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J. L. Colman,

Wind Wheel,

Patented May 4, 1832

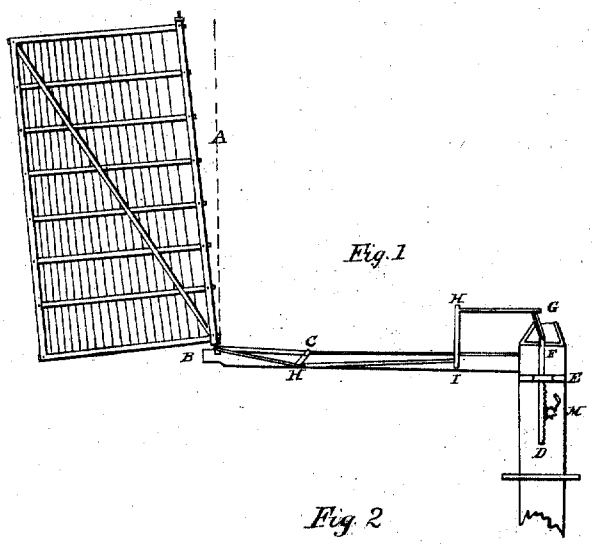
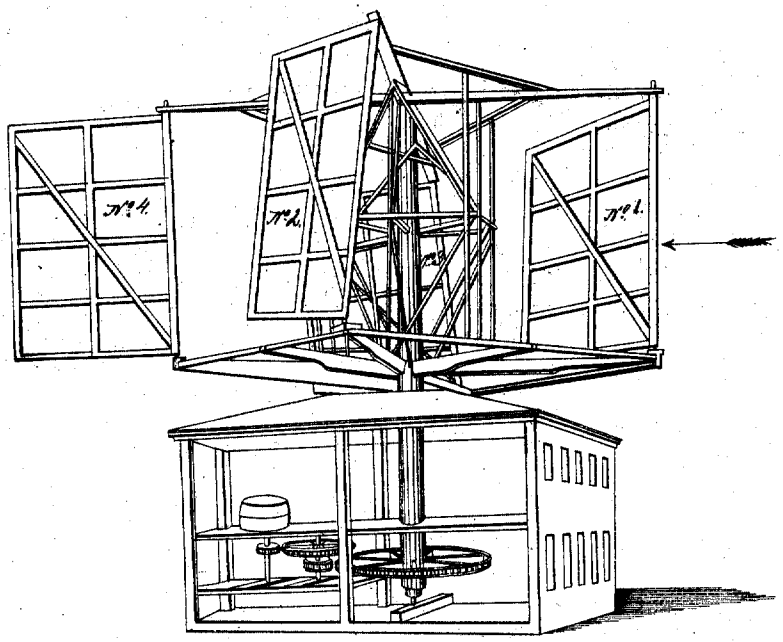


Fig. 1

Fig. 2



N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

7041X May 4. 1832 345

Jeremiah L. Colman
Letters Patent

The Schedule referred to in these Letters Patent and making part of the same containing a description in the words of the said Jeremiah L. Colman himself of his improvement called the self regulating Horizontal Corn Mill

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Be it known that I Jeremiah L Colman of Cincinnati in the County of Hamilton and State of Indiana have invented a new and useful improvement in the application of wind to Machinery and that the following is a full and exact description of the construction and operation of said machine as invented by me Jeremiah L. Colman reference being had to the annexed drawings making part of this specification.

Fig 1 represents one of the wings or sails standing inclining to the left backwards from a certain line A which shows a weight of the wing to the left. The inclination may be more or less than represented by the wing and still be agreeable to the natural weights of the wing.

But give it such inclination back from the way which the wind will be calculated to exert as will give sufficient weight to drive say one light run of millstones. If more power is desired and the wind sufficiently strong add more weight to the wings or give the wings more inclination which may be effected by hand. Stopping the mill and moving a piece of timber on which the wings turn, as at D. which said timber moves on a smooth surface turning on a pivot on the axis at C. or the wings may be inclined more or less without stopping the Mill by the following described Machinery viz.

By a piece of cast iron with teeth as represented at D. which moves up or down in a groove in the wind shaft and passes under a cast iron collar on the wind shaft as at E. with moving joints at F. & G. which collar attaches to a turning iron frame of wood or iron with a stationary pivot at H. A piece of timber screwing from J. to which there is another moving joint to K. which joins on a turning guide as the one above described. By a man standing on a stool or platform on wind shaft at L. and turning a small

7041x

small pinion wheel with a crank at M. The cast iron wheel with teeth inserted at D is moved by a strap which moves the brass pinion of the wind at B. by the above described machinery to attached thereto by which means the power may be given. Figure 2 is a view of a mill in position with the Side Keeps of wind. Wing N°1 receiving the wind on its back side as it comes from the arrow. Wing N°2 is receiving the wind on its back the same as above. Wing N°3 coming with its thin end to the wind. Wing N°4 receiving the wind as it comes from the arrow passing in front of Wing N°2 and back of wing N°1 which wing stands as a condensator and bends close in front of wing N°4. Each wing performing one revolution on its pivot to meet the wind which of the wind be sufficient. The above described mill is safe with about any sized wings, as each wing stands a storm stands with its thin edge to the wind. The wind having [illegible] power if any than the gross weight of the wings in the wind. The stopping the mill friction levers may be lightly drawn around any of the wheels by a cord clasp which will be sufficient to over balance the weight of the wings above and the mill stops. All the bracing within the wind wheel at M. in Figure 2 may be dispensed with on a small scale, leaving the centre part sufficiently large. The answering gears may be as in any other mill geared from a vertical shaft, to suit such machinery as is calculated to be driven. The machinery ought to have its proper space when the wings are moving say 5 miles an hour. a little more or a little less will do. The wings may be covered with light boards or canvas Vincennes March 27th 32.

Jeremiah G. Colman

Witness
G. W. Johnson
G. W. Cathline

Ltr 95 to D