

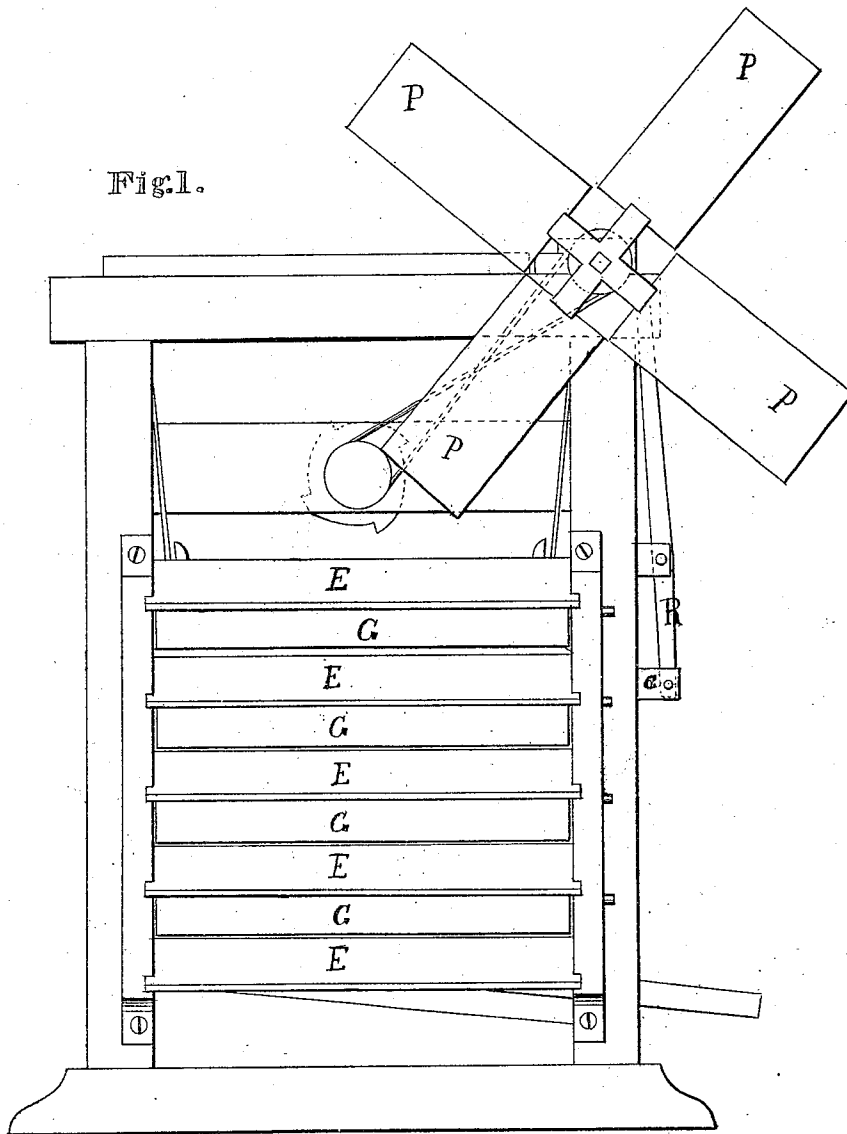
H. K. AVERILL.

Fanning Mill.

No. 108,953.

Patented Nov. 8, 1870.

Fig. 1.



