

J. C. GREGG.
GRAIN SEPARATOR.

No. 29,161.

Patented July 17, 1860.

Fig. 3

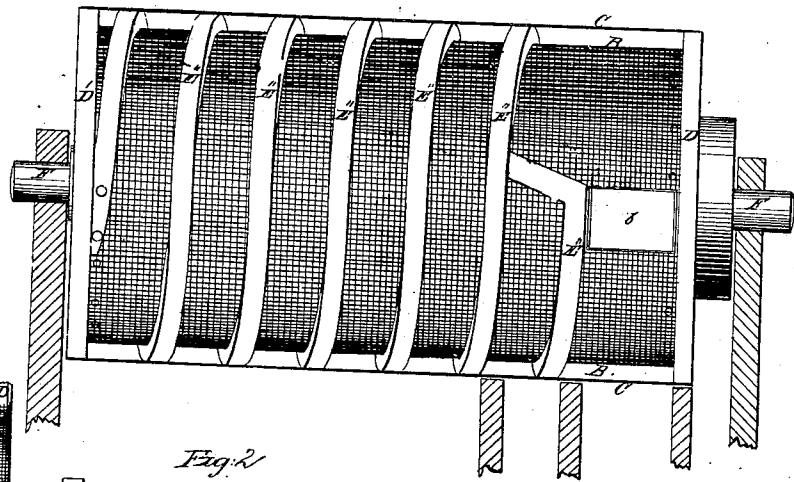


Fig. 4

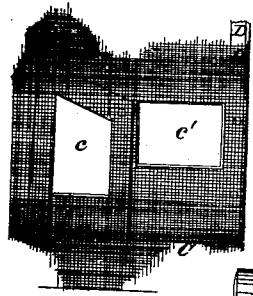


Fig. 2

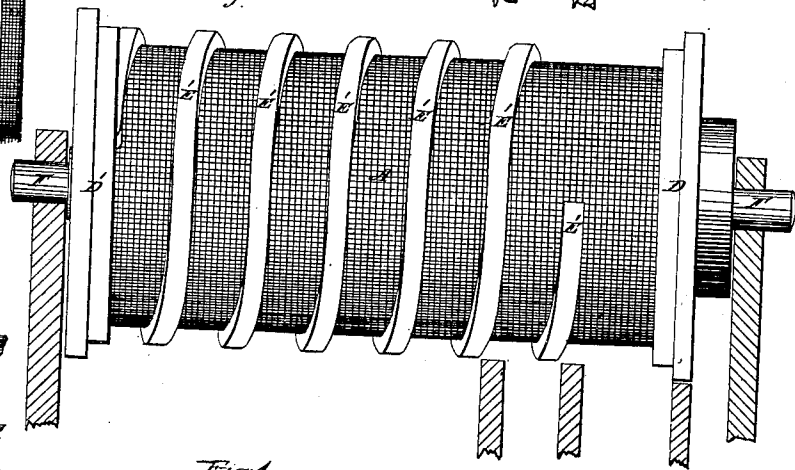


Fig. 5

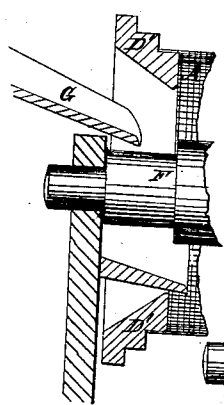
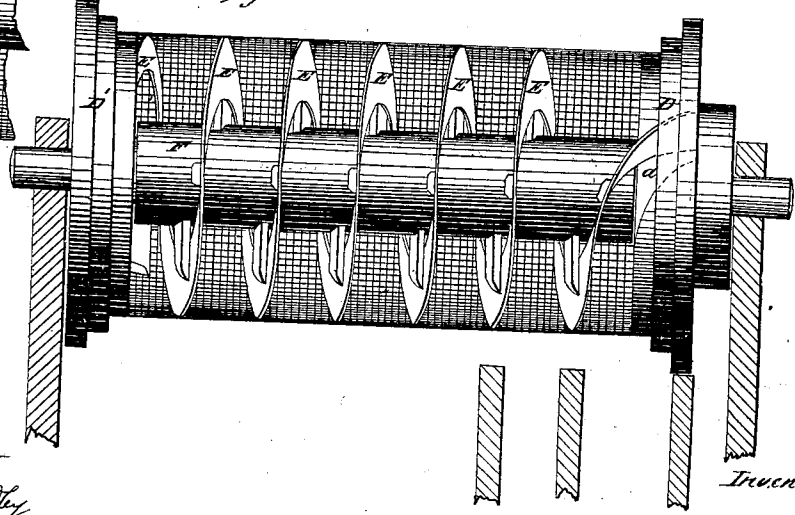


Fig. 1



Mitrosses

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UNITED STATES PATENT OFFICE.

JOHN C. GREGG, OF HILLSBORO, OHIO.

GRAIN-SEPARATOR.

Specification of Letters Patent No. 29,161, dated July 17, 1860.

To all whom it may concern:

Be it known that I, JOHN C. GREGG, of Hillsboro, Highland county, Ohio, have invented a certain new and useful Improvement in Grain Screens or Separators; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making part of this specification.

My invention consists in a peculiar combination of concentric screens and spiral conductors for the separation of different kinds of grain.

In the accompanying drawings, Figure 1, is an axial section of the inner screen. Fig. 2, is an external view of the same. Fig. 3 is an external view of the intermediate screen. Fig. 4 shows part of the outer screen. Fig. 5 is a section representing the feeding mechanism.

A, B, C, are three cylinders of wire gauze of unequal diameter and fineness held concentrically one within the other by heads D, D', the coarsest screen being the innermost or smallest one, and the finest screen being the outermost or largest one.

Around the concavity of each screen is a spiral conveyer E E' E''. An aperture *d* in head D and apertures *b c c'* in the gauze of the second and third screens respectively allow the escape at their appropriate places of the several grades of grain too coarse to escape through the meshes of the gauze.

F is a shaft by which the entire series of

screens receives a simultaneous rotation. G is a feeding spout.

Operation: The screens being rotated and grain being supplied by the spout G—the grass and like small seed and dust pass immediately through the meshes of the two inner screens and escape through those of the outer screen. The dust and other very small particles escaping first and the grass and other small seeds at different distances along the length of the screen according to their relative sizes. The chaff and light wheat escape at aperture *c* in screen C. The No. 2 wheat through aperture *b* in screen B and No. 1 wheat through aperture *d* in head D. The spiral conveyers serve to keep apart the partially cleansed and the uncleansed grain, and forward the matter uniformly and gradually through the screens.

The apparatus may if desired be so arranged as to elevate the grain during the operation of cleaning.

I claim as new and of my invention herein and desire to secure by Letters Patent—

The combination of screens A, B, C, spiral conveyers E E' E'' and apertures *d b c c'* substantially as and for the purposes set forth.

In testimony of which invention, I hereunto set my hand.

JOHN C. GREGG.

Witnesses:

GEO. H. KNIGHT,
C. STEEMER, Jr.