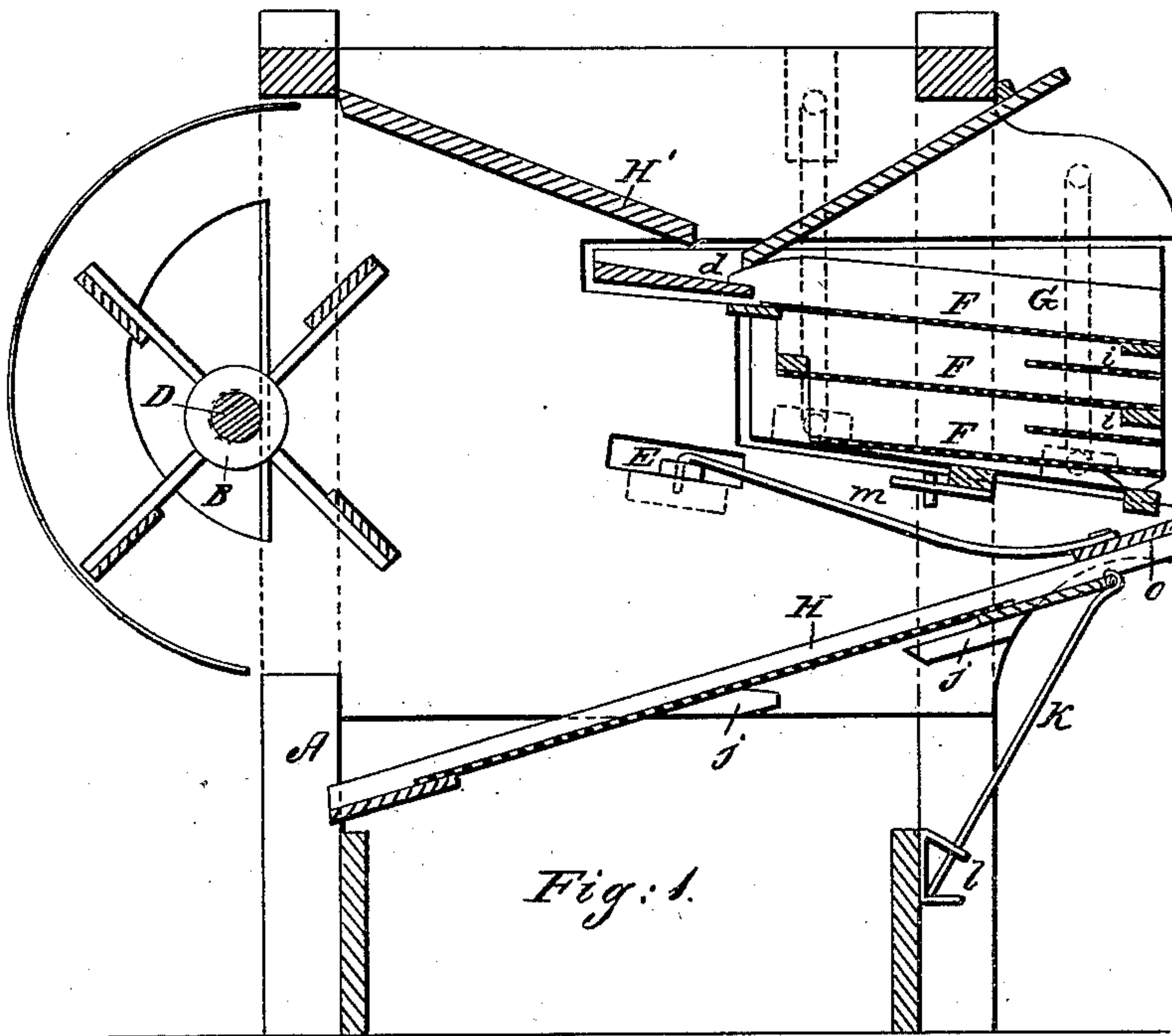


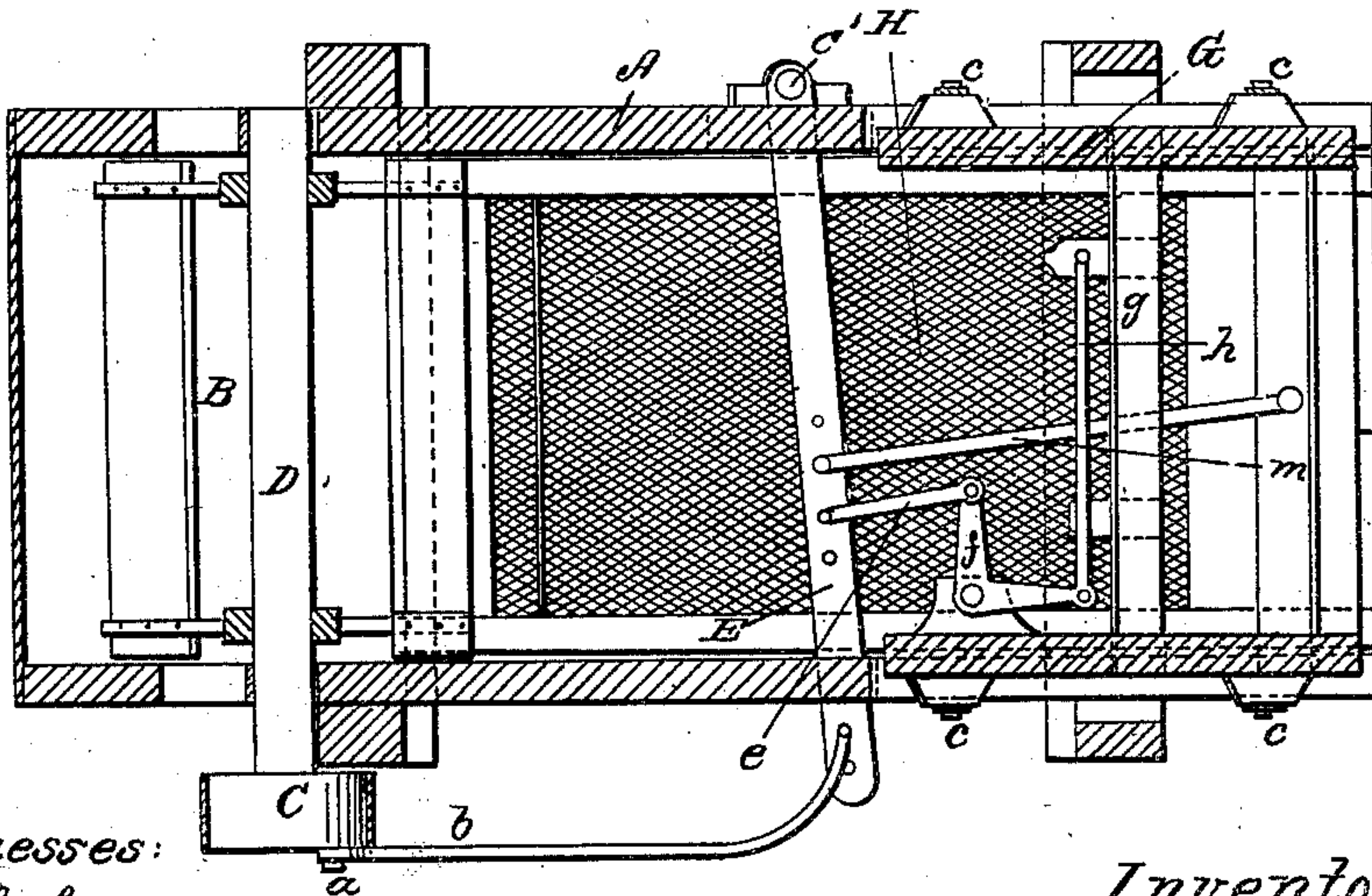
**J. NASH.**  
**Grain Separator.**

**No. 25,608.**

Patented Sept. 27, 1859.



