W. TODD.

Rotary Winnower.

No. 45,654 Patented Dec. 27, 1864.

Fig. 2.

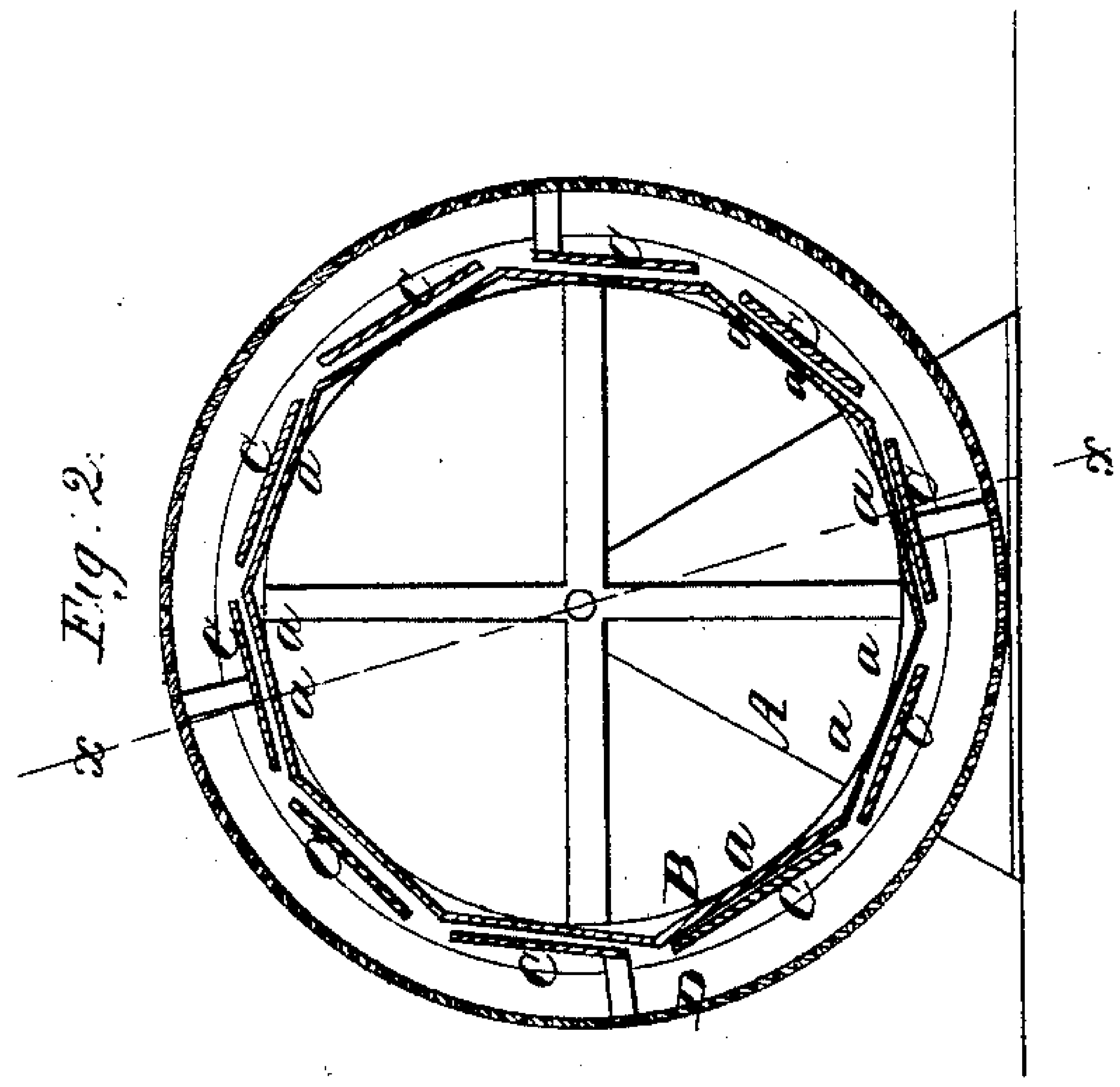
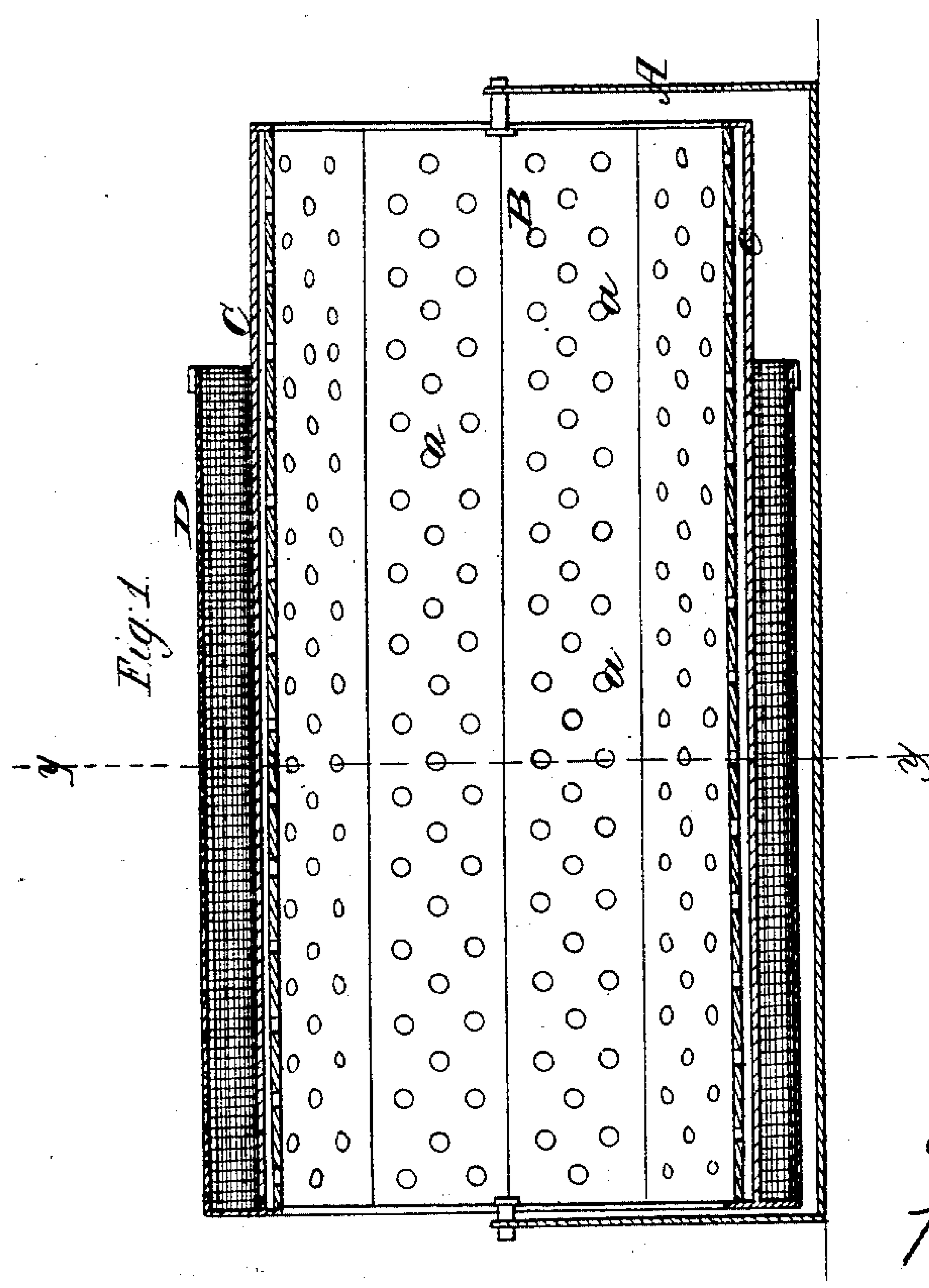


