forth.

2. The described counterbalance for a well pump-rod, comprising a standard adapted for attachment to the well-platform by its base, a lever pivoted at the upper end of the standard, and connecting pivotally at one end with said pump-rod, a spring connecting with the other end of the lever, a chain attached to the other end of the spring, and a hook on the base to engage any link of said chain, substantially as and for the purpose set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

ROBERT R. SMITH.
GILBERT McTURK.

Witnesses:

LORETTA BURNS,
H. M. WOOLLEY.