J. R. BUCK.

Grain Winnower.

No. 32,857. Patented July 23, 1861.

Fig. 2

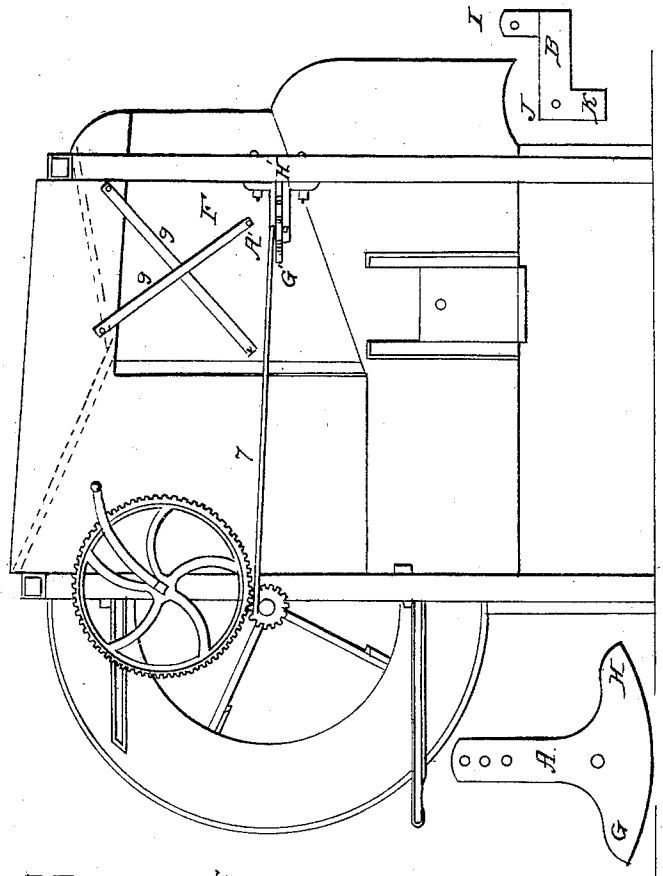
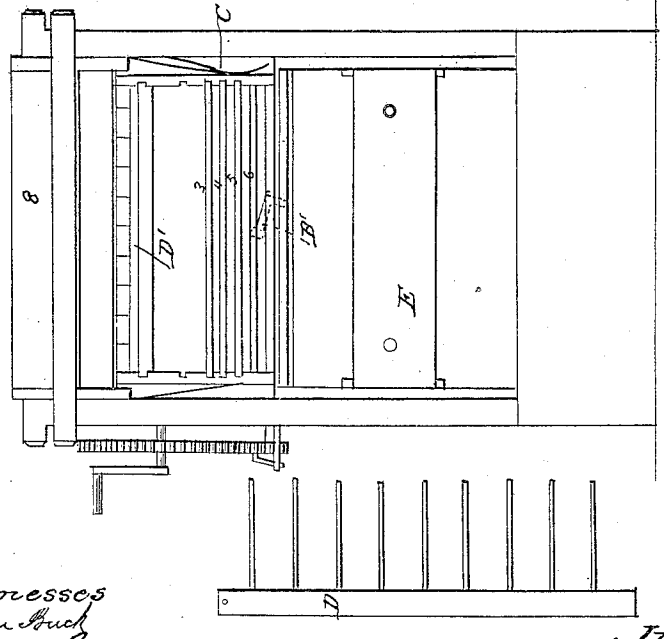


Fig. 1



Witnesses
Norman Buck
Wm D Story

Inventor
Jared R. Buck

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

JARED K. BUCK, OF WINONA, MINNESOTA.

WINNOWING-MACHINE.

Specification of Letters Patent No. 32,857, dated July 23, 1861.

To all whom it may concern:

Be it known that I, JARED K. BUCK, of Winona, in the county of Winona and State of Minnesota, have invented new Improvements Upon 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 drawings, making a part of this specification, in which—

Figure 1, is an end view, and Fig. 2, a side view, of a fanning-mill containing my improvements.

My improvements consist of a shaker, represented by A and A′; a screen lever, represented by B and B′; a shoe spring, represented by C; a hopper rake, represented by D and D′; and a drawer, represented by E. (3, 4, 5 represent the sieves, and 9 the supporters of the shoe.)

The construction of the several improvements is represented by the characters in the drawings.

Their object and operation are as follows: The object of the shaker (A and A′), and the shoe spring (C) is, to produce, during any given number of revolutions of the fans, twice as great a number of vibrations of the shoe containing the sieves as are produced by the ordinary elbow shaker, and thus facilitate the passage of the grain through the sieves without a corresponding increase of wind. In mills with the ordinary elbow shaker, to produce as rapid vibration of the shoe as is produced by my shaker, it is necessary to double the quantity of wind, which, by blowing over much of the grain, neutralizes the good effect of the more rapid vibration. This is effected by communicating the motion of the shake rod (7) to the side of the shoe (F) by pressure upon it, of the convex side (G H and G′ H′) of the shaker, (A and A′); and by pressure of the shoe spring (C) upon the opposite side of the shoe.

The object of the screen lever (B and B′), is, to produce a perpendicular motion of the screen, (6). This is effected by attaching the upper arm, I, of the lever, to the screen, and, attaching the elbow, J, to the shoe, and letting the lower arm, K, into the stationary part (10) of the mill.

The object of the rake, (D and D′), is, to prevent the throat of the hopper from becoming clogged. This is effected by attaching the rake to the shoe, and allowing its teeth to project upward through the throat of the hopper, (8). The vibrations of the shoe, being communicated to the rake serves to keep the throat of the hopper clear from obstruction.

The object of the drawer (E) is to prevent the heavy tailings from falling to the ground. It can be so adjusted by sliding as to receive the tailings.

What I claim as my invention and desire to secure by Letters Patent is—

The above named improvements on fanning-mills to wit: the combination and arrangement of the shaker (A) the shoe spring (C) the screen lever (B) the rake (D) the drawer (E) when constructed and operating as and for the purpose specified.

JARED K. BUCK.

Witnesses:

NORMAN BUCK,

WM. D. STOREY.