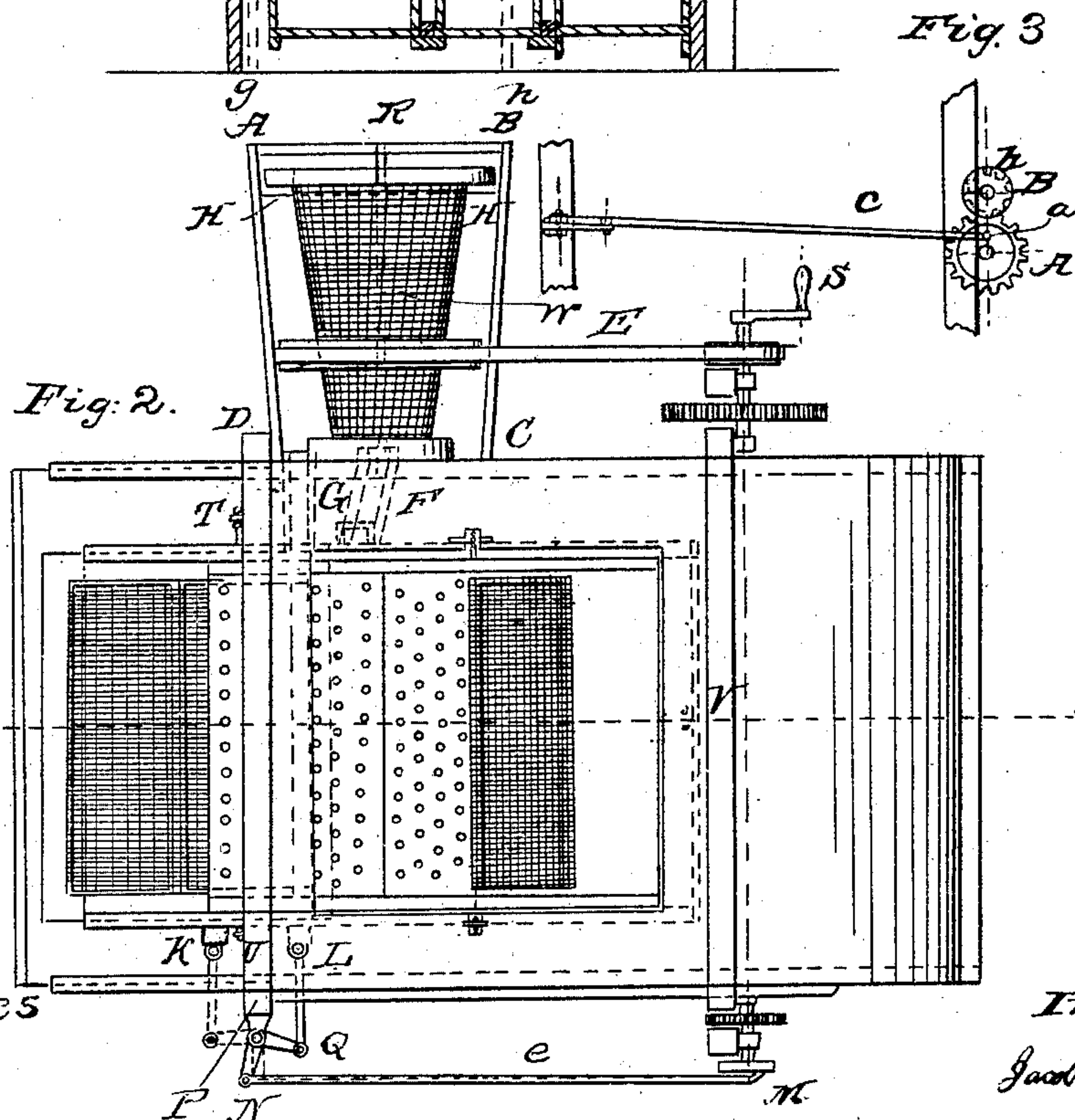
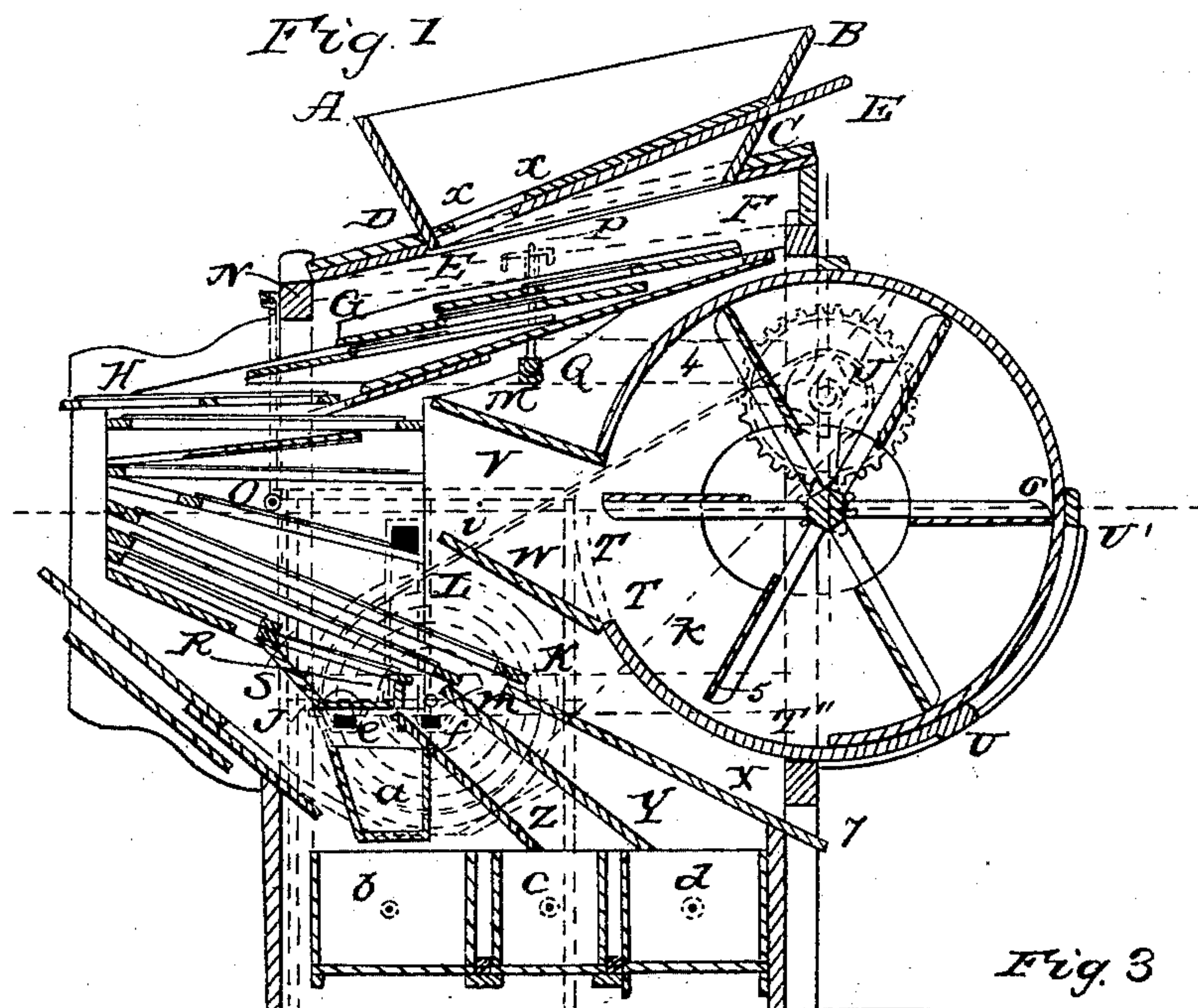


