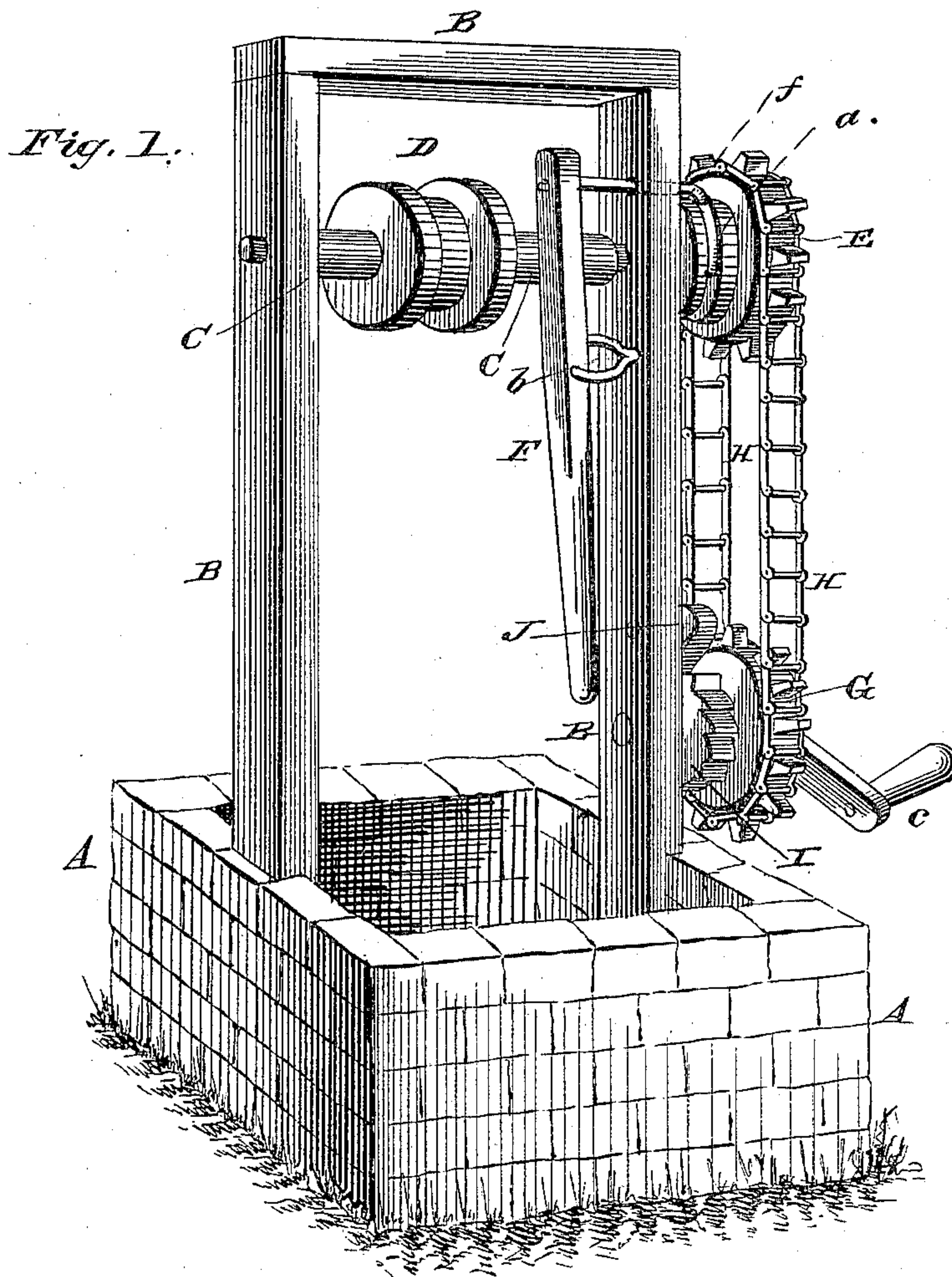


(No Model.)

