

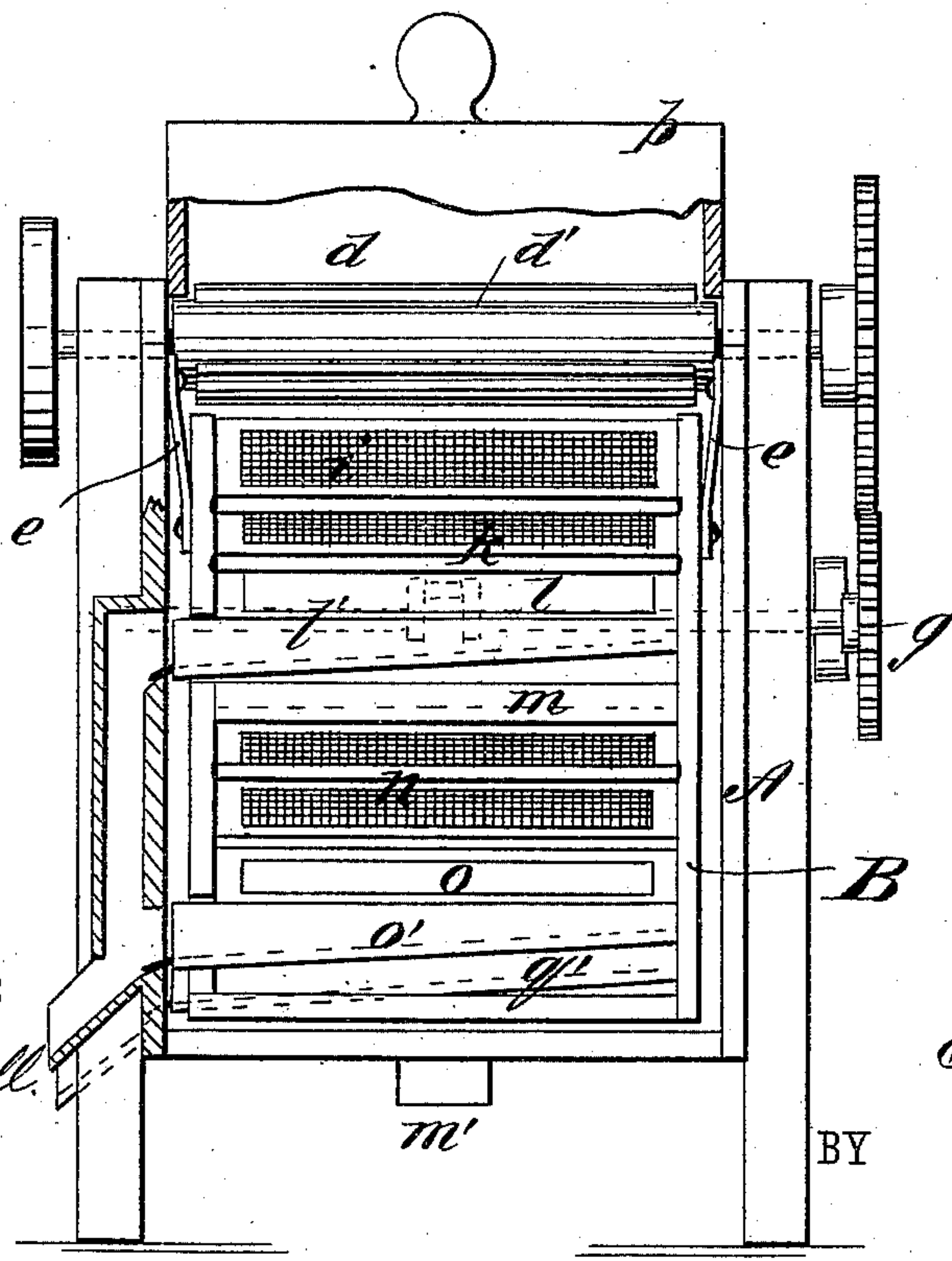
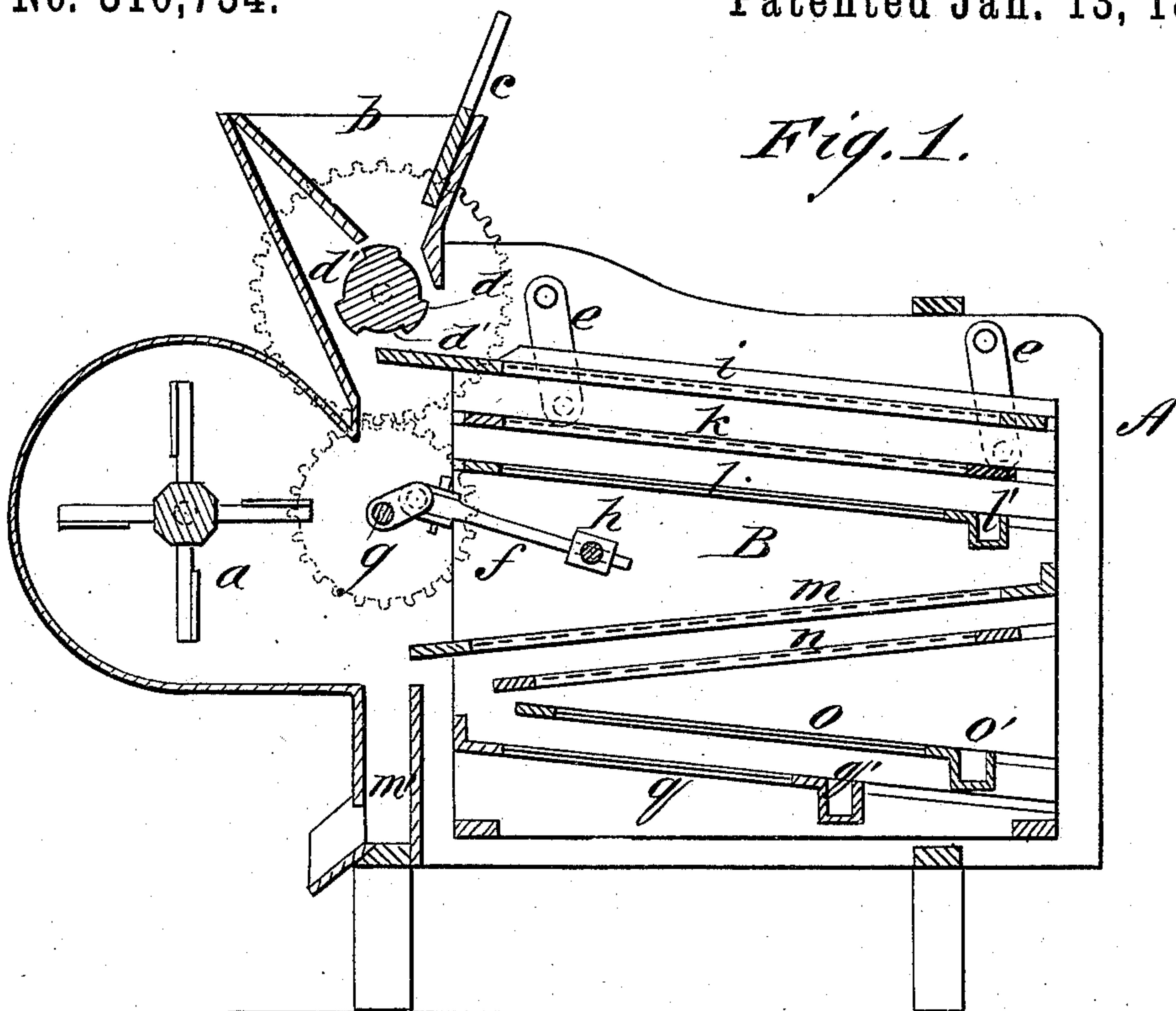
(No Model.)

