

E. TUSH.

Grain Winnower.

No. 42,808.

Patented May 17, 1864.

Fig. 2,

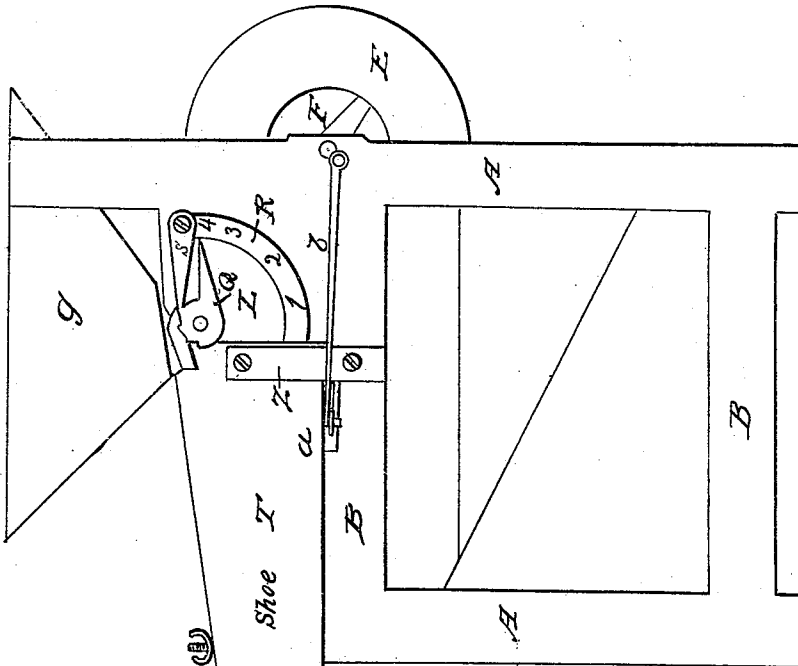
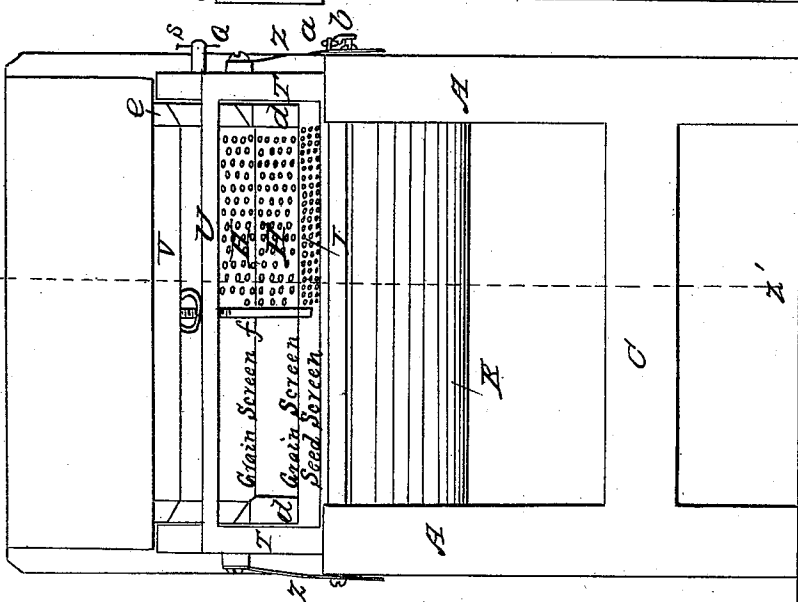