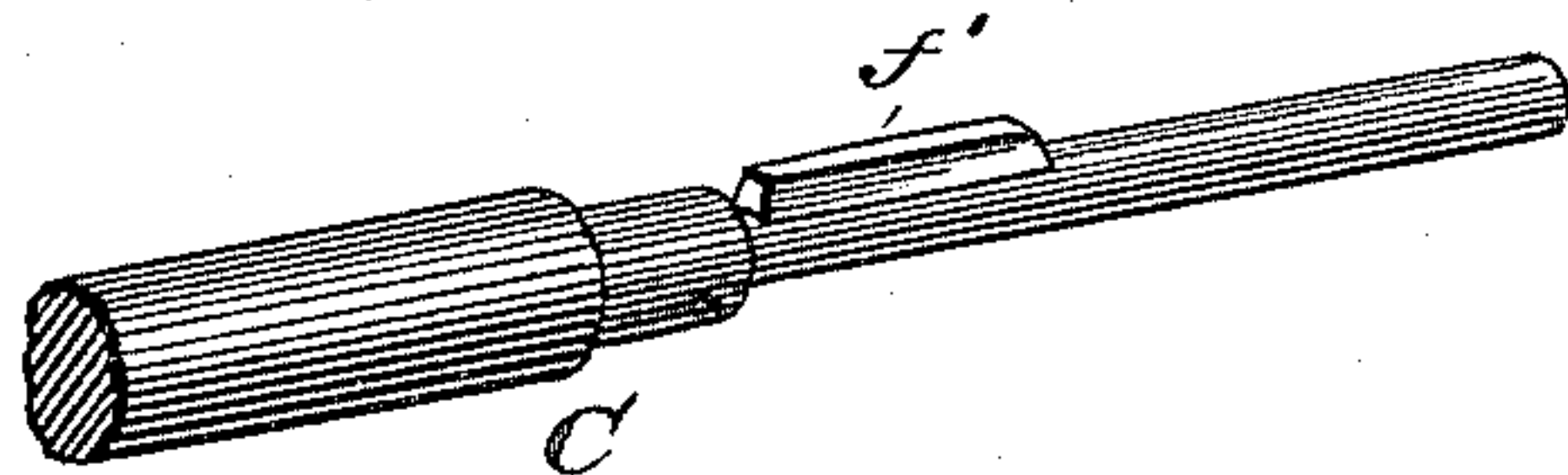
W. I. RORICK.  
WATER ELEVATOR.

No. 299,014.

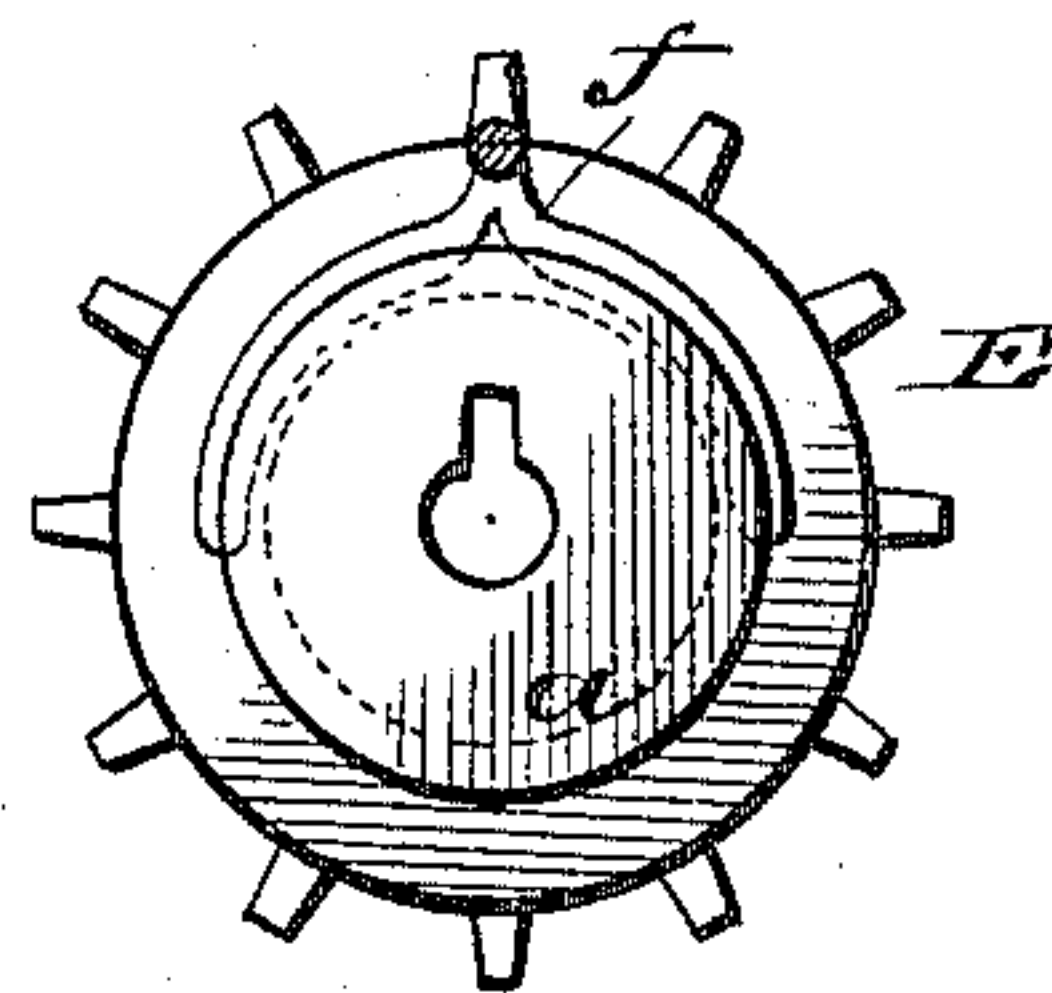
Patented May 20, 1884.



