

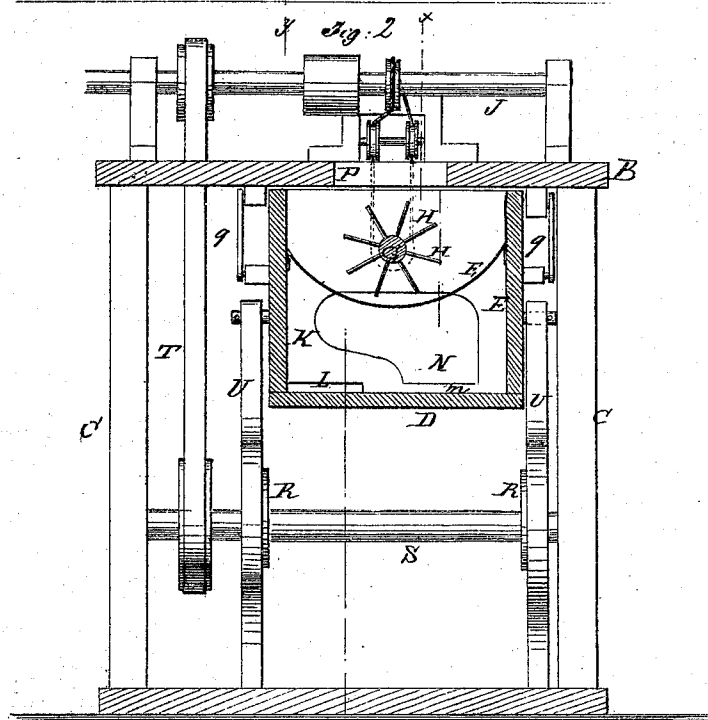
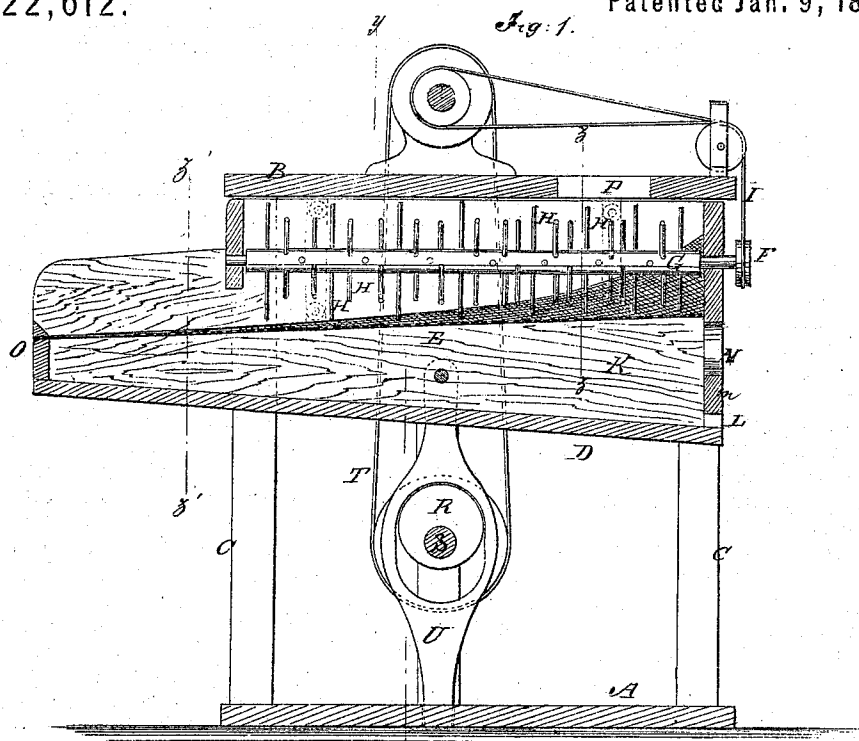
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D. KAHNWEILER.

Improvement in Screening Apparatus.

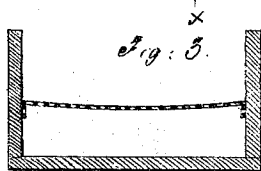
No. 122,612.

Patented Jan. 9, 1872.



Witnesses:

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Inventor:

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UNITED STATES PATENT OFFICE.

DAVID KAHNWEILER, OF NEW YORK, N. Y.

IMPROVEMENT IN SCREENING APPARATUS.

Specification forming part of Letters Patent No. 122,612, dated January 9, 1872.

To all whom it may concern:

Be it known that I, DAVID KAHNWEILER, of New York city, in the county and State of New York, have invented a new and useful Improvement in Screening Apparatus; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

The invention will first be fully described and then clearly pointed out in the claims.

In the accompanying drawing, Figure 1 is a vertical section of the machine taken on the line *x x* of Fig. 2. Fig. 2 is a vertical section of Fig. 1, taken on the lines *y y* and *z z*. Fig. 3 is a vertical section of the projecting end of the screen, taken on the line *z' z'*.

Similar letters of reference indicate corresponding parts.

A is the bed-plate or platform of the machine. B is the table or top. C represents legs or standards by which the table is supported. D is the screen-box, constructed to slide or move longitudinally beneath the table. E is the screen proper, made of woven wire or other suitable material, attached to the box in an inclined position and with its back or upper end approaching a semicircle, as seen in Fig. 2. This circle diminishes from that to the outer projecting end, where the cross-section shows but a slight curve, as seen in Fig. 3. F is the agitator, which consists of a shaft in which is any desired number of rods or wires H. This agitator is revolved by means of the belt I from the driving-shaft J, or in any other suitable manner. As it revolves the rods H are designed to sweep near the screen E and to keep the seed and hulls constantly stirred up so that all the finer portions will readily pass through the screen and down into the chamber K onto the bottom of the screen-box, which bottom is slightly inclined back so that the hulled seed, or that with the finer hulls, will work back and be discharged from the chamber. The discharge-apertures are seen in

Fig. 2. The hulled seed and meal will be discharged from the orifice L, and the lighter hulls and other foreign matter which has worked through the screen, and which will naturally rest upon the surface of the heavier seed, will work out, over the projecting lip *m*, from the orifice N. The coarser hulls and fibers, which were combined with the hulled seed, will work off the screen over the end of the box at O. The hulling-machine stands upon the table B and the seed and the hulls are discharged therefrom onto the screen-agitator through the aperture P. The screen-box D is supported from the table on each side by joint-straps *g*, which act as hangers. It is moved or shook longitudinally by means of eccentrics R R on the horizontal shaft S. This shaft S is revolved by the belt T from the upper shaft J. The eccentrics work in circular orifices in the upright bars U U. The upper ends of these bars are attached to the sides of the screen-box. Their lower ends are loosely confined in the bed-plate, so that the bars are simultaneously oscillated by the eccentrics, and thereby give the screen the required longitudinal motion.

By this machine hulled or cracked seed is cleaned or separated from the hulls, fibers, &c., connected with it as it leaves the hulling-machine in the most effectual manner, when heretofore a blast of air has been applied, which blast was the occasion of much loss as the fine meal or dust was expelled or blown away thereby.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The screen-box D with the chamber K and apertures L and N therein arranged, substantially as and for the purposes described.

2. The combination of agitator F G H, inclined and curved screen E, and the chamber K having apertures L N and lip *m*, as and for the purpose described.

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Witnesses:

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