Fig. 1.



Witnesses
Henry Morris
C. L. Topliff

Inventor
Walter Todd
per Munn & Co
attorneys

UNITED STATES PATENT OFFICE.

WALTER TODD, OF OTTAWA, ILLINOIS.

IMPROVED GRAIN-SEPARATOR.

Specification forming part of Letters Patent No. **45,654**, dated December 27, 1864.

To all whom it may concern:

Be it known that I, WALTER TODD, of Ottawa, in the county of La Salle and State of Illinois, have invented a new and Improved Grain-Separator; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a longitudinal central section of my invention, taken in the line *x x*, Fig. 2; Fig. 2, a transverse section of the same, taken in line *y y*, Fig. 1.

Similar letters of reference indicate like parts.

This invention relates to a new and useful improvement on a grain-separator for separating oats and foreign substances or impurities from wheat, for which letters patent were originally granted to Lewis Patrie, dated June 24, 1864.

My invention and improvement consists in having the rotating perforated cylinder encompassed by a wire or other screen, arranged in such a manner that small seeds will be separated from the wheat, as well as oats and impurities and foreign substances.

A represents a framing of any suitable construction, in which a perforated cylinder, B, is suspended and allowed to rotate freely; and C represents a series of longitudinal plates, which are secured to the exterior of the cylinder B, directly over the perforations *a* of the cylinder, the former being made in longitudinal rows and a place being allowed between the cylinder and plates, as well as between the plates themselves, as shown clearly in Fig. 2.

The cylinder B is not strictly a cylinder, although commonly so termed. It is a screen of polygonal form, as shown clearly in Fig. 2.

The wheat passes into the screen through the perforations *a*, but the oats, sticks, and similar long impurities are prevented from doing so. The wheat, being oval, can readily pass under the plates C and through the perforations; but the oats, being long, cannot turn edgewise under the plates and pass through into B.

D is a wire-screen which encompasses the perforated screen B, and is designed to separate small seeds from the wheat. A sufficient space is allowed between D and B to admit of the free passage of the wheat into it. The wire screen performs the work designed for it in an admirable manner, and with the screen B and plates C a perfect grain-separator is obtained.

I do not claim separately any of the parts herein shown and described; but

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

The rotating perforated-screen B, provided with the plates C, in combination with the wire or other screen D, all arranged substantially as and for the purpose herein set forth.

WALTER TODD.

Witnesses:

C. J. KINNER,

JACOB HESS.