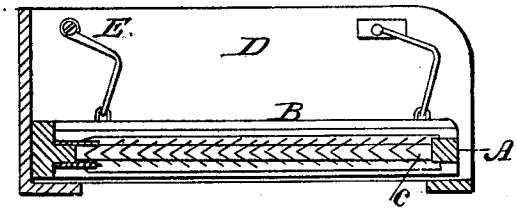
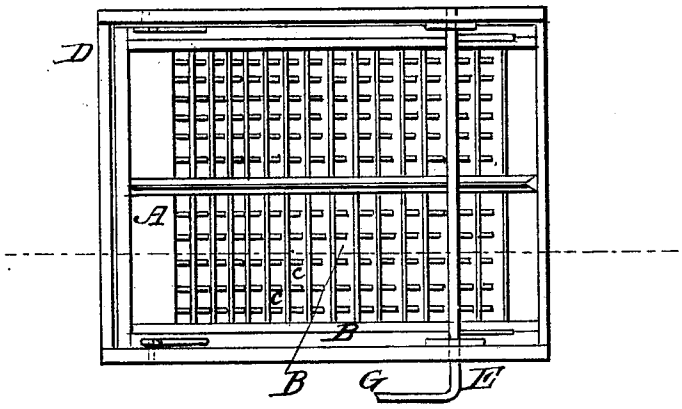
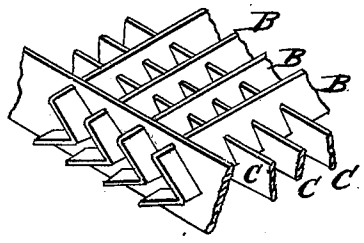
L. D. CARPENTER.

Grain Sieve.

No. 91,307. Patented June 15, 1869.







Witnesses
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LORIN D. CARPENTER, OF BUFFALO GROVE, IOWA.

Letters Patent No. 91,307, *dated June* 15, 1869.

IMPROVEMENT IN GRAIN-SIEVE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, LORIN D. CARPENTER, of Buffalo Grove, in the county of Buchanan, and State of Iowa, have invented a new and improved Grain-Sieve; 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 drawing, forming part of this specification.

This invention relates to new and useful improvements in the construction of grain-sieves, designed to facilitate the operation, and calculated for application to all kinds of grain-separating machines.

The invention consists in an arrangement of perforated angle-plates of thin sheet-metal, and plain strips traversing the said plates; also in an improved arrangement for operating the sieves, as hereinafter more fully specified.

Figure 1 represents a longitudinal sectional elevation of a sieve, constructed according to my improvement.

Figure 2 represents a plan view.

Figure 3 represents a section of the sieve in detail.

Similar letters of reference indicate corresponding parts.

I arrange, within a rectangular frame, A, similar to the frames on which the common reticulated sieves are fixed, a series of angle-plates, B, representing, in cross-section, two sides of an equilateral triangle, the distance of the said plates from one another being governed by the size of the grains the sieve is intended for, and the vertexes of the said angle-plates are arranged in the same direction, and in the same horizontal plane.

These plates have a series of vertical slots, also arranged at suitable distances apart, according to the grain to be sifted, and in such order that, when the angle-plates are in position, the slots of all the plates will coincide in lines at right angles to the said plates.

In these slots, I place the transverse strips C, as already shown in the drawing, forming reticulations, or passages between the plates for the grain, of rectangular form in cross-section, with two vertical walls, and two angular walls.

I arrange the vertexes of the angles of the plates B toward the end where the grain is received, and from which the blast comes.

In sieves designed for separating oats, chess, or other long grains from wheat, the reticulations are made slightly less in distance across than the length of the said grains, whereby they are readily caused to pass over the sieves, while the grain passes through, as will be well understood.

For adapting my improved sieves for application to any grain-cleaning mill, and for operation, I arrange them in a rectangular case, D, open at one end, and adapted for application to the shaking shoes of fanning-mills, and I suspend one end of the sieves, by the bent links E, from studs in the sides of the cases D, and the other end, by similar links, from a shaft, F, having a bent arm, G, for connection of the connecting-rod, which, when my sieves are used, may be disconnected from the devices for shaking the shoe, and the motion imparted in this manner to the sieves, whereby a forward and backward and rising and falling movement of the sieves is effected, calculated to facilitate both the passage of the grain through the sieves, and the refuse-matter from over the top thereof.

Having thus described my invention,

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

1. Grain-sieves, composed of the angle-plates B, plain plates C, and frames A, arranged substantially as specified.

2. Suspending the said sieves, by links E, from the case D and shafts F, for operation substantially as specified.

3. The combination, with cases D, adapted for application to the shaking shoes of fanning-mills, of sieves, constructed substantially as specified.

LORIN D. CARPENTER.

Witnesses:

JOHN M. PRICE,

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