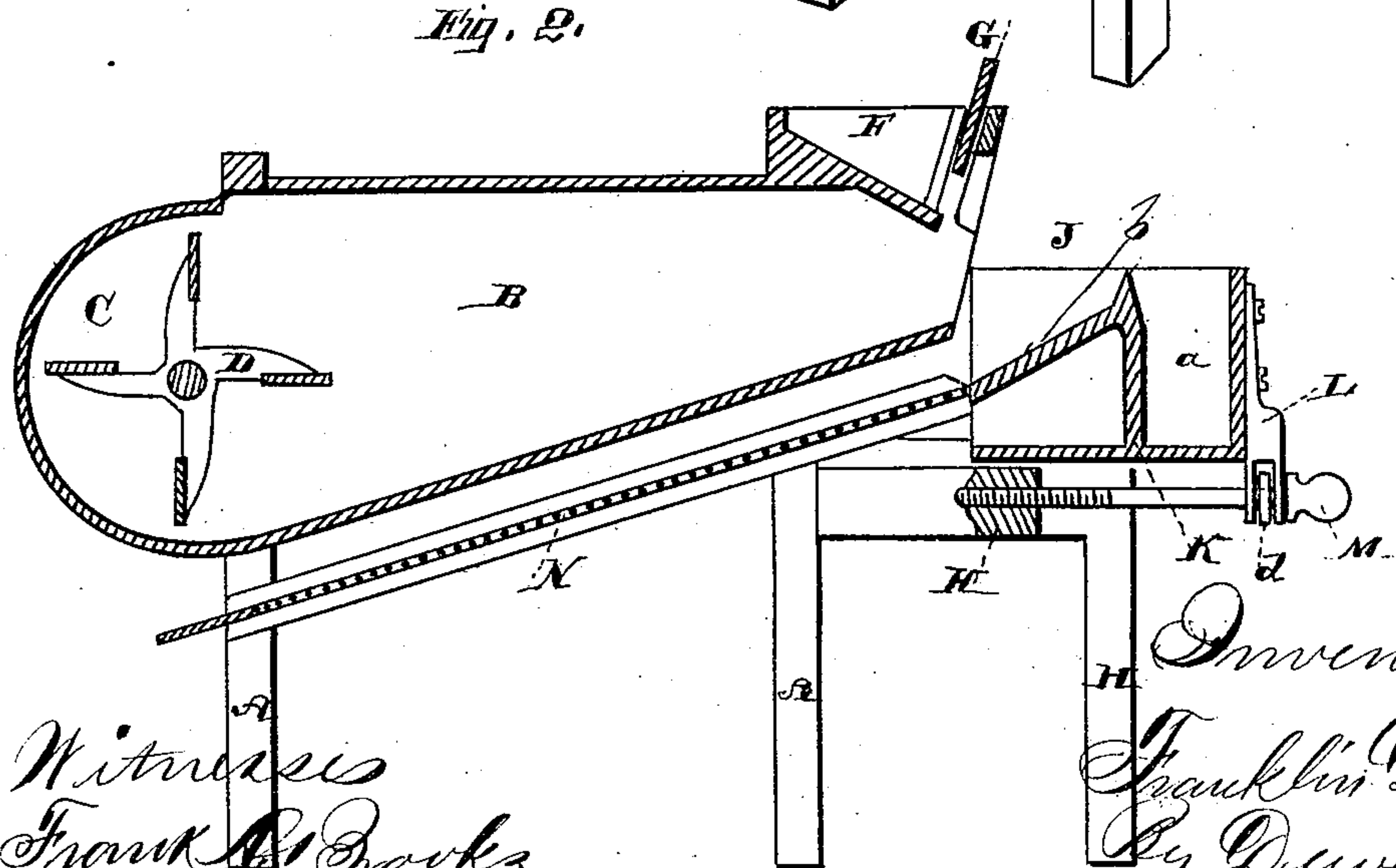
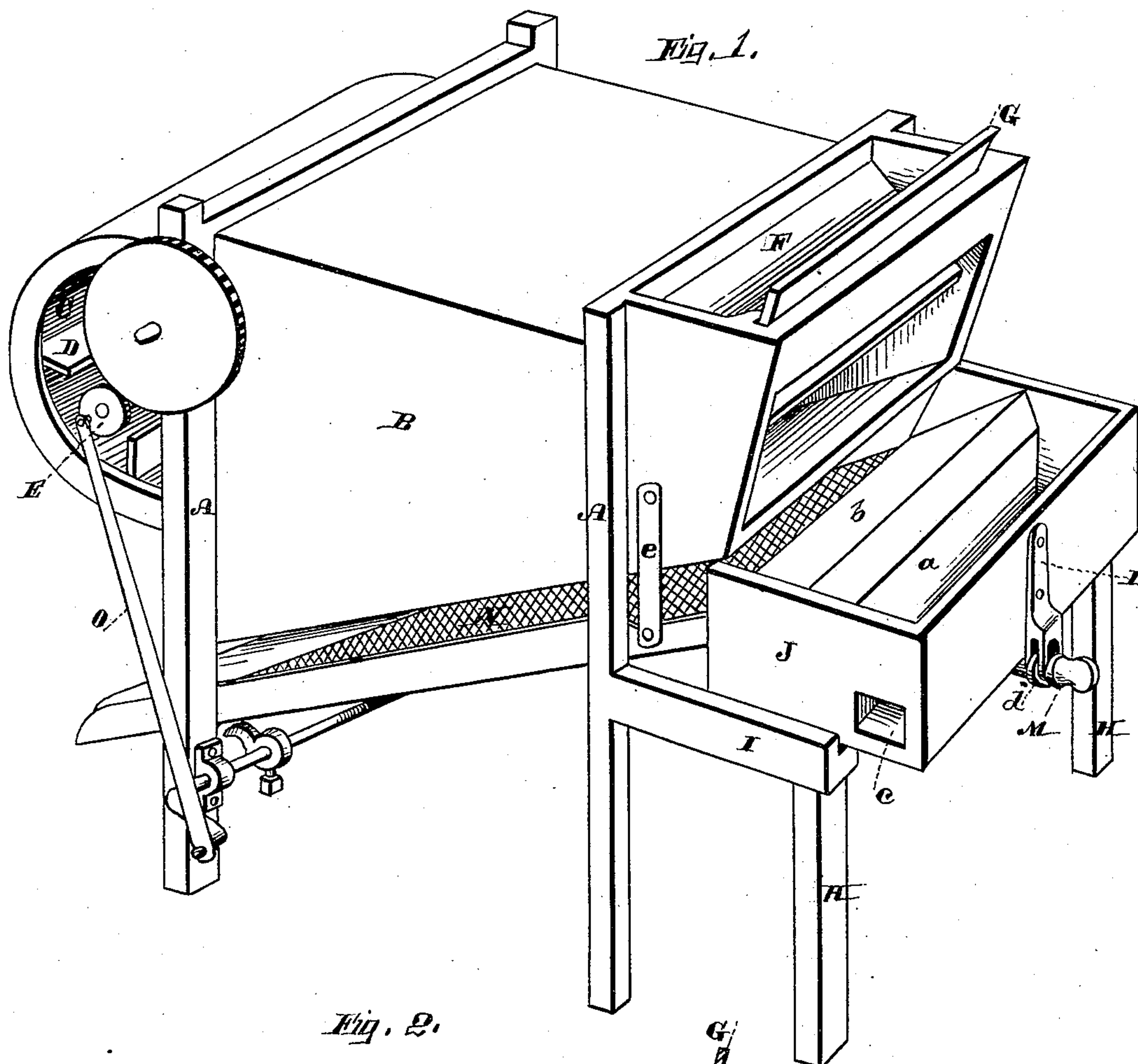


