No. 716,786. Patented Dec. 23, 1902.

B. TERRY.

AUTOMATIC BALANCE ATTACHMENT FOR WINDMILLS.

(Application filed Sept. 11, 1902.)

(No Model.)

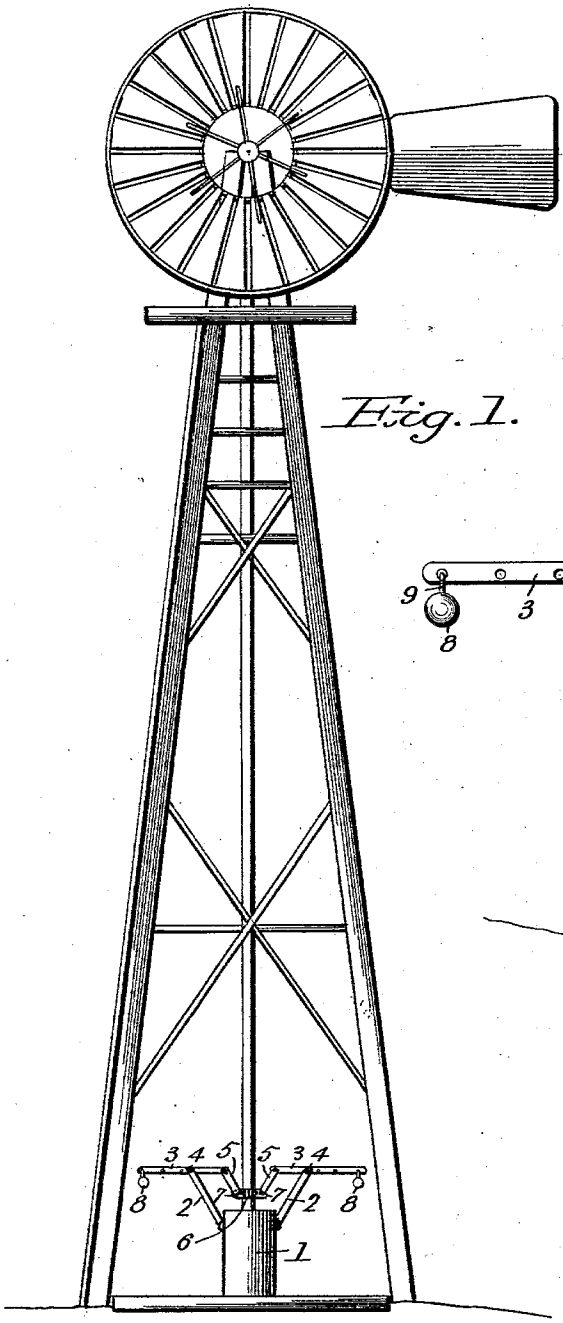


Fig. 1.

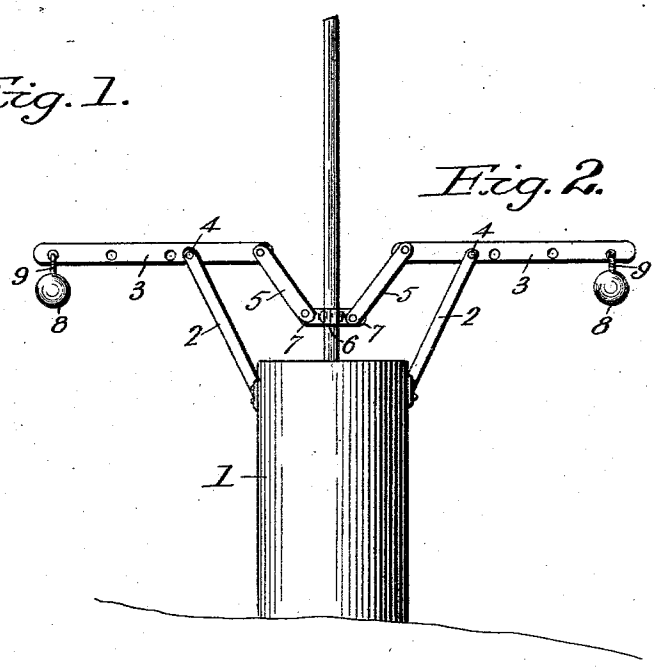


Fig. 2.

Witnesses
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UNITED STATES PATENT OFFICE.

BLAKE TERRY, OF ORIANA, TEXAS.

AUTOMATIC BALANCE ATTACHMENT FOR WINDMILLS.

SPECIFICATION forming part of Letters Patent No. 716,786, dated December 23, 1902.

Application filed September 11, 1902. Serial No. 122,940. (No model.)

To all whom it may concern:

Be it known that I, BLAKE TERRY, a citizen of the United States of America, residing at Oriana, in the county of Stonewall and State of Texas, have invented certain new and useful Improvements in Automatic Balance Attachments for Windmills, of which the following is a specification.

This invention relates to windmills, and particularly to a device for automatically balancing the pump-rod.

The object of the invention is to produce an attachment for windmills in which the upward movement of the rod is assisted through the medium of a set of levers and weights, the said weights being elevated with the descent of said rod when under ordinary conditions no appreciable work is being done by the mill.

The further object of the invention is to produce an attachment for windmills whereby the amount of work done is approximately constant, regardless of the ascent or descent of the rod.

Furthermore, the object of the invention is to produce an attachment of the character noted which will prove strong and durable, efficient and satisfactory in use, simple in construction, and comparatively inexpensive.

With the foregoing and other objects in view the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully set forth and claimed.

In describing the invention in detail reference will be had to the accompanying drawings, forming part of this specification, wherein like characters denote corresponding parts in both views, and in which—

Figure 1 is a view in elevation of a portion of a windmill with the invention applied. Fig. 2 is a detail view of the equalizer.

In the drawings, 1 denotes a well-piping, to which are attached the arms 2, having the outer end bifurcated to receive the levers 3, said levers being pivoted to the arms by the bolts 4. Links 5 are pivotally connected to the inner ends of the levers 3 and have their lower ends pivoted to a clamp 6, secured around the pump-rod. The clamp has ears 7, to which the links are connected. Weights 8 are movable on the outer ends of the levers and may have spring-jaws 9 for retaining the weights at any degree of adjustment.

It will be observed from the illustration and foregoing description that with the descent of the rod the weights are elevated, and on the ascent of the rod when work is being done in lifting the water the weights assist the mill in raising the rod. When the rod descends under ordinary conditions, the mill is doing no appreciable work; but with this invention the load is almost always uniform, since with the descent of the rod the weights must be raised, and with its ascent the weights assist in elevating the rod.

The construction, operation, and advantages will, it is thought, be understood from the foregoing description, it being noted that various changes may be made in the proportions and details of construction for successfully carrying the invention into practice without departing from its scope.

Having fully described the invention, what I claim as new, and desire to secure by Letters Patent, is—

In an automatic balance attachment for windmills, a clamp adjustably secured to the pump-rod, arms having their outer ends bifurcated secured to the well-piping, levers pivoted in the bifurcated ends of the arms, links having their ends pivotally connected to the inner ends of the levers, and their opposite ends pivoted to the adjustable clamp, weights on the outer ends of the levers and spring-jaws for retaining the weights at any degree of adjustment substantially as described.

In testimony whereof I affix my signature, in the presence of two witnesses, this 7th day of June, 1902.

BLAKE TERRY.

Witnesses:
E. S. LEE,
D. R. COUCH.