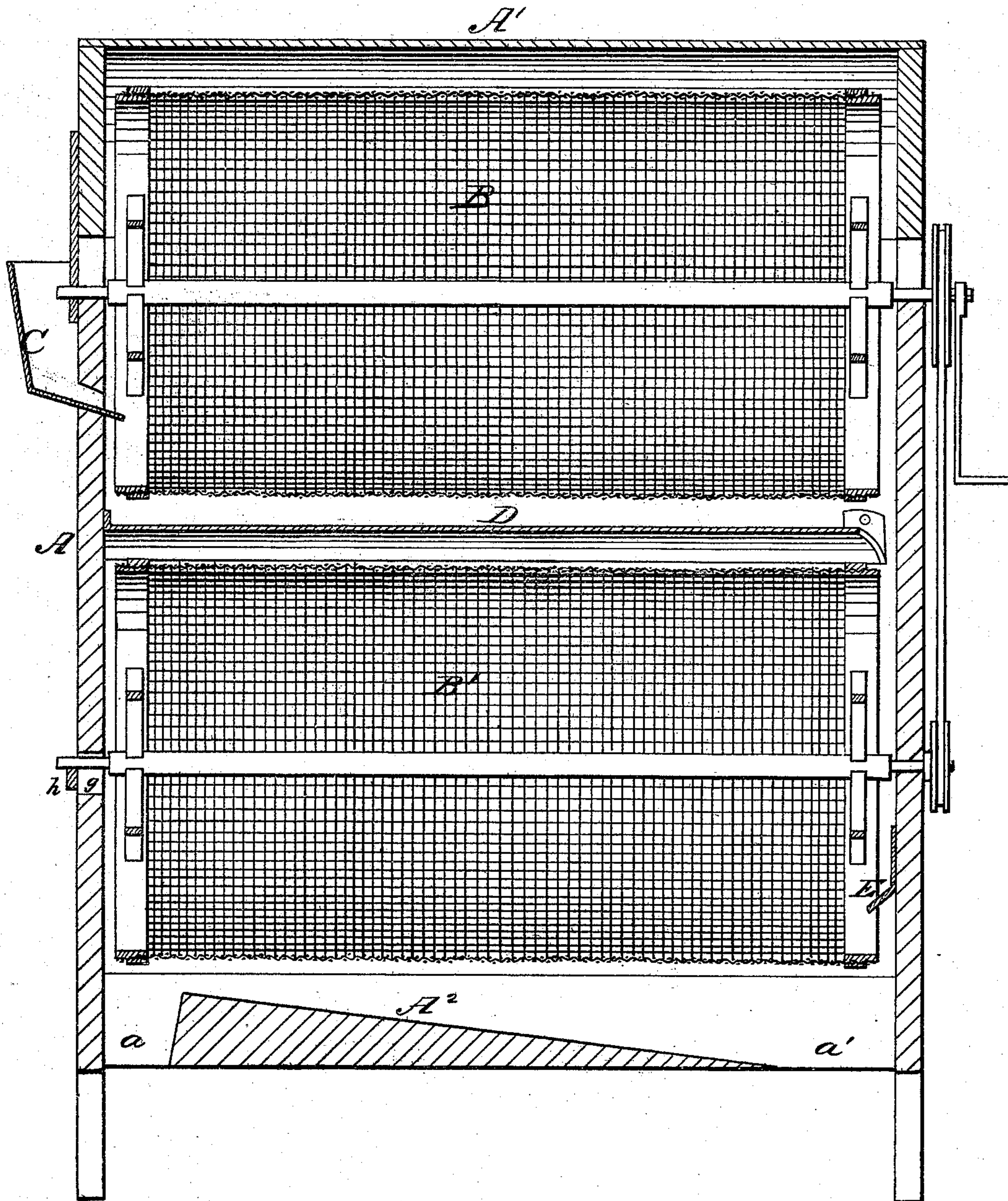


F. M. FISH.
Grain-Separators.

No. 155,017.

Patented Sept. 15, 1874.

