## R. CLARKE. Grain-Separators.

No. 206,929.

Patented Aug. 13, 1878.

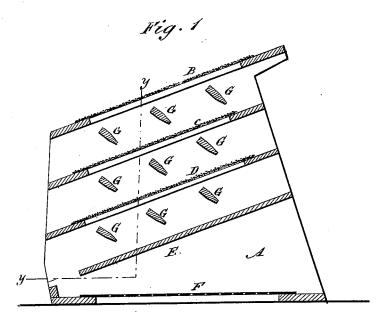
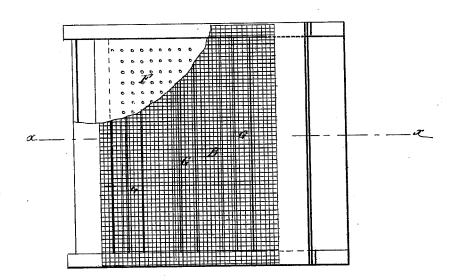


Fig. 2



WITNESSES:

6 Sidgwick

INVENTOR:

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ATTORNEYS.

## JNITED STATES PATENT OFFICE.

ROSELLE CLARKE, OF AUSTIN, MINNESOTA, ASSIGNOR TO HIMSELF AND JOHN C. BARDSLEY, OF SAME PLACE.

## IMPROVEMENT IN GRAIN-SEPARATORS.

Specification forming part of Letters Patent No. 206,929, dated August 13, 1878; application filed February 2, 1878.

To all whom it may concern:

Be it known that I, Roselle Clarke, of Austin, in the county of Mower and State of Minnesota, have invented a new and useful Improvement in Fanning-Mills, of which the following is a specification:

Figure 1 is a longitudinal section of my improved grain-sieves, taken on line x x in Fig. 2. Fig. 2 is a plan view, having a portion

broken away on line y y in Fig. 1. Similar letters of reference indicate corre-

sponding parts.

The object of my invention is to provide an arrangement of grain-sieves and wind-vanes by means of which a rapid and thorough separation of the grain and foreign substances will be effected.

Referring to the drawing, A is the shoe, which is suspended in the mill-frame, and receives a reciprocating end motion in the usual way. The shoe contains three wire-cloth sieves, BCD, which are inclined from the front downward toward the rear, and are arranged parallel to each other. Below the lower sieve there is a board, E, which is parallel with the sieves, and extends nearly to the rear end of the shoe. Below the board a zinc screen, F, is placed, which is inclined downward toward the front of the mill. In the spaces between the sieves and between the lower sieve and the board E vanes G are placed about mid-

way between the sieves and between the lower sieve and the board E. These vanes are arranged at equal distances apart, and are inclined from a horizontal plane at an angle of

about fifty degrees.

A direct head-blast is used with this device. The wind strikes the vanes, and is deflected so that it passes upward through the sieves, and is effective in cleaning the grain passing over the sieves. The grain that drops through the sieves is carried forward by the vanes, so that it passes over a greater sieve-surface than it would if it dropped directly from one sieve to another, and it is more thoroughly exposed to the action of the wind. The grain from the last sieve passes over the zinc screen F, in which there are round holes, which allow the small seeds and other impurities to escape through them, while the screen conveys the grain forward.

Having thus described my invention, I claim as new and desire to secure by Letters Pat-

ent-

The shoe A, containing three parallel inclined sieves and board, B C D E, and the intermediate inclined vanes, G, arranged as shown and described.

ROSELLE CLARKE.

Witnesses:

JOHN C. BARDSLEY, JOHN E. CORBITT.