JOHN L. CUSTER.

Improvement in Grain-Separators.

No. 126,683. Patented May 14, 1872.

Fig. 1.

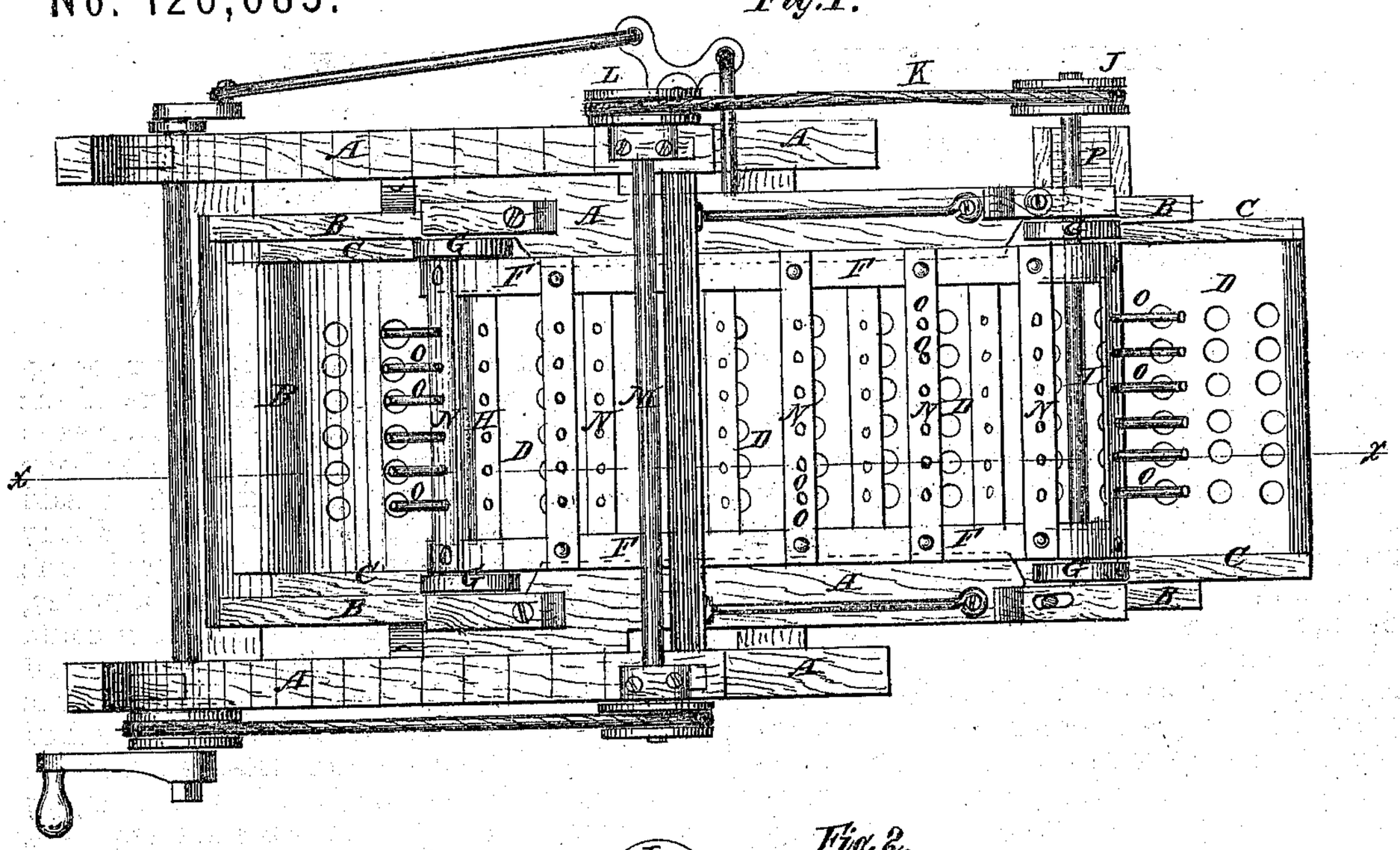
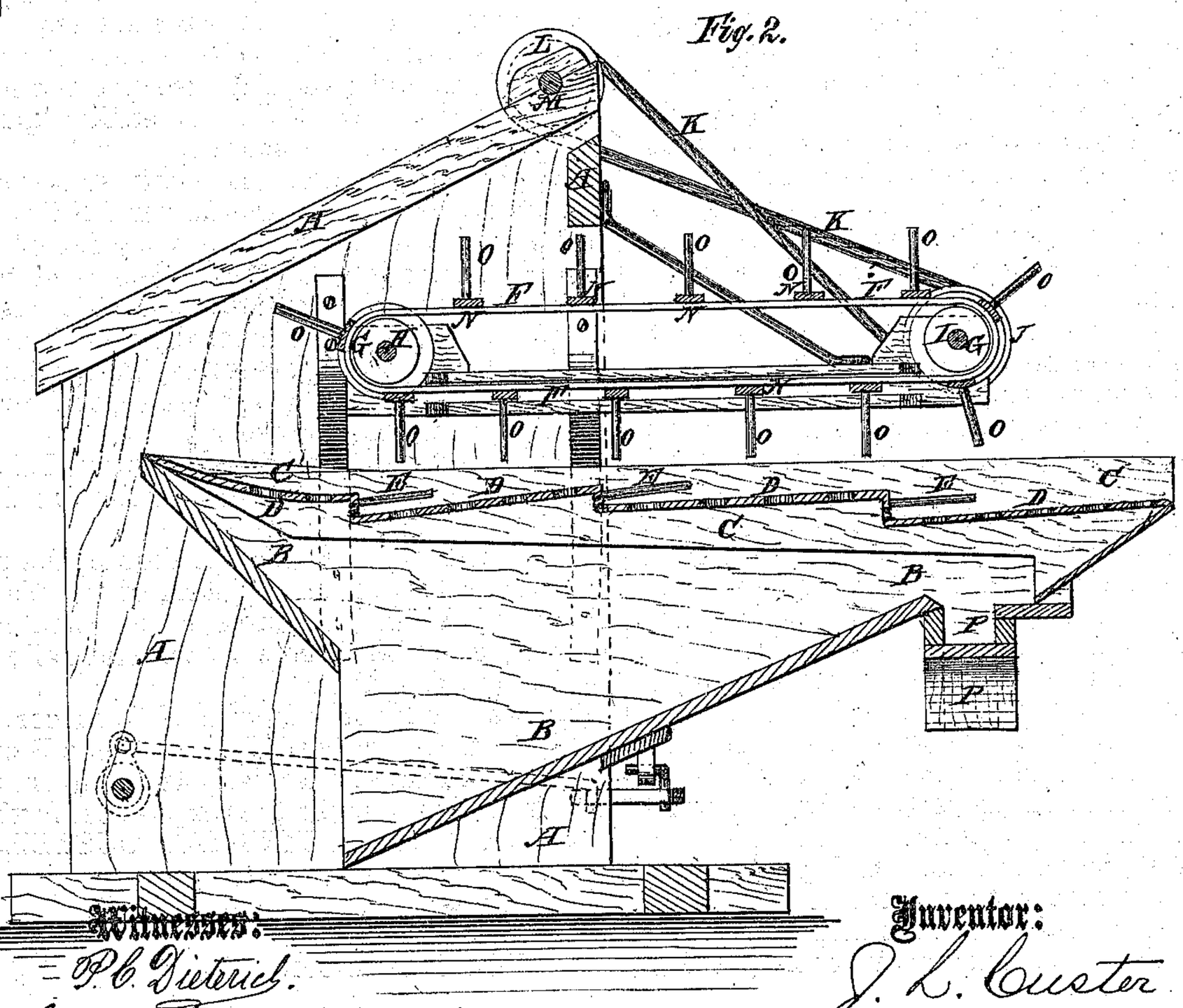