(No Model.)

F. DALBEY.  
GRAIN CLEANER.

No. 250,789.

Patented Dec. 13, 1881.



Witnesses  
Frank A. Brooks  
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# UNITED STATES PATENT OFFICE.

FRANKLIN DALBEY, OF SHERIDAN, CALIFORNIA.

## GRAIN-CLEANER.

SPECIFICATION forming part of Letters Patent No. 250,789, dated December 13, 1881.

Application filed July 18, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, FRANKLIN DALBEY, of Sheridan, county of Placer, State of California, have invented a Grain-Cleaner; and I hereby  
5 declare the following to be a full, clear, and exact description thereof.

My invention relates to that class of agricultural implements known as "grain-cleaners;" and it consists in the combination of  
10 mechanism, hereinafter set forth and claimed, for adjusting a double receiving-box whereby the grain which is discharged above and subjected in its fall to a blast of air is cleaned up, the chaff and lighter grain being blown out-  
15 ward into the farther receptacle and the good grain dropped closer in, from whence it is conducted upon a shaking screen for further cleaning, all of which will hereinafter more fully appear.

20 The object of my invention is to clean up grain after it has been thrashed, to render it suitable for market or for seeding purposes. For these two objects a different degree of cleaning is required. For the market it is not  
25 necessary to clean the wheat as thoroughly as for seed. In the latter case not only the chaff and foreign stuff must be separated, but all the light and imperfect wheat, commonly known as "chicken-feed," must be taken out, because  
30 as seed the best grains are required, while in the former case, if the wheat be not quite so thoroughly cleaned, it is just as good, and a considerable portion is saved.

