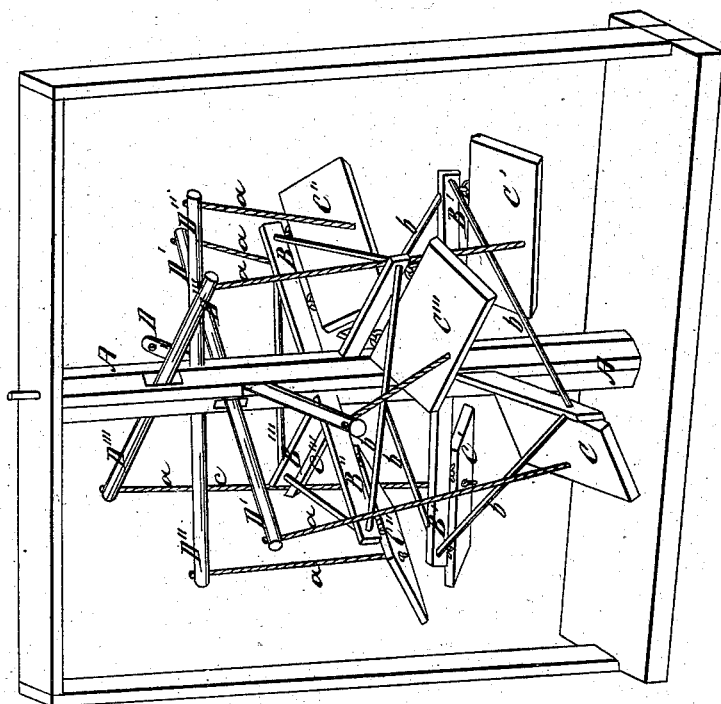


*D. Dennett,*  
*Wind Wheel,*  
*N<sup>o</sup> 3,822.      Patented Nov. 13, 1844.*



# UNITED STATES PATENT OFFICE.

DANIEL DENNETT, OF CENTREVILLE, LOUISIANA.

## IMPROVEMENT IN HORIZONTAL WIND-WHEELS.

Specification forming part of Letters Patent No. 3,522, dated November 15, 1844.

*To all whom it may concern:*

Be it known that I, DANIEL DENNETT, of Centreville, in the parish of St. Mary's and State of Louisiana, have invented a new and useful Improvement in the Manner of Constructing a Horizontal Wind-Wheel; and I do hereby declare that the following is a full and exact description thereof.

My improved wind-wheel has a vertical shaft supported by a suitable frame, from the lower segment of which shaft project eight or any other suitable number of arms, which stand at right angles thereto. These arms each carry a vane against which the wind is to act, said vanes being hinged to the respective arms by their upper edges. When there are eight such arms, each of them forms an angle of forty-five degrees with those next contiguous to it. Above these eight arms there is an equal number consisting of four beams or rods, which pass through mortises in or are otherwise so attached at their centers to the vertical shaft, by means of pins which constitute fulera, as that they can turn or vibrate to the necessary distance. From the extremities of these vibrating arms descend cords, rods, or chains, the lower end of each of which is connected to the lower edge of one of the vanes, the two cords from one vibrating arm being connected to two vanes in a right line with each other. The cords are of such length as that when one of the vanes stands vertically, so as to be exposed to the full action of the wind its opposite vane will be held at right angles thereto, or in the plane of the horizon. The result of this ar-

rangement is that any two opposite vanes must act in harmony, and when the wind is acting with its whole force on one of them, bringing it to a vertical position, the other will necessarily be held horizontally.

In the accompanying drawings, A A is the vertical shaft running on suitable gudgeons.

B, B', B'', and B''' are arms firmly mortised into said shaft, and carrying vanes C C' C'' C''', that are hinged to them.

D D' D'' D''' are vibrating arms turning on pins or fulera at their centers. From these descend the cords *a a*, which are attached by their lower ends to the vanes in the manner above described, the arms D D being connected to the vanes C C, respectively. The arms B B may have their ends stayed by braces *b b*. The arms D D operate best when they have considerable lateral play on their fulera, as they then accommodate themselves the more perfectly to the motion of the vanes.

Having thus fully described the nature of my improvement in the horizontal wind-wheel, what I claim therein as new, and desire to secure by Letters Patent, is—

The manner herein set forth of combining the motion of two opposite vanes by means of cords, chains, or rods, by which they are connected to the ends of a vibrating beam, substantially in the manner and for the purpose herein made known.

DANIEL DENNETT.

Witnesses:

THOS. P. JONES,  
WM. BISHOP.