No. 696,000. Patented Mar. 25, 1902.

# C. S. BEGGS.

## GEAR FOR WINDMILLS.

(Application filed Nov. 1, 1901.)

(No Model.)

Fig. 2.

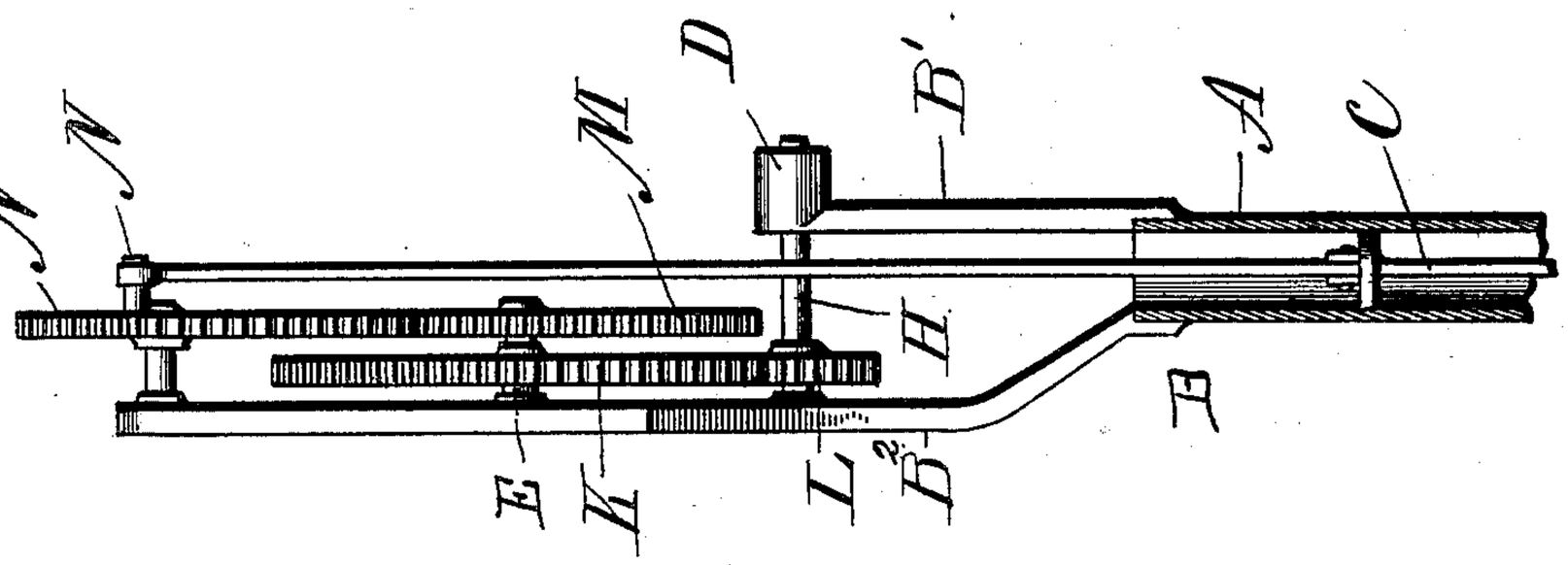
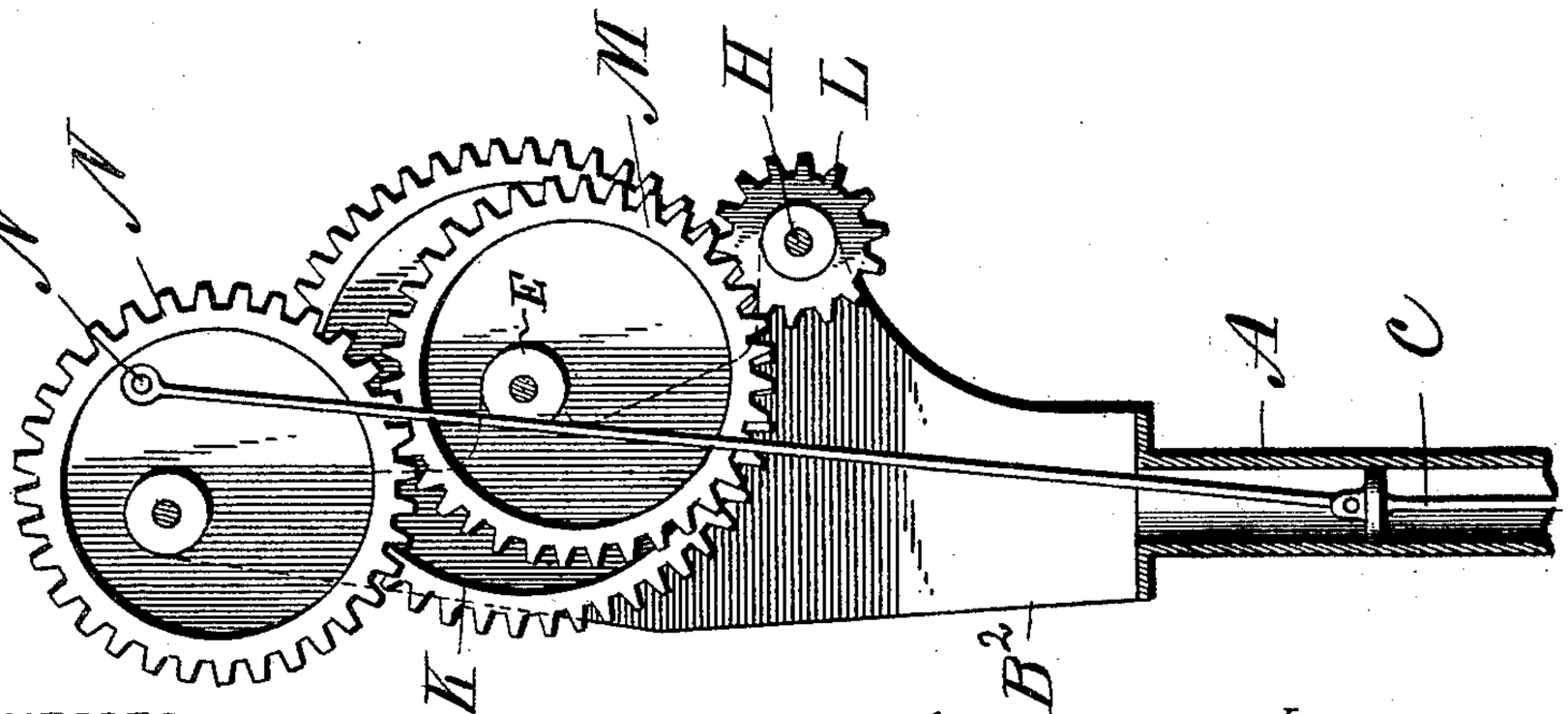



