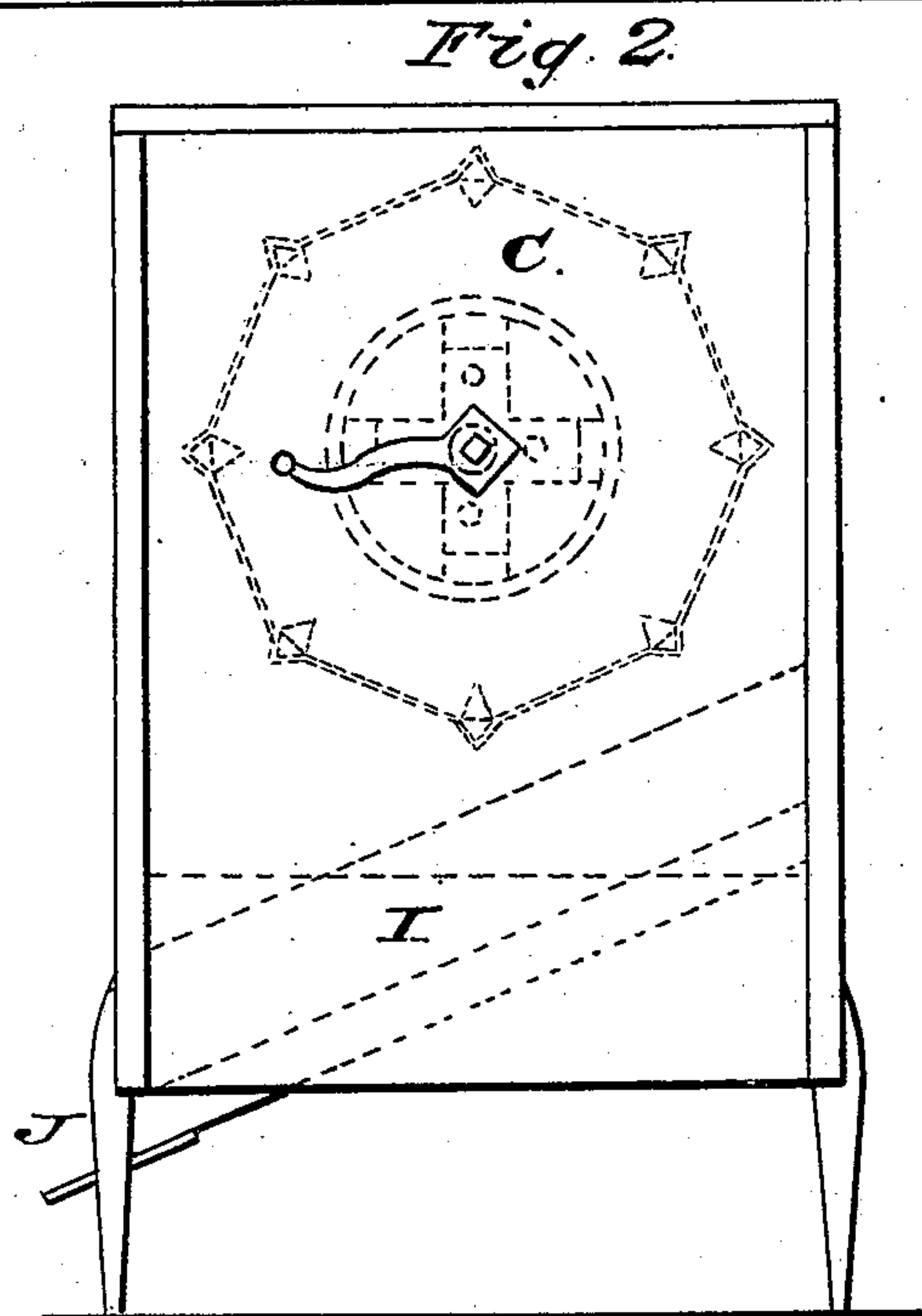
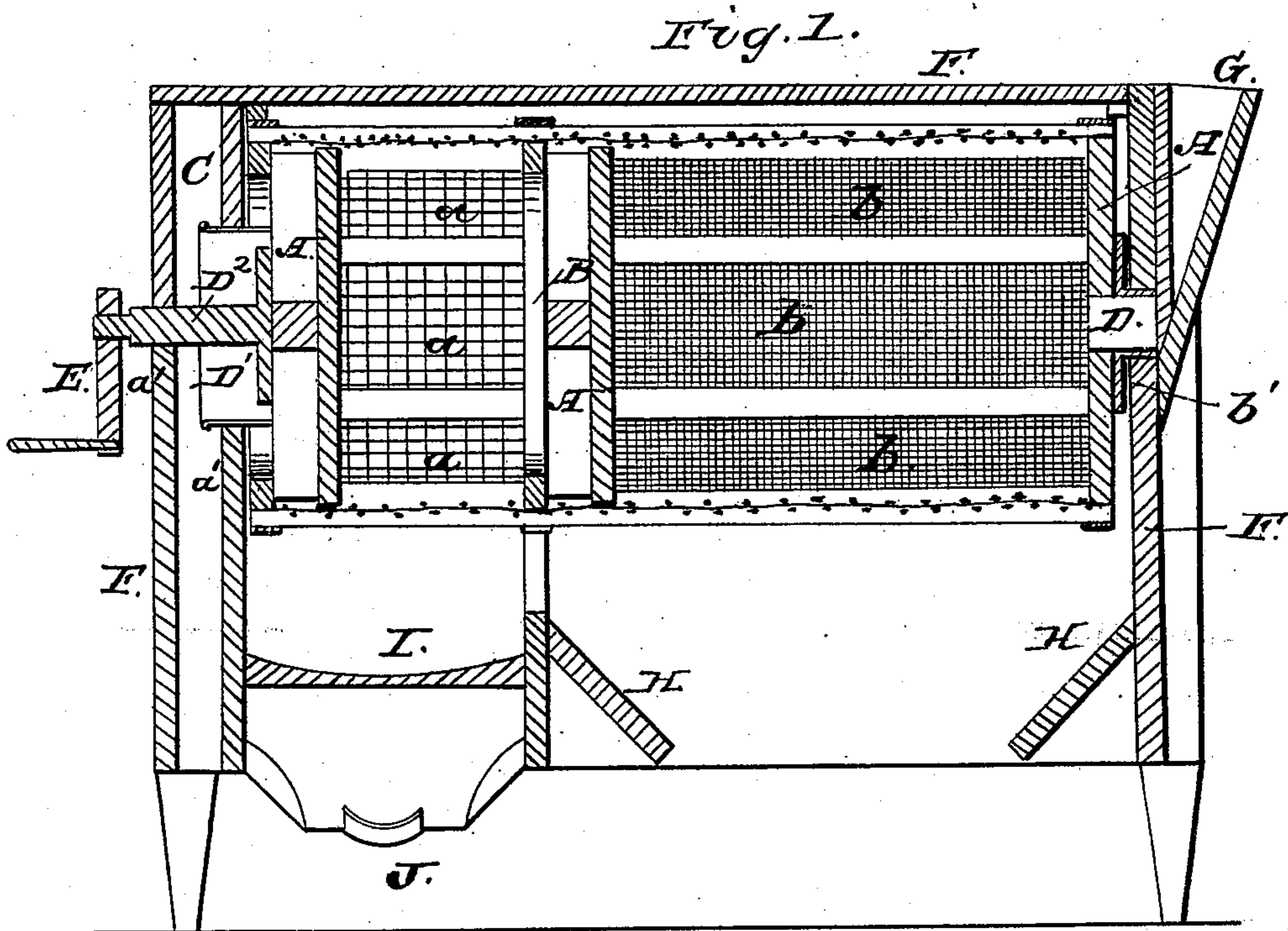