*Fig. 2.*



*Fig. 3.*



WITNESSES

*Phil. B. Dirterich.*  
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INVENTOR

*Wm. I. Rorick*  
*By J. O. McLeary,*  
Attorney



# UNITED STATES PATENT OFFICE.

WILLIAM I. RORICK, OF WINFIELD, KANSAS.

## WATER-ELEVATOR.

SPECIFICATION forming part of Letters Patent No. 299,014, dated May 20, 1884.

Application filed October 4, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM I. RORICK, of Winfield, in the county of Cowley and State of Kansas, have invented certain new and useful Improvements in Water-Elevators; 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 pertains to make and use the same.

My invention relates to windlass water-elevators, the object being to provide means for disengaging the windlass from its operating devices, for a purpose hereinafter fully described.

The invention consists in the improved construction and combinations of parts hereinafter fully described, and pointed out in the claim.

In the drawings, Figure 1 is a perspective view of my device applied to a well, and Figs. 2 and 3 represent detached views of the windlass-shaft and upper sprocket-wheel.

A represents the curb of the well, and B an upright frame erected thereon, and spanning the same. The frame is of sufficient height to allow the buckets to be raised above the curb of the well and conveniently emptied.

C represents a shaft mounted in bearings at the upper end of the frame B, and provided at its center with a drum, D, which is annularly grooved, as shown, to prevent the lateral displacement of the bucket chain or rope.

E represents a sprocket-wheel loosely mounted at the outer end of the shaft C, and adapted to slide thereon, and having formed integral therewith an annularly-grooved shoulder, *a*.

F represents a lever secured to one side of the frame B by means of a looped rod, *b*. At the upper end of the lever F is secured a forked arm, *f*, which extends through a perforation of the frame, and engages the annularly-grooved shoulder of the sprocket-wheel, to throw the latter out of rigid connection with the shaft C. The outer end of the shaft C is round, while

the inner part is provided with a spline, *f'*. The sprocket-wheel is grooved, to receive this spline, and by this means the shaft is rotated when the device is operated. When it is desired to lower a bucket, the sprocket-wheel is thrown out of connection with the spline by means of the lever F, and the shaft rotates without turning the sprocket-wheels, and allows the bucket to descend by its own weight.

G represents a second sprocket-wheel rigidly mounted near the lower end of the frame B, and actuated by means of a crank, *c*.

H represents an endless chain, which passes around the wheels E and G, by means of which rotary motion is imparted to the shaft C and drum D.

I represents a ratchet-wheel formed integral with the sprocket-wheel G, and adapted to be engaged by a gravity-dog, J, to prevent the turning backward of the wheels.

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

In a water-elevator, the combination, with the shaft C, provided with a spline, of a sprocket-wheel mounted on said shaft and formed with an annularly-grooved shoulder and an internal groove, a lever fulcrumed upon the frame by means of a loop or yoke, *b*, and a rod secured at one end to the lever and passing through one side of the frame, and formed at its opposite end with arms to rest in the groove of the shoulder of the sprocket-wheel, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

WILLIAM I. RORICK.

Witnesses:

W. H. LUCAS,  
JNO. D. PRYOR.