Witnesses.
Villette Anderson,
Chas Kengon

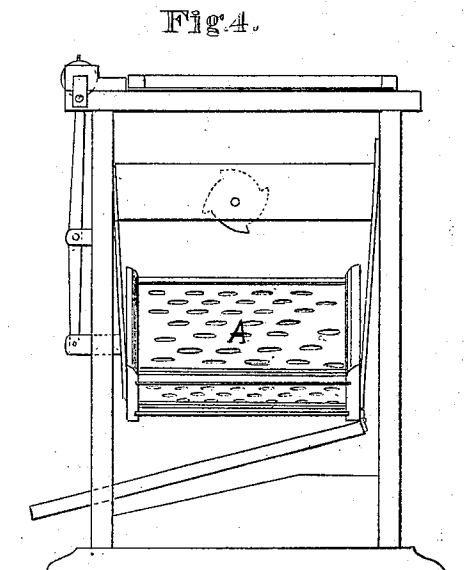
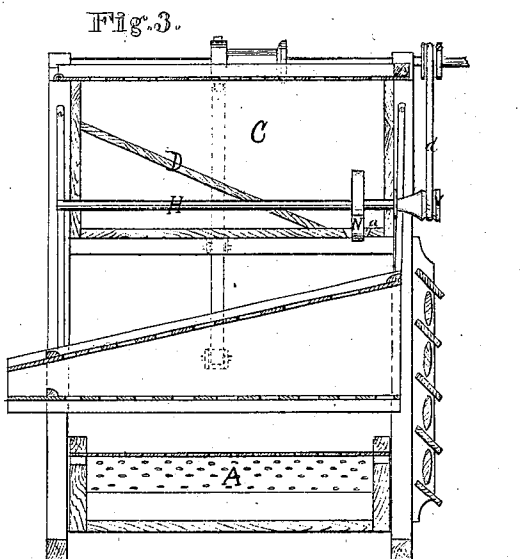
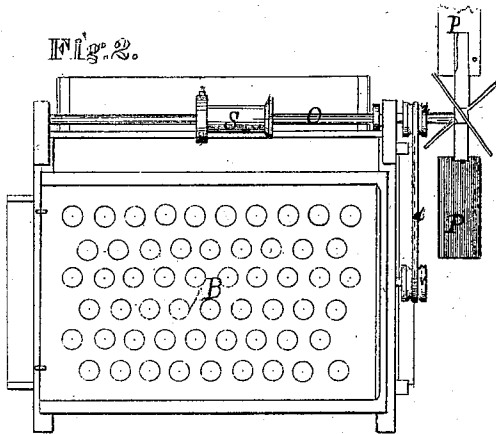
Inventor.
H. K. Averill,
Shipman & Son & Co
Atty

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Witnesses:
Villette Anderson
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United States Patent Office.

HENRY K. AVERILL, OF NEW OREGON, IOWA.

Letters Patent No. 108,953, dated November 8, 1870.

IMPROVEMENT IN FANNING-MILLS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, HENRY K. AVERILL, of New Oregon, in the county of Howard and State of Iowa, have invented a new and valuable Improvement in Fanning-Mills; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is an end view of my invention;

Figure 2 is a top view thereof;

Figure 3 is a vertical longitudinal section; and

Figure 4 is a reverse view, showing the other end of the same.

My invention relates to means for separating grain from chaff, and consists in a novel arrangement of devices designed to promote economy and despatch in that department of agriculture.

To this end, I construct a frame as represented on the drawing, and arrange therein the sieves A, in the manner common to fanning-mills.

B represents a perforated plate, placed on the top of the frame, upon which the wheat and chaff are thrown as they fall from the thrashing-machine.

C represents a triangular chamber, formed immediately under the plate B, by the inclined plank or partition D and the sides of the frame.

The letter *a* represents a slot cut in the partition D, to allow the grain and chaff to pass downward.

E represents removable slats, adjusted in the end of the mill to aid in regulating the volume of wind upon the sieves A, and

G represents pivoted slats, working between the slats E, for the same purpose.

H represents a rotating shaft, arranged as shown, the office of which is to operate the cam N, next mentioned.

The cam N is firmly attached to the shaft H, and rotates therewith. The lower side of this cam is arranged in the slot *a*, and as it revolves its arms draw the wheat, chaff, and straw through said slot upon the sieves, and effectually prevent said slot from choking therewith.

The letter O represents a rotating shaft, arranged

upon the top of one side of the frame, as shown, and is actuated by the wind-mill arms P.

R is a lever, pivoted to the side of the frame, to the lower end of which is pivoted the arm *c*. This arm *c* is pivoted at one end to the lever R, while its opposite end is attached to the frame that holds the sieves A.

S represents a drum, attached to the shaft O, one portion of which is adapted to receive a working-belt, while its other part is arranged to act as a shaker for the sieves, as next mentioned.

The raised part of this drum S has a series of slots, in which I place the removable pins *y*, which, as the drum revolves, engage with the upper end of lever R, and thereby secure a sharp shaking movement for the sieves. The number of pins arranged in the slots of the drum will always determine the amount of shaking the sieves receive, provided the shaft is moved at a uniform rate of speed.

The letter *z* represents a drum upon the shaft O, and

v is a drum upon the end of the shaft H.

A belt or cord, *d*, extends from one of these drums or pulleys to the other, and thereby secures a revolving movement for said shaft H, and actuates the cam N in its slot.

My fanning-mill is actuated either by wind upon the arms or fans P, or by a belt from any suitable motor upon the drum S.

I claim as my invention—

1. The arrangement in the fanning-mill herein described of the slats E and G, as shown, and for the purpose specified.

2. In the fanning-mill herein described, the drum S, working upon shaft O, when constructed with removable pins *y* and operating with lever R, substantially as and for the purpose specified.

In testimony that I claim the above, I have hereunto subscribed my name in the presence of two witnesses.

HENRY K. AVERILL.

Witnesses:

ALFRED J. MINTEY,
O. D. CURTIS.