S. BLAIR.  
Grain Winnower

No. 87,239.

Patented Feb. 23, 1869.



Witnesses  
J. A. Allen  
James White

Inventor  
S. Blair  
J. H. Alexander, Atty



SAMUEL BLAIR, OF NEW WILMINGTON, PENNSYLVANIA.

*Letters Patent No. 87,239, dated February 23, 1869.*

**IMPROVEMENT IN GRAIN-SCREENS.**

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern:*

Be it known that I, SAMUEL BLAIR, of New Wilmington, in the county of Lawrence, and State of Pennsylvania, have invented certain new and useful Improvements in Grain-Screens; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification, and in which—

Figure 1 represents a longitudinal section, and

Figure 2, an end view of my grain-separator.

Similar letters indicate like parts in both figures.

My invention relates to certain improvements in grain-separators; and to this end,

It consists in the employment of an octangular cylinder, covered with wire gratings.

It further consists in providing said cylinder with two partitions, in combination with such other devices as will hereinafter be fully described.

To enable others skilled in the art to which my invention appertains, to make and use the same, I will now describe its construction and operation.

In the accompanying drawings—

A represents the frame of an octangular cylinder, which is covered with two sets of wire gratings, coarse and fine, the coarse grating *a* covering one-third of the surface of the cylinder, and the fine grating *b* covering the remainder of the surface of the cylinder.

In this cylinder are two partitions, B and C, constructed as seen in fig. 2, the object of which will be hereinafter more fully described.

D is a cylindrical journal, secured to one end of the cylinder A.

D' is a larger cylindrical journal, secured to the other end of the cylinder.

E is the crank, one end of which is attached to the partition C.

F is an ordinary box, in the ends of which are formed beds, *a' b'*, to receive the journal D and the crank-arm D<sup>2</sup>.

To one end of the box A is attached the V-shaped hopper G, connecting with the journal D, whereby the grain is received in the cylinder A.

H H are boards, secured, in an angular direction, to the bottom of the box.

I is a small box, secured between to the sides of the box, in an inclined position, connecting with the spout J, whereby the grain is removed after being separated from the chaff.

The operation of my machine is as follows:

The grain is placed in the hopper G, and the cylinder A made to revolve by acting upon the crank E, the fine dirt, &c., passing through the fine gratings *b*. The grain then passes through the partition B, where the large dirt, chaff, &c., are separated from the grain, through the large gratings *a*; and the grain then passes, through the partition C, down into the box I, and is discharged through the spout J.

Having thus fully described my invention,

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

1. The partitions B and C, arranged and constructed in the manner and for the purpose set forth.

2. The octangular cylinder A and gratings *a* and *b*, in combination with the partitions B and C, arranged and operated substantially in the manner and for the purpose described.

In testimony that I claim the foregoing as my own, I affix my signature in presence of two witnesses.

SAMUEL BLAIR.

Witnesses:

J. A. McLAUGHY,  
P. M. HATCH.