

No. 653,058.

Patented July 3, 1900.

C. S. BEGGS.  
GEARING FOR WINDMILLS.

(Application filed Feb. 28, 1900.)

(No Model.)

Fig. 1.

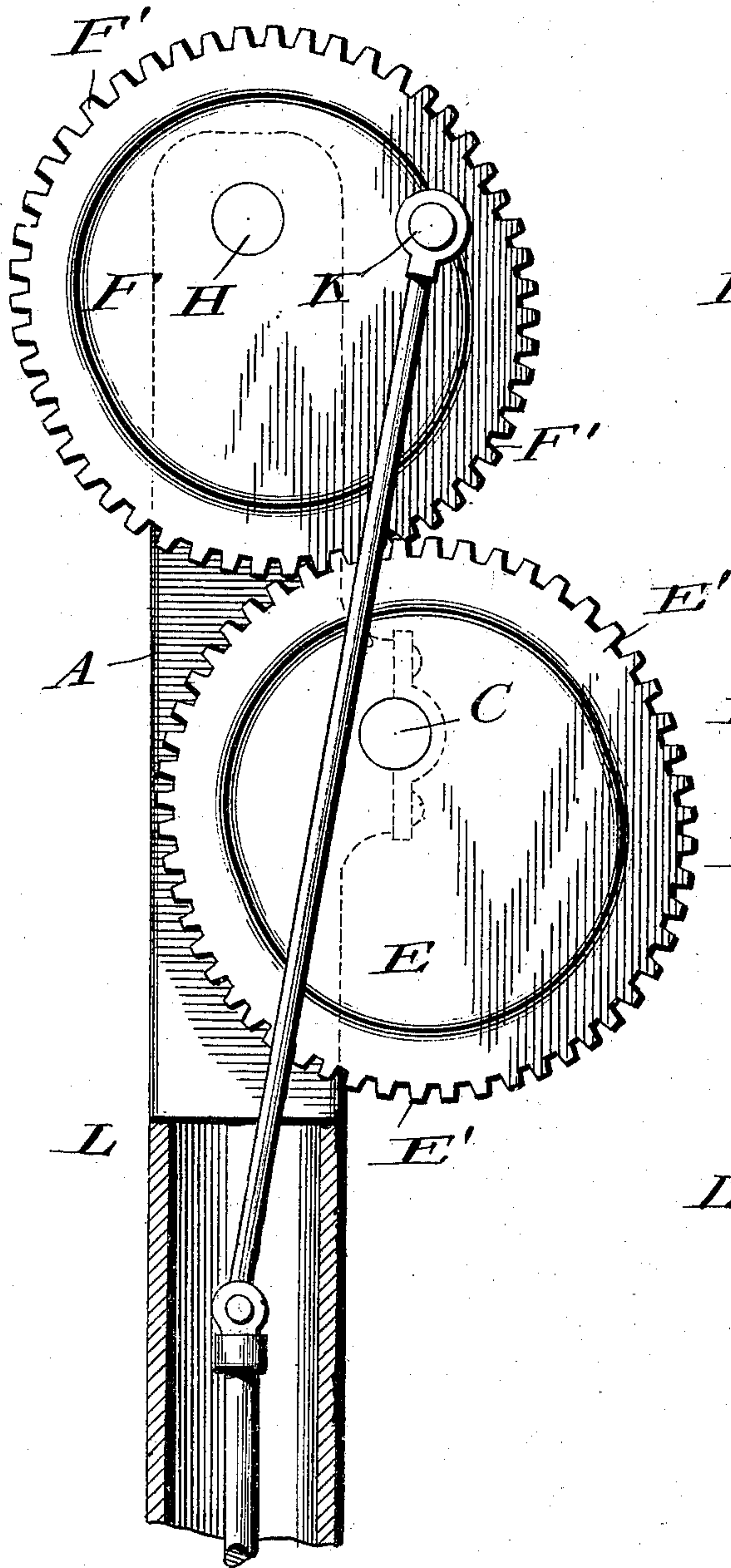
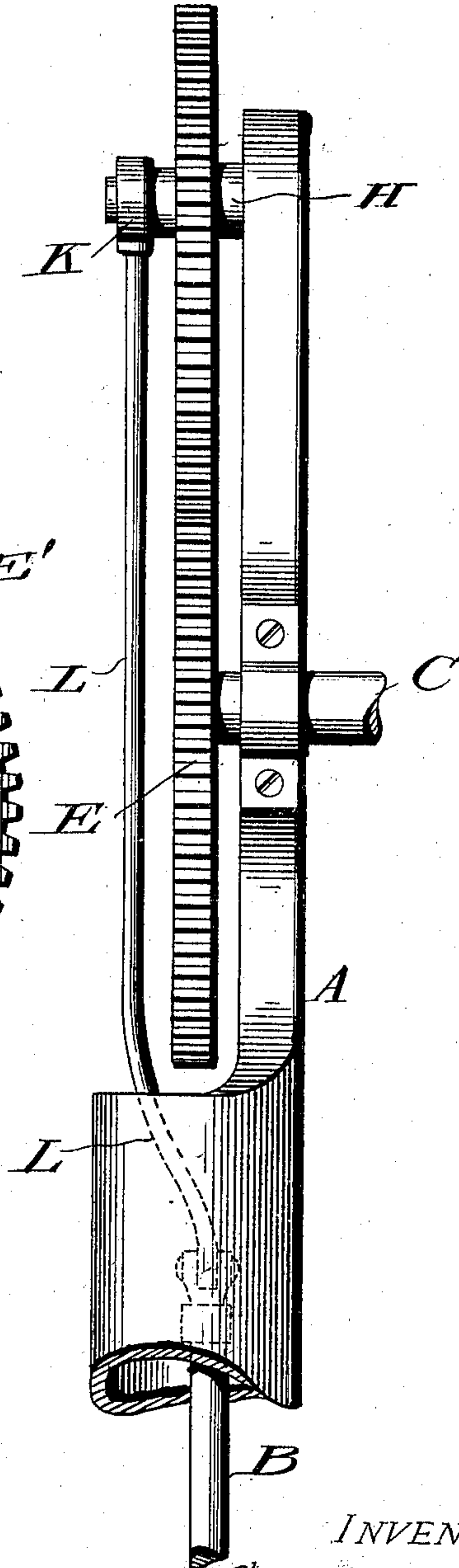