Referring to the accompanying drawings,  
35 Figure 1 is a perspective view of my apparatus. Fig. 2 is a longitudinal section.

A represents a vertical frame-work, in the top of which is an inclosed chute or blast-chamber, B, the floor of which is inclined downwardly  
40 toward the front of the device and connects with the fan-chamber C, in which a revolving fan, D, operates. The fan D is at the front of the blast-chamber B, and is so situated as to direct its blast full within said chamber. The  
45 fan is operated by a crank-wheel, E, with any appropriate power. At the rear end of the frame, above the top, is the feed-hopper F, the discharge-opening in which is regulated by an ordinary sliding plate, G. The opening of the  
50 hopper is just above and about in a vertical plane with the end of the blast-chute.

H represents a supplementary or additional

frame attached to the main frame. On the upper horizontal timbers are placed guide-flanges I. These support and guide the receptacle or  
55 box J, which is adapted to be moved back and forth thereon. This box has a longitudinal diaphragm or partition, K, dividing it into a compartment, *a*. The other side of the box, or that which would be another compartment, is  
60 not closed on its side, and has an inclined top, *b*, as shown. The partition K is beveled off on top, that it may be sharp, or, if found preferable, I can fasten a strip of iron on top and sharpen it down so that it may act as a di-  
65 vider. In the side of compartment *a* is a discharge-opening, *c*.

On the rear side of the box J is a metal strip, L, which has cross-grooves in its lower end, as shown. Through one groove a set-screw, M, 70 passes. This screw has a collar, *d*, on its neck and fits it into the other groove of the strip, so that one flange of said strip rests between the collar and head of the screw, and thus any movement of the screw will move the box. 75 The end of the screw is set into a cross-piece of the frame H. When I set up this screw I move the box J closer up, so that the divider K comes closer under the feed-opening above. When I move this screw out I draw the box 80 away. The object is this: The grain is fed into the hopper above and passes out through the discharge and falls across the mouth of the blast-chute. There the blast strikes it, and blows the chaff and lighter stuff farther 85 out into the compartment *a* of the box J, and the wheat, being heavier, drops down upon the near side of the divider or partition upon the inclined top or floor *b*, and thus is separated out. Now, if I do not want to clean it thor- 90 oughly, I set the box J farther away. This gives a greater distance for the chaff to be blown into the compartment *a*, and only the very lightest impurities will be blown that far, while the wheat, with the small grains, &c., 95 will remain together; but if I want to clean for seed I set the box J closer up, and then all but the heaviest and best grain is blown into the compartment *a*. Thus I can obtain any intermediate degrees of cleaning, for by 100 adjusting the box at different points I can clean to suit.

The sharp divider or partition K prevents any of the grain from lodging upon it, but di-



vides it clean and nice. In some wheat there are impurities which are as heavy as the wheat, and upon which, therefore, the blast has no effect. To reach this I have the inclined shaking screen N, the upper end of which is in relation with the inclined top *b*, upon which the cleaned wheat falls. This screen is hung from the frame by straps *e*, and is given a shaking motion by having ordinary cams, *m*, upon a shaft, *n*, under the lower end. The shaft is given motion through a connecting-rod, *o*, attached to gearing engaging with the crank-wheel which operates the fan. The wheat, after falling upon the inclined top *b*, is discharged upon the shaking screen, by which the small but heavy impurities are sifted out. This screen is only necessary for very fine cleaning, and in such cases where these heavy impurities are in the wheat and cannot be separated by the blast.

I am aware that in the application of a blast of air to falling grain there is nothing new, nor do I claim anything for it broadly, nor for the shaking screen; but

What I do claim as new, and desire to secure by Letters Patent, is—

1. In a grain-cleaner, a fan-blower, a box, J, having an outer compartment, *a*, and an inner inclined top, *b*, and a partition or divider, K, and means, substantially as described, for adjusting said box, the whole constructed to act in combination, in the manner set forth.

2. In a grain-cleaner, the combination of the revolving fan D, blast-chute B, feed-hopper F, and adjustable box J, substantially as and for the purpose herein described.

3. In a grain-cleaner having a fan-blower, the combination of the adjustable box J with its compartment *a* and inclined top *b*, and the shaking inclined screen N, arranged substantially as and for the purpose herein described.

In witness whereof I have hereunto set my hand.

FRANKLIN DALBEY.

Witnesses:

WM. F. BOOTH,  
S. H. NOURSE.