Fig. 1,



Witnesses:
 Sidney Malby
 J. E. Dennis

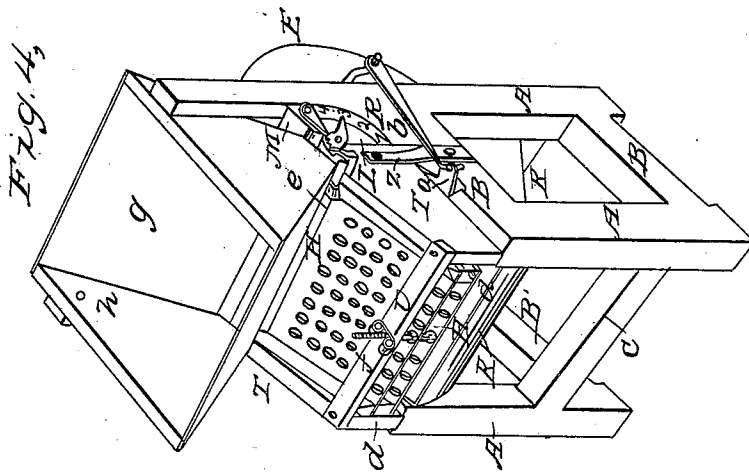
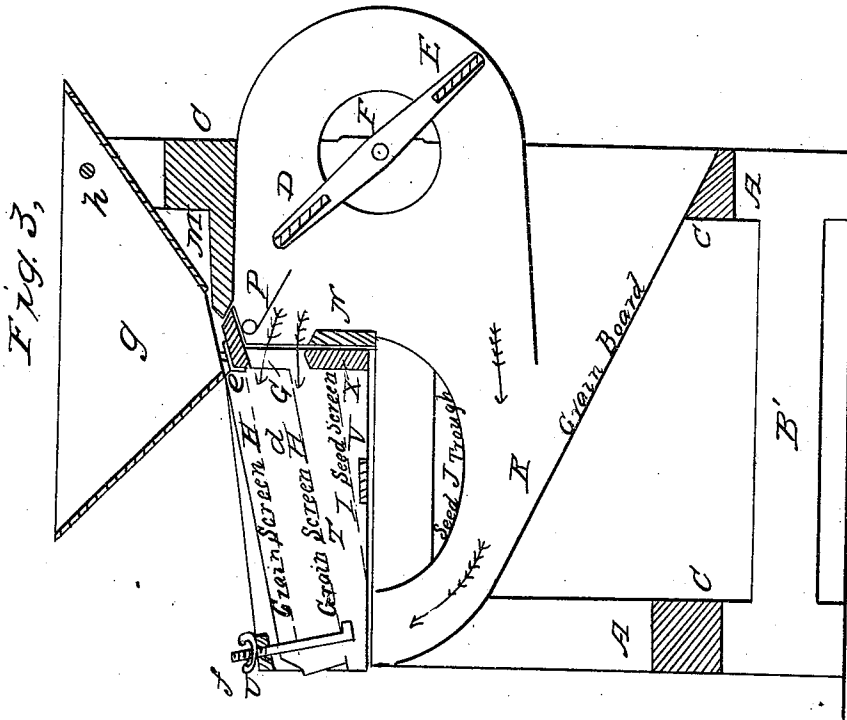
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 By his Attorney
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UNITED STATES PATENT OFFICE.

ELWOOD TUSH, OF MANCHESTER, IOWA.

IMPROVEMENT IN FANNING-MILLS.

Specification forming part of Letters Patent No. 42,808, dated May 17, 1864.

To all whom it may concern:

Be it known that I, ELWOOD TUSH, of Manchester, in the county of Delaware and State of Iowa, have invented certain new and useful Improvements in Fanning-Mills; and I do hereby declare that the same are described and represented in the following specification and drawings.

To enable others skilled in the art to make and use my improvements, I will proceed to describe their construction and operation, referring to the drawings, in which the same letters indicate like parts in each of the figures.

Figure 1 is an elevation of a fanning-mill with my improvements. Fig. 2 is a side elevation. Fig. 3 is a section of Fig. 1, cut perpendicularly through the center. Fig. 4 is a perspective view of the machine.

The nature of my invention and improvements in fanning mills consists in the construction and arrangement of devices as described in the following specification and shown in the drawings.

In the accompanying drawings, A A are posts connected by the top bars, B, and bottom bars, B', and cross-bars C C, making a strong frame, to which the other parts of the machine are either fastened or connected. The shaft of the fan D turns in boxes fastened to the posts A, and to this shaft a pulley or crank may be applied to turn the fan and operate the machine.

The fan case E is fastened to the posts A and provided with openings F to admit the air, which is blown through the opening G in between the grain-screens H and under the lower one, and between that and the seed-screen I, while a part of the blast passes under the seed-trough J, and is blown up through the falling grain and against and through the rear ends of the grain-screens H. This is effected by the peculiar shape of the trough J and grain-board K, the upper end of the latter being curved to turn the blast up among and through

the falling grain and against and through the rear ends of the grain-screens, to carry away the dust and chaff.

The side boards, L, are fastened to the posts A A and top bars, B, and to these boards L the top board, M, and upright board N are fastened with the opening G between them, which opening may be partially or entirely closed by the valve P, with its shaft turning in the boards L.

The index-hand Q is fastened to the shaft of the valve P, and points to the graduated arc R on the board L to indicate the position of the valve, which may be adjusted as desired, and held by the pawl S, which catches in the teeth on the hub of the index Q.

The shoe is composed of the side pieces, T T, connected by the bars U, V, X, and Y. This shoe is hung next to the boards L on the springs or links Z, and its rear edge rests on the frame of the machine, and is traversed or shaken by a link from the bell-crank *a* under the bar X, which crank vibrates on a screw in the top bar, B, and is worked by the link *b*, which connects it to the crank on the fan-shaft.

The seed-screen is fastened to the sides T, and the grain-screens H are fastened to the pieces *d d*, which are hung by the links *e e* to the bar V. The rear ends of the screens are supported and adjusted to the inclination desired by the screw-bolt *f*.

The hopper *g* is made in the form shown, and hinged to the posts A by the pivots *h*, so that it can be turned up when desired.

I claim —

The combination of the opening G, seed-trough J, and grain-board K, by which the blast is conducted between and under the grain-screens, over the seed-screen, and up through the rear end of the grain screen, as described.

ELWOOD TUSH.

Witnesses:

L. A. LOOMIS,
ENOS HAMBLIN.