(12) **United States Patent**
Flanders et al.

(10) **Patent No.: X9395**
(45) **Date of Patent: Feb. 13, 1836**

(54) **WINNOWING WHEAT**

(76) Inventors: **David Flanders; Calender Rathburn**

C. David Manders and Calender Rathburn

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 David Manders and Calender Rathburn themselves of their improvement in the machine for fanning and cleaning all kinds of grain.

The construction of this machine or mill, is very plain and simple and is as follows. First it consists of boards, 3 ft 10 inches in length to stand endwise matched together 3 ft 8 inches in width: the head of the wind barrel 2 ft in diameter this is to be placed 4½ inches from the bottom up and 3 quarters of an inch from the back in front: the air hole to be cut 11 inches in diameter an upright piece is to be placed perpendicular across the air-hole; next a shaft is to be 21 inches in length from shoulder to shoulder with wood or iron or brass or other may run in wood within iron or other metal boxes, four arms are put thro' sd. shaft to which the fans are attached 8 inches in width cylindrical so as to fill the space in the said barrel. Sd barrel is to be covered with half inch stuff length 21 inches commencing 4 inches from the centre on the top in front winding under the bottom and up the back and commence raising the covering 12 inches back of the centre on the top raising 5 inches on the centre and is continued on the same true curve 24 inches towards the front from the back end, and two inches from the top tips down leaving a space for the wind 8 inches the shoe to be 19 inches in width 2 feet 7 inches in length the hind end resting on a pivot, the bottom board, to pitch sufficiently to carry or slide down. the chaff sieve 1¼ of the upper sieve or riddle 1½ inch above bottom board, next sieve 1½ inches below the riddle sd. sieve to be one inch pitching in front. Next a screen of chaff wire netting, commencing in front inch below the lower sieve descending back 12 inches falling 6 inches below the sieve extending 3 inches farther on a level with the sieve then a square

by inch which forms a spout sufficient to shake out the grain, Next a rolling screen, this rolling one eighth of an inch made one foot in diameter in the Clear 8 Inches long tapering 3 inches at the small end, a brace is put in Long ways and nailed from the Center of the head on a side 6 inches in diameter then a Circle a spout encases the grain Runs the upper screen which spout is fastened to the left side the mill the screen is supported with a shaft, and arms and Cogs in the Center 26 inches up and 7 inches in front of the wind barrel, the grain may be let out at the left side the mill by hanging a back or door the Sliders the grain to the rolling screen, the grain that goes through the rolling screen drops out the big end into a spout which Conducts it into the bag basket or box 9 or 10 inches above the floor on the side Side the mill runs the screen is a door 12 inches wide and is run the length of the screen to be cut in the left Side the mill Long to the wind barrel, the bottom 9 inches above the floor runs this another drawer to catch the leadings to stand 2 front 7 inches high wide and long enough to fill the space from the front to the wind barrel the mill is to be supported by 2 inch posts duplicated across and to be bolted up 29 inches from the bottom above which a Shoe is made a little inclining to the front by hoisting or lowering it Conducts the leadings to the front drawer between the screens on the Side to carry the chaff or cockle to the screen drawer on the rolling screen by side the wind barrel 2 inch posts a duplicate across the top 7 inches from the ends, between which the hopper is built sticking in between these posts, the front post supports the Shoe by 2 large wires, the upper corners of the mill is rounded the back corners round with a board 12 inches on below this a Circle door that shuts up the end above the barrel, Next a shaft that is attached to the turning wheel goes through the Center of the 2 inch Square or center of the rolling, Next a wheel 3 inches in diameter 2 inches thick is to be made fast in the Center the wheel is to be flutted or Cogged out three eighths of an inch deep and half inch wide commencing in the Center carrying it about 5 eighths of an inch to the rim then back to the Center on a true circle, then Slant to the left and so on making from 46 to 50 Cogs to the

turning wheel going one round a small round iron wheel is
pushed to the shore in four places viz. the cross which fits the
spindle. The shaking wheel may be made of wood or cast iron,
may be fluted out on a nine with scrolled iron by ply each side of it
the mill may be cast iron gearing or wood and bands. The turning
wheel if cast iron 26 inches in diameter shaking wheel or pan 8 f.
inches a small fully wheel on the shaft inside the turning wheel
4 inches in diameter, the wheel that turns the sifting screen 8 inch
-es in diameter to go with a band by adding an extra wheel and place
-ing the gearing on the other side the mill. The wheels may be much
smaller for lightening the hands, by iron or by pinchase or Screw and
fully. The may be dampers to slide over the air holes if necessary
to shut out the wind. The manner of shaking the grain & the sift
-ing screen constitute the principal part claimed as our invention
or improvement

Witnesses
Jonathan Wallace
Rufus Hougell

David Summers
Ebenezer Rathbun

Esq
Chief