Fig. 2.



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126,683

UNITED STATES PATENT OFFICE.

JOHN L. CUSTER, OF BONAPARTE, IOWA.

IMPROVEMENT IN GRAIN-SEPARATORS.

Specification forming part of Letters Patent No. 126,683, dated May 14, 1872.

Specification describing a new and useful Improvement in Grass-Seed Cleaner, invented by JOHN L. CUSTER, of Bonaparte, in the county of Van Buren and State of Iowa.

Figure 1 is a top view of my improved grass-seed cleaner. Fig. 2 is a detail vertical longitudinal section of the same taken through the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved timothy and other grass seed cleaner, for attachment to thrashers and separators, which shall be simple in construction, convenient in application and use, and effective in operation; and it consists in the construction and combination of the various parts of the machine, as hereinafter more fully described.

A is the frame-work and casing, in which the shoe B is placed and agitated in the ordinary manner. C are the side boards of the riddle, the ends of which are inclined to fit into the end parts of the shoe B, and are notched to fit upon the cleats attached to said shoe, and which are not shown in the drawing. The side boards C are secured to the shoe B by screws or bolts. D are the screen-plates, which are perforated to allow the air or blast to pass up and the seeds to pass down through them. The plates D are made with shoulders or steps between them, as shown in Fig. 2, and may be made in one piece or as four separate plates, as may be desired. In either case the shoulders or vertical parts should have numerous holes formed through them, and should have teeth or fingers E attached to them above the said holes to carry the stalks, chaff, &c., forward upon the next plate, and at the same time allow the blast to operate upon them properly as they are passing from one of said plates to the other. F are endless chains or belts, which pass around pulleys G attached to the shafts H