G. Parker,

Wind Wheel,

No. 4,190. Patented Sept. 11, 1845.

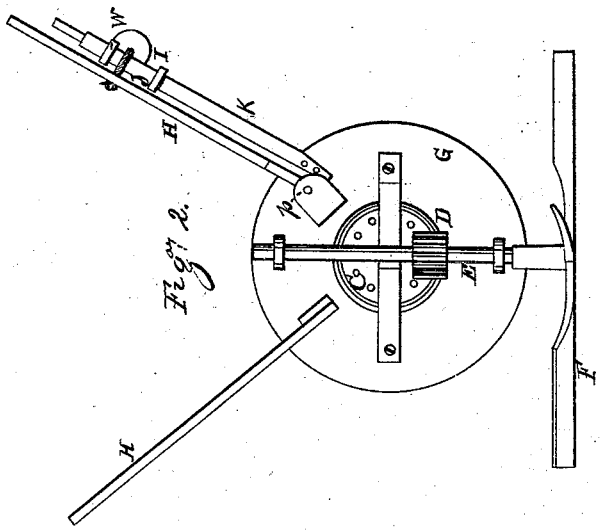

Fig. 2.

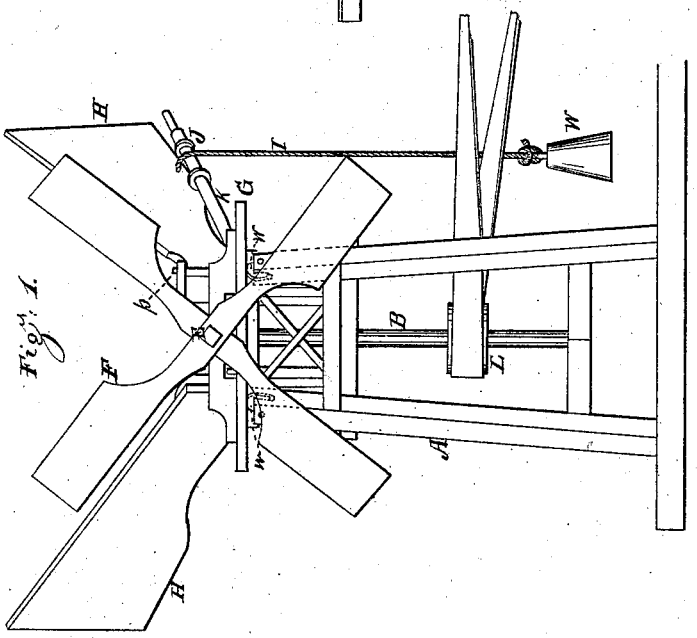

Fig. 1.

UNITED STATES PATENT OFFICE.

GEORGE PARKER, OF CORINNA, MAINE.

IMPROVEMENT IN WINDMILLS.

Specification forming part of Letters Patent No. **4,190**, dated September 11, 1845.

To all whom it may concern.

Be it known that I, GEORGE PARKER, of Corinna, in the county of Penobscot and State of Maine, have invented a new and useful Improvement in Windmills for Propelling Machinery, which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

Figure 1 is a front elevation of the mill. Fig. 2 is a top or bird's-eye view of the same.

The frame A of this windmill is made of any size and material to contain and support the several parts and of the form represented in the drawings. In this frame is placed a vertical shaft B, turning in a step at the lower end and supported by a cross-piece of the frame, on the upper end of which shaft is secured a cog-wheel C, which meshes in gear with a pinion D, secured on the end of a horizontal shaft E, having an ordinary wind-wheel F, secured on its opposite end and turning in boxes fixed to a circular platform G, resting on friction-wheels *w*, inserted in the tops of the posts of the frame A, being held in its proper position by the vertical shaft B, which passes through an opening in a cross-piece secured to the said platform, and which acts as a center for the platform to turn. Two wing boards or rudders H H′ are attached to the top of this platform, behind the wind-wheel, at equal distances from the horizontal shaft E, one of which rudders H is secured firmly at the top of the platform and extends in a radial line from the center of the platform, and the other is attached by a vertical pin *p*, upon which it moves, and has a weighted cord I attached to its outer extremity, which passes over a roller J on a beam K, secured to the platform. This arrangement of the wings or rudders H H′ is designed to regulate the speed and power of the mill and keep it at one uniform speed at all times, and will operate in the following manner: When the wind becomes so great as to increase the speed of the mill beyond what is required by the specific gravity of the weight W, the action of the wind on the rudder H′ will overcome the weight and turn said rudder until it presents a feather-edge to the wind, and the force of the wind on the opposite wing H will turn the platform G and the horizontal axle E with it, causing the front of the wind-wheel F to present an obtuse angle to the wind, thus decreasing the effect of the wind on said wheel.

A whur or band wheel L is secured to the lower part of the vertical axle, from which power can be conveyed to any machinery required to be propelled.

What I claim as my invention, and which I desire to secure by Letters Patent, is—

The mode of regulating the speed of the mill by means of the fixed and movable rudders H H′, roller J, cord I, and weight W, in combination with the circular platform G, to which they are attached, containing the wind-wheel F and axle E and resting on friction-rollers *w*, in the manner set forth.

GEORGE PARKER.

Witnesses:
EDMUND MAHER,
J. FRANCIS MAHER.