J. Wind.

Cotton Picker.

No. 5,369. Patented. Nov. 13, 1847.

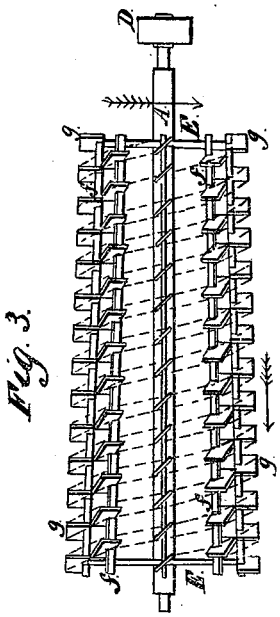

Fig. 3.

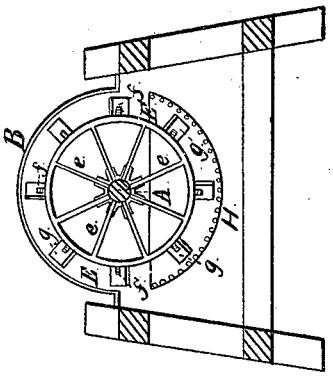

Fig. 2.

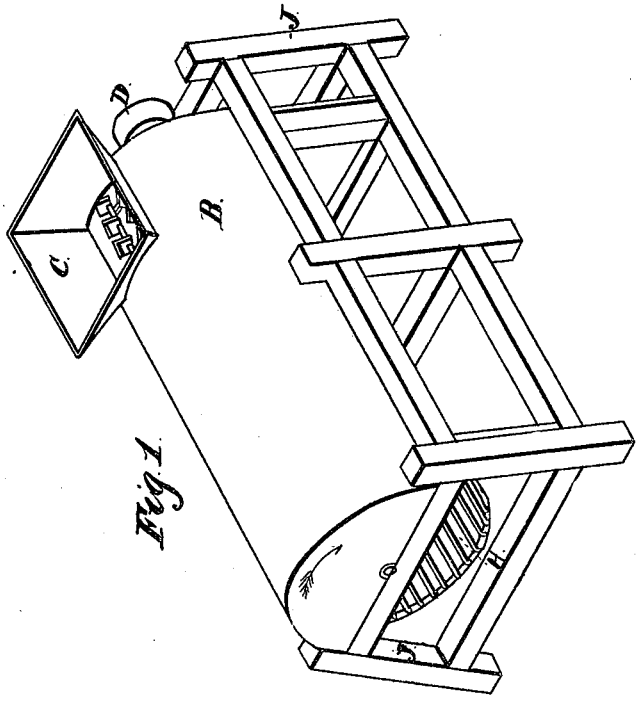

Fig. 1.

UNITED STATES PATENT OFFICE.

JOHN WIND, OF THOMASVILLE, GEORGIA.

COTTON-CLEANER.

Specification of Letters Patent No. 5,369, dated November 13, 1847.

To all whom it may concern:

Be it known that I, JOHN WIND, of Thomasville, in the county of Thomas and State of Georgia, have invented a new and Improved Machine for Threshing and Cleaning Cotton Preparatory to Ginning; and I do hereby declare the following to be a full, clear, and exact description of the construction and operation thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1, is a perspective view, Fig. 2, a transverse vertical section, and Fig. 3, a longitudinal elevation of the main shaft and beating wings of the machine detached.

Similar letters indicate corresponding parts in all the figures.

J, is the supporting frame, constructed in any suitable manner.

H, is a semi-cylindrical skeleton concave, composed of rods or slats secured in the supporting frame.

A, is the main shaft.

e, *e*, are arms radiating from the main shaft, supporting the rings E, E, to which the bars *f*, *f*, are secured, forming a skeleton cylinder, one end of which is one fourth or one half—more or less—larger than the other, as represented in Fig. 3.

g, *g*, are radial beating wings secured to the bars *f*, *f*, in a continuous helical line from the smallest to the largest end of the cylinder. The beating wings are secured to the bars *f*, *f*, with their sides at an angle of forty five degrees, or thereabout, with the main shaft. The conical beating cylinder thus constructed, is placed in the concave H, to which it is accurately adjusted, and is supported by bearing boxes at each end of the machine, in which it revolves.

B, is a semi-cylindrical casing inclosing the upper half of the beating cylinder.

C, is the hopper connected to the casing B, over the smallest end of the beating cylinder, into which the cotton is placed to be operated upon.

D, is a driving pulley on the end of the shaft A.

The skeleton concave H, is closed at the end opposite the smallest end of beating cylinder.

The operation of my cotton thresher and cleaner is as follows. The cotton is placed in the hopper C, and is first acted upon by the wings at the smallest end of the beating cylinder, and is gradually removed to the opposite end, in consequence of the helical position of the wings, and discharged at the open end of the concave H. Much of the cotton when it comes from the field, is in a matted state, and if subjected to violent beating action at first, would be much injured; the slow motion of the beating wings at the smallest end of the cylinder, acting in conjunction with the bars or ribs of the concave H, open the fibers of the cotton without injuring the same; and as it is gradually passed along, the increasing speed of the wings beats the cotton and agitates the air to such a degree that the dirt and a portion of the seeds are separated from the cotton, the fibers are thoroughly opened, and the cotton is discharged from the machine in the most perfect condition for ginning.

Having thus fully described my improved cotton thresher and cleaner, what I claim therein as new and desire to secure by Letters Patent, is—

The placing the beating wings in a continuous helical direction upon a conical skeleton cylinder, and combining the same with a skeleton concave and casing, substantially in the manner and for the purpose herein set forth.

JOHN WIND.

Witnesses:

CHAS. H. REMINGTON,

JAMES M. GRAY.