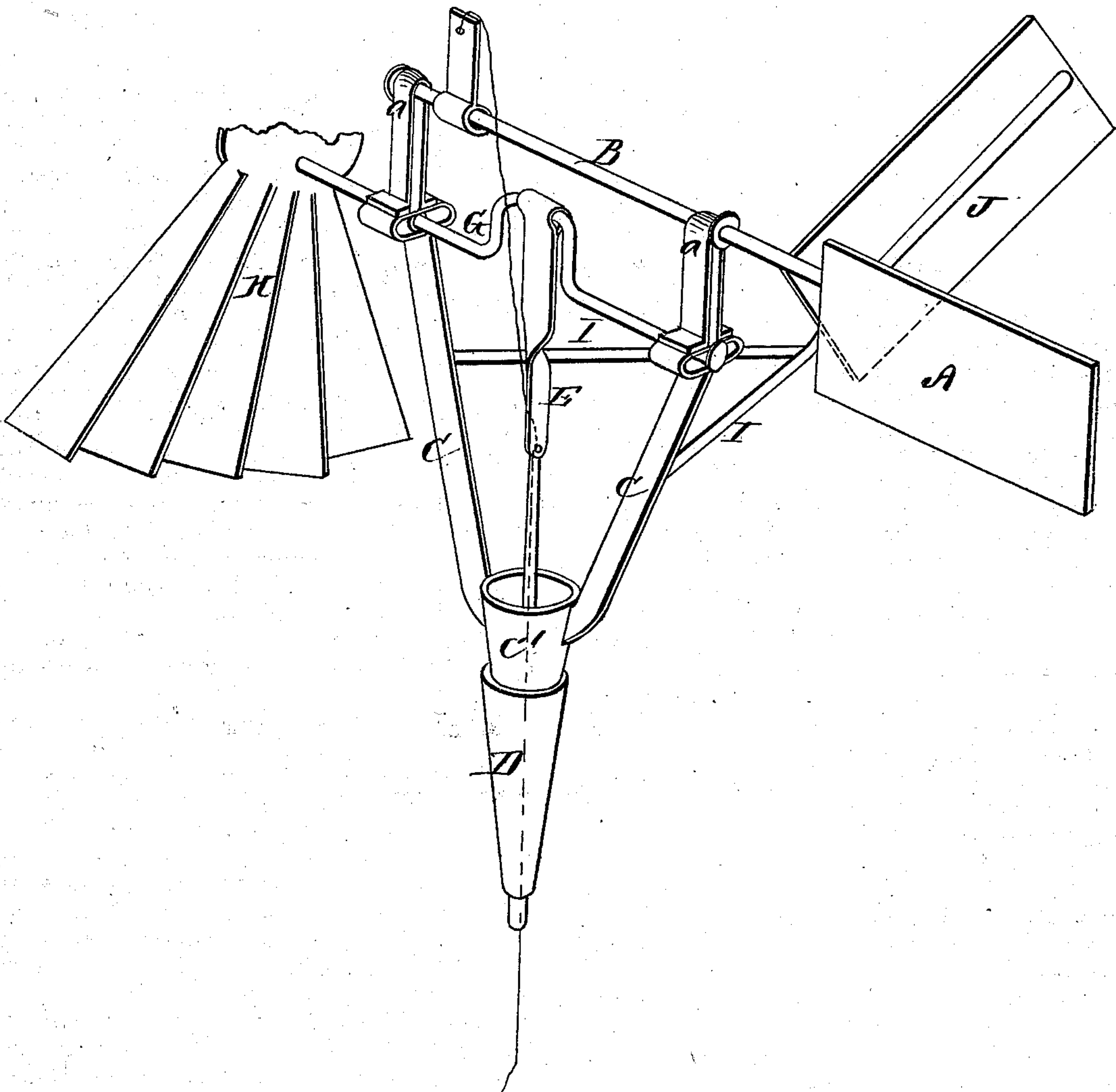


C. REMPE.
Wind-Mills.

No. 150,615.

Patented May 5, 1874.



WITNESSES.
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UNITED STATES PATENT OFFICE.

CHRISTOPHER REMPE, OF LELAND, ILLINOIS.

IMPROVEMENT IN WINDMILLS.

Specification forming part of Letters Patent No. 150,615, dated May 5, 1874; application filed April 4, 1874.

To all whom it may concern:

Be it known that I, CHRISTOPHER REMPE, of Leland, in the county of La Salle and in the State of Illinois, have invented certain new and useful Improvements in Windmill; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of the vane, governor, supporting-crotch, and socket or holder of a windmill, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, which represents a perspective view of so much of a windmill as will illustrate my invention.

A represents the vane, made of any suitable dimensions, and attached to a horizontal shaft, B, about two inches below its upper edge, to enable it to turn flat or horizontally in a strong wind or when the water-tank is full, and, by so doing, cease to turn the wheel to the wind. The shaft B rests and turns in boxes or collars *a a* on top of the crotch C, and the turning of this shaft to bring the vane flatwise may be done by hand or by some mechanical means. The lower end of the crotch is in the form of a hollow inverted cone, C', and is supported by passing into the hollow socket D, which is also made in the shape of an inverted cone, and is to be fastened with clamps or bands to the frame or post. The socket D, being hollow, allows the crotch to turn in it to any point of the compass, and the part C' of the crotch being hollow allows the pitman or pump-stock E to play up and down in it by the motion of the crank-shaft G, which is supported and revolves in suitable boxes on the crotch, and carries the wheel H. It will be understood that the socket D is stationary, and

that the socket C' with its attachments rotates within the socket D. By this construction the entire windmill mechanism can be removed from the socket D by simply raising the socket C' up and away from the stationary socket D. In this construction there is but little friction of the parts, and, by having the two tapering, as the cone C' wears it will gradually fall or lower by its own gravity. J represents the governor, fastened by two arms, I I, to the two arms of the crotch C standing at right angles to the plane of the crotch, and stands level. In a full-sized windmill the arms of the crotch will have holes to admit the arms I I, which latter will be further secured by a right-angular iron band or brace screwed to the arm of the crotch and to the arms I.

In a very strong wind the governor J turns the whole device quartering to the wind, and slackens its too rapid motion.

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

1. The combination, with the crotch C forming bearing, *a a*, of the horizontal shaft B provided with the vane A, which is attached to said shaft at a point near its upper edge, so that said vane will be normally kept in a vertical position by its own gravity, as set forth.

2. The crotch C, with its lower end forming a hollow inverted rotating cone, C', in combination with the conical hollow stationary socket D, substantially as and for the purposes herein set forth.

3. The combination of the vane A with oscillating shaft B, crotch C C', socket D, and governor J, with arms I, all constructed substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 21st day of February, 1874.

CHRISTOPHER REMPE. [L. S.]

Witnesses:

S. H. KEIME,
M. E. BELDIN.