*Fig: 2.*



Witnesses:  
L. S. Fellow  
W. V. Fox.

Inventor:  
Jefferson Rahl



# UNITED STATES PATENT OFFICE.

JEFFERSON NASH, OF JANESVILLE, WISCONSIN, ASSIGNOR TO HIMSELF, AND ALONZO K. CUTTS, OF FULTON, WISCONSIN.

## GRAIN-SEPARATOR.

Specification forming part of Letters Patent No. 25,608, dated September 27, 1859; Reissued July 23, 1861, No. 1,215.

*To all whom it may concern:*

Be it known that I, JEFFERSON NASH, of Janesville, in the county of Rock and State of Wisconsin, have invented a new and Improved Grain-Separator; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a longitudinal vertical section of a grain separator constructed according to my invention. Fig. 2 is a horizontal section of ditto.

Similar letters of reference in both views refer to corresponding parts.

To enable those skilled in the art to fully understand, make and use my improved grain separator I will proceed to describe its construction and operation.

A represents a frame, which serves to support a fan blower, B, and the several sieves which will be hereinafter more fully explained. The fan blower receives its motion from some source of power from which motion is conveyed to a pulley, C, on the axle, D, of the fan blower, and secured to the side of this pulley is an eccentric wrist pin, *a*, which connects, by means of a rod, *b*, with a vibrating lever, E, which extends through the whole width of the machine and the fulcrum of which is on a pivot, *c*'.

The sieves, F, are arranged in a shoe, G, which is supported from hinged rods, *e*, and which is provided with an apron, *d*, close under the opening in the hopper, H', so that the grain as it drops from the hopper is worked down to the sieves by the apron *d*. The shoe connects with the lever, E, by means of a rod, *c*, which extends from the lever to one arm of an elbow crank, *f*, and the other arm of this crank connects with a cross brace, *g*, of the shoe by means of a rod, *h*, and if thus connected the motion of the shoe is in a transverse direction. The rod, *h*, however, may be disconnected from the elbow crank, and it can be connected directly with the lever, E, and in this case the motion of the shoe is in a longitudinal direction. The lever, E, as well as the elbow crank, *f*, is provided with a series of holes

whereby the quantity of motion given to the shoe can be regulated for different kinds of grain. The sieves, F, are arranged in a common frame, one above the other, and they are of uniform texture, and placed between each pair of full sized sieves are the sectional sieves, *i*, which materially assist in cleaning and separating the grain, and they are secured to the shoe by means of buttons, or any other convenient manner.

Arranged under the shoe G, and supported by projections, and by a rod, K, is an additional sieve, H, in an inclined position, which connects with the lever, E, by means of a rod, *m*, so that when the lever is agitated a reciprocating motion is communicated to the sieve, H, in a longitudinal direction, and the rod, K, is stepped on a lug, L, which is secured to one of the cross-bars of the frame, A, in such a position that the rod, K, is in an inclined position, and that by the action of this rod the sieve, as it is moved in a longitudinal direction, receives, at the same time, a slight up and down motion, which materially facilitates the operation of cleaning. This sieve is provided with a throat, *o*, through which the lighter parts of the chaff are driven out by the action of the blast from the fan-blower.

This invention is of particular advantage for cleaning spring wheat, which is very difficult to clean with any other grain separator as now constructed, and it can be used equally well for all sorts of grain, and it is only necessary to regulate the throw of the shoe, G, and the motion of the sieve, H, by shifting the rods, *e* and *m*, to different holes in the lever, E.

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

The arrangement and combination of the vibrating lever, E, the elbow crank, *f*, and the rods, *e* and *h*, whereby the motion of the shoe can be changed from a longitudinal to a transverse direction, and vice versa, substantially as herein described.

JEFFERSON NASH.

Witnesses:

L. S. FELLOWS,  
W. V. FOX.