E. SHERMAN.

GRAIN SEPARATOR AND CLEANER.

No. 310,734.

Patented Jan. 13, 1885.



WITNESSES:

Donn Twitchell.
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EDWARD SHERMAN, OF NEW PENDINGTOWN, INDIANA.

GRAIN SEPARATOR AND CLEANER.

SPECIFICATION forming part of Letters Patent No. 310,734, dated January 13, 1885.

Application filed June 24, 1884. (No model.)

To all whom it may concern:

Be it known that I, EDWARD SHERMAN, of New Pendingtown, in the county of Decatur and State of Indiana, have invented a new and Improved Grain Separator and Cleaner, of which the following is a full, clear, and exact description.

My invention relates to machines for separating grain and seeds and for grading wheat so as to obtain the seed-wheat separately; and it consists in the construction and combination of parts, as will be hereinafter fully described and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a vertical longitudinal section of the machine, and Fig. 2 is a transverse section of the same.

A is the case of the machine. *a* is the fan-blower, and *b* the feed-hopper, having an adjustable board, *c*. Beneath the hopper, on a cross-shaft, is a roller, *d*, formed with longitudinal grooves or pockets *d'*. The roller closes the outlet from the hopper, so that the pockets receive and carry out the grain as the roller is rotated, thereby preventing the feed from becoming checked or stopped by straw and trash.

B is the shoe carrying the screens, hung by links *e e*.

f is a pitman from a crank on a shaft, *g*, connected to the shoe B by a gib T-piece, *h*, that is journaled in the sides of the shoe. This mechanism acts to give a steady and straight line movement to the screen-case, thereby reducing the noise.

i is the top screen in the case for separating the straw which is discharged at the end of the screen. *k*, the second screen, separates the cheat. *l* is a chute for catching the cheat, provided at its lower end with a spout, *l'*. *m* is the first wheat-screen, inclined to discharge to a spout, *m'*, beneath the blower. *n* is a screen next below for separating cheat from the second wheat. *o* is a short chute for the cheat, having a spout, *o'*, leading out at the

side; and *q* is a chute receiving the second wheat, and having a spout, *q'*, for its separate delivery. The grain delivered to the upper screen, *i*, by the feed-roller passes to screen *k* free from straw and chaff, and the cheat going through is caught upon chute *l* and passes to the spout *l'*, while the grain all goes over the lower end of the screen to the screen *m*. This screen *m* passes everything except the larger or seed wheat that is discharged by spout *m'*. The second wheat falls on screen *n*, which retains the grain, and any fine cheat remaining goes to the chute *o* and spout *o'*, while the second wheat passes over the lower end of the screen to the chute *q* and spout *q'*.

With this machine all the seed-wheat, be it much or little, is saved and separated from the grain passed through as it comes from the thrashing-machine.

The shaker may be operated by either a crank or an eccentric, as most convenient.

The chute *l* may have fine perforations to separate clover-seed from the cheat, and a chute placed beneath to receive the clover-seed.

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

In a grain-separator, the shoe B, means for operating the same, the top screen, *i*, extending from the feed-opening to the opposite end of the shoe, the screen *k*, below the screen *i*, chute *l*, provided with a pocket, *l'*, the said screen *k* and chute *l* terminating a short distance from the rear end of the shoe, the spout *m'*, the screen *m*, extending from the rear end of the shoe to the spout *m'* at the forward end, the screen *n* below the screen *m*, the chute *o*, provided with a pocket, *o'*, said screen *n* and chute *o* terminating a short distance from the front of the shoe, and the chute *q*, extending from the front of the shoe rearward, and provided with a pocket, *q'*, as shown and described.

EDWARD SHERMAN.

Witnesses:

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