J. FELSING.
Grain Winnower.

No. 34,824.

Patented April 1, 1862.



Witnesses
W E Maule
Homer Holmes

Inventor
Jacob Felsing.

UNITED STATES PATENT OFFICE.

JACOB FELSING, OF GRANVILLE, WISCONSIN.

IMPROVEMENT IN GRAIN-SEPARATORS.

Specification forming part of Letters Patent No. 34,824, dated April 1, 1862.

To all whom it may concern:

Be it known that I, JACOB FELSING, of Granville, in the county of Milwaukee and State of Wisconsin, have invented a new and useful Improvement in Grain-Separators; and I hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings and the letters and figures marked thereon, which form a part of this specification.

Figure 1 in the accompanying drawings is a side elevation showing a longitudinal section through the center. Fig. 2 is a plan view with the hopper removed, and Fig. 3 represents the arrangement of the pitman as the power is applied to it.

To enable others skilled in the art to construct and use my grain-separator, I will now proceed to describe my invention with particularity.

In Fig. 1, A B C D is the hopper with the slide E for opening or closing the aperture through which the grain passes, (marked *x x*.) Beneath the sieve-frame and attached to it is the box J R S, to receive the small seeds and smaller grain while the larger and fuller kernels pass down the inclined sieve or screen to go out from the separator at 7, while the intermediate qualities pass down the screens Y Z, respectively.

The letters *a b c d* in Fig. 1 denote boxes or drawers to receive different kinds of grain and different qualities of the same kind. The small seeds which are shaken through the fine screen forming the bottom of J R S are received in *a*.

In Fig. 1, T U represents a movable slide for regulating and directing the current of air generated by the fan.

T' T'' show the position of the slide when closed and T' U' when opened. By this arrangement the whole current of air may be directed through the passage V W; or distributed throughout the entire space V X, and it may also be rendered very slight by moving the slide to T.

In Fig. 2 is shown a hollow revolving sieve whose form is the convex surface of the frustum of a cone, (marked W,) which is revolved by means of a belt passing over the drum

fixed about it and connected with the crank, as seen in the figure. This is inclosed in a tight box and beneath it is a drawer for grain. Into this hollow sieve the larger sort of grain, which does not pass through the bottom of the box J R S, is conducted by means of a spout, (shown in Fig. 2, marked G F,) to be again separated into two sorts, one falling through the cylinder into the drawer beneath and the other passing out at the end.

In Fig. 2, M N is the pitman by which the vibratory motion is given to the sieve-frame. The pitman may, by means of the elbow-crank, be connected with the sieve-frame at either of the points K or L, according as a more or less violent motion of the sieves is desirable. The black lines show the connection at L and the red lines at K.

In Fig. 3 is shown the improved mode of applying the power to the pitman. The cog-wheel A turns the cog-wheel B. The circles about A and within B are disks fixed upon the prolonged axes of A and B, as shown in Fig. 2. B being smaller than A, its revolutions will be more rapid, and the strokes of the pitman when attached at *b* in B will be more rapid than when attached at *a* in A.

The object of my invention is to clean grain from chaff and to separate different kinds of grain which may have been mixed accidentally or otherwise, so that each particular kind and different qualities, either by size of kernel or weight, of the same kind of grain may be deposited in its appropriate place, and to do this in a more rapid and thorough manner than can be done by any other separator in use.

I claim as my invention and desire to secure by Letters Patent of the United States—

The arrangement of the pitman as connected with the sieve-frame at the points L or K, and the wheels A B, for the purpose of imparting a more or less rapid movement to the sieves, constructed and operating substantially as set forth.

JACOB FELSING.

Witnesses:

JNO. BENTLY,
ERNST LUDOB.