Fig. 1.

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# UNITED STATES PATENT OFFICE.

CHARLES S. BEGGS, OF ASHLAND, ILLINOIS.

## GEAR FOR WINDMILLS.

SPECIFICATION forming part of Letters Patent No. 696,000, dated March 25, 1902.

Application filed November 1, 1901. Serial No. 80,804. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES S. 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 Gear 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 gears for windmills, &c.; and the aim of the present invention is to generally improve upon the construction of gearing upon which I have been granted Letters Patent No. 653,058, of July 3, 1900; and it consists in the provision of a hollow standard having a bracket with two arms, one of which is bent at right angles at its free end and forming a journal-bearing for one end of the shaft, the other end of which shaft is mounted in the second arm of the bracket, and in the provision of two stub-shafts carried by an arm of the bracket and on which are mounted intermeshing eccentric gear-wheels, one of which drives a pitman, a gear-wheel being provided for transmitting motion to one of the eccentric wheels.

The invention relates, further, to various details of construction and arrangement of parts, as will be hereinafter more fully described and then specifically defined in the appended claim.

The invention is 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 side elevation of my improved gear, showing two eccentric gear-wheels in mesh with each other and the back gear in the rear. Fig. 2 is a side elevation.

Reference being now had to the details of the drawings by letter, A designates the standard supporting the bracket B, said standard being hollow and receiving the rod C, which is adapted to be connected to the pump-stem. Said bracket has two arms B′ and $B^2$, the former of which, B′, has an angled end D, in which one end of the shaft H has a bearing. The other arm $B^2$ has its lower portion bent at an inclination, thence is extended vertically and is parallel to the arm B′. The shaft H has also a bearing in said arm $B^2$, which latter carries a stub-shaft E, on which shaft E a gear-wheel K is journaled, which is in mesh with a gear-wheel L on the shaft H. Also mounted on the shaft H is an eccentric wheel M, which is in mesh with the eccentrically-mounted gear-wheel N. To the eccentric wheel N is fastened a pin N′, to which is pivoted one end of the pitman P, the other end of which is pivoted to the stem or rod C.

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

A gearing for windmills, comprising in combination with a hollow standard a bracket B having two arms B′ and $B^2$, the former of which is bent at right angles at D, a shaft H having a bearing in said angled end, the other arm bent at an inclination, and thence in a vertical direction and forming a bearing for one end of said shaft, a gear-wheel mounted on said shaft, the upper end of the arm $B^2$ having a lateral projection, a stub-shaft journaled in said projection, an eccentrically-mounted wheel journaled on said stub-shaft, a reciprocating rod, a pitman connected to said eccentrically-mounted wheel, and to said rod, a shaft E journaled in the arm $B^2$, a gear-wheel K mounted on said shaft E and in mesh with the gear-wheel L, and the eccentrically-journaled gear-wheel M on shaft E, and in mesh with the wheel to which the pitman is connected, as set forth.

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

CHAS. S. BEGGS.

Witnesses:
W. S. REARICK,
J. J. WYATT.