Fig. 1



WITNESSES
E. H. Bates.
George C. Upham. BY

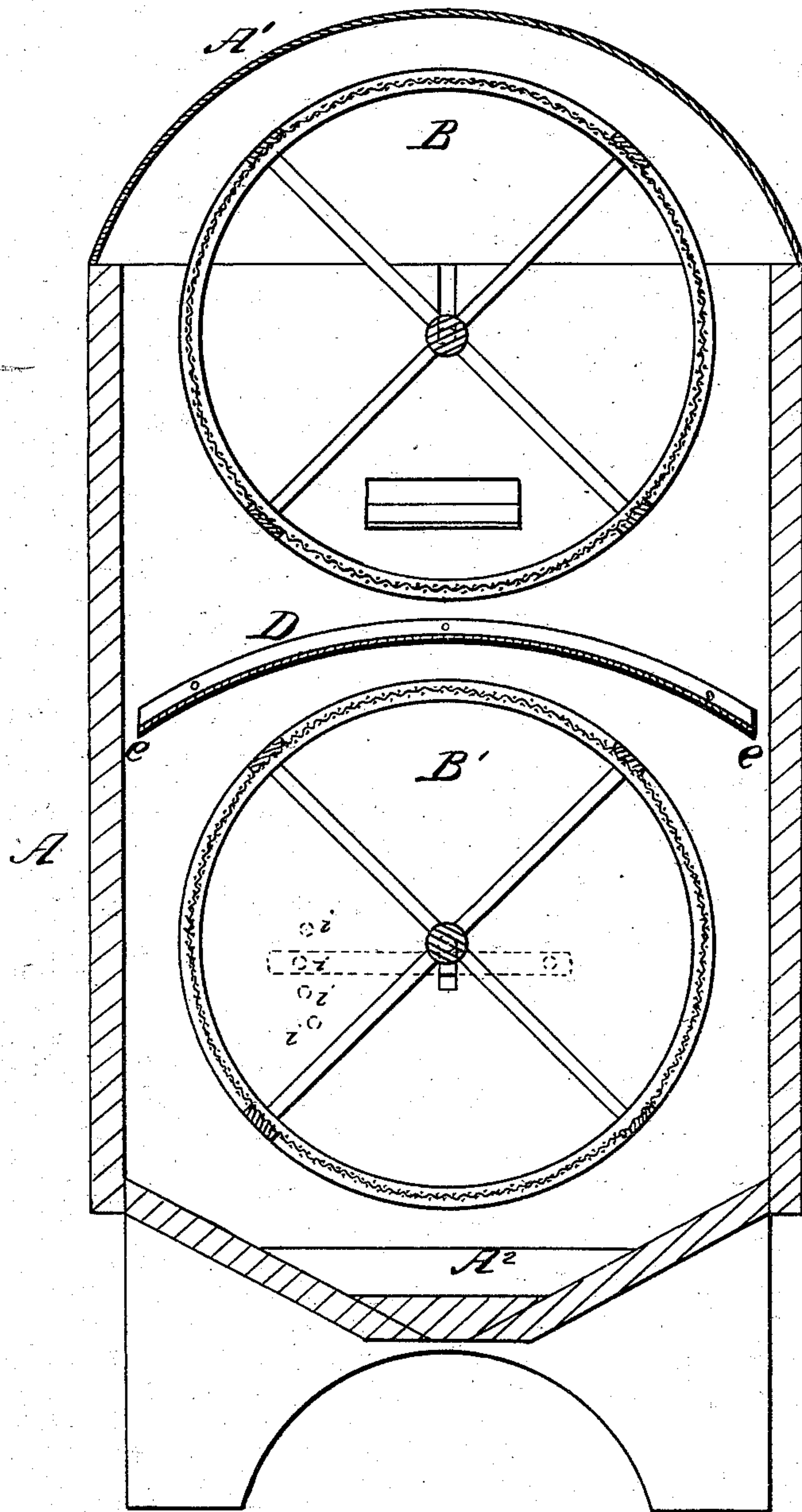
INVENTOR
Francis M. Fish.
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ATTORNEYS.

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Fig. 2



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BY

INVENTOR
Francis M. Fish.
Chipman Hosmer & Co.
ATTORNEYS.

UNITED STATES PATENT OFFICE.

FRANCIS M. FISH, OF PEABODY, KANSAS.

IMPROVEMENT IN GRAIN-SEPARATORS.

Specification forming part of Letters Patent No. **155,017**, dated September 15, 1874; application filed May 23, 1874.

To all whom it may concern:

Be it known that I, FRANCIS M. FISH, of Peabody, in the county of Marion and State of Kansas, have invented a new and valuable Improvement in Wheat-Screens; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a longitudinal section of my wheat-screen, and Fig. 2 is a cross-section.

This invention has relation to machines for cleaning wheat, wherein rotating screens are employed for separating the foreign matters from the good grain.

It consists in the arrangement of two inclined cylindrical screens inside of a box or case in combination with a partition having convex upper surface which is arranged between said cylinders for the purpose of separating the small grains, cockle, &c., from the grain, which it is desired to preserve, as will be hereinafter explained.

In the annexed drawings, A designates the case or housing for containing two revolving cylindrical screens, B B', which case is constructed with a removable arched cover, A¹, also with an inclined bottom, A², terminating at one end in a discharge-opening, *a*, for the good grain, and at the other end in a discharge-opening, *a'*, for the small grain and other substances which fall through the screening-cloths. The two cylinders B B' are open at both ends, and these cylinders are composed chiefly of wire-cloth, the meshes of which are large enough to allow all foreign substances to pass through them, while the good grain for seed will pass from one cylinder into the other and be discharged through the passage *a* into a suitable receptacle.

The grain, &c., is fed into the highest end of the upper cylinder B through a hopper, C,

and as the grain moves toward the lower end of this cylinder it is thoroughly agitated, and most of the small grain and foreign substances will escape through its meshes and fall upon a partition having convex upper surface D, and be discharged from the sides of the same through spaces *e e*, when such substances will fall free of the cylinder B' and be received upon the inclined bottom A². The material which is not discharged through the meshes of the cylinder B will fall upon a chute, E, and be directed into the highest end of the cylinder B', wherein the grain is subjected to a second cleaning operation, and finally discharged through the opening *a*. All of the foreign matters will be discharged from the machine through the opening *a'*, as before stated. One end of the shaft of each screening-cylinder carries a belt-pulley, around which passes a belt, so that rotary motion imparted to the upper cylinder will be communicated to the lower cylinder. One end of the shaft of the lower cylinder B' passes through a vertically-oblong slot, *g*, and has its bearing on a bar, *h*, which is pivoted at one end to the outside of the case A, and attached at the other end by means of a pin applied in one of several holes, *i*, shown in dotted lines, Fig. 2. By removing said pin and raising or lowering the free end of the bar *h*, the cylinder B' can be adjusted to discharge faster or slower, as circumstances require.

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

Two inclined revolving screens, B B', in combination with the side-discharging partition D, having a convex upper surface, substantially as described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

FRANCIS MARION FISH.

Witnesses:

W. C. NYE,
J. D. PERKINS.