Fig. 2.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

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## GEARING FOR WINDMILLS.

SPECIFICATION forming part of Letters Patent No. 653,058, dated July 3, 1900.

Application filed February 28, 1900. Serial No. 6,837. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES SINCLAIR BEGGS, a citizen of the United States, residing at Ashland, in the county of Cass and State of Illinois, have invented certain new and useful Improvements in Gearing for Windmills; 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in windmill-gearing; and it consists in the provision of two eccentrically-mounted elliptical gear-wheels, one of which is mounted on and rotates with the shaft of the power-wheel, while the second one is mounted on a stub-shaft, said gear-wheels being in mesh with each other and to one of which is pivoted a pitman, which in turn is connected to a pump-rod. By this gearing a stroke of the pump is had with each revolution of the power-wheel, and the long throw of the pump-rod is had on the upward pull of the gear-wheel to which the pitman is pivoted.

To these ends and to such others as the invention may pertain the same consists, further, in the novel construction and arrangement of parts, as will be hereinafter more fully described and then specifically defined in the appended claim.

My invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this application, and in which—

Figure 1 is a view in side elevation of my windmill-gearing with connections with a pump-rod. Fig. 2 is an edge view.

Reference now being had to the details of the drawings by letter, A designates an upright portion of the standard of the windmill-frame, and B is the pump-rod, which works vertically in said standard. The shaft C is the main power-shaft on which the wind-

wheel is mounted to rotate same. This shaft is journaled in suitable bearings at one side of the standard and fastened thereto. Keyed to rotate with said shaft C is an elliptical gear-wheel E, the latter being eccentrically mounted on the shaft C, and about the circumference of gear-wheel E is a series of teeth E', which are designed to mesh with the teeth F' about the circumference of the gear-wheel F. Said gear-wheel F is eccentrically mounted on a stub-shaft H, which is carried by the standard A.

K is a stud on the face of the wheel F at one side of its center, and to said stud is pivoted one end of the pitman L, the other end being connected to the upper end of the pump-rod B.

From the foregoing, when taken in connection with the drawings forming a part of this application, it will be noted that by the use of the elliptical gear-wheels the power where most needed is obtained on the upward throw of the pump-rod.

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

A gearing for windmills, comprising the hollow standard having a solid projecting portion, the inner and outer faces of the latter being flush respectively with the outer and inner surfaces of said hollow standard, combined with the stud H secured to the upper end of said projection, a gear-wheel F eccentrically journaled thereon, the pin K carried by the latter, the operating-shaft journaled on the edge of the standard, the gear-wheel rotating with said shaft and meshing with said wheel F, and the pitman pivoted to said pin K, and connected to the pump-rod, as shown and described.

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

CHARLES SINCLAIR BEGGS.

Witnesses:

W. S. REARICK,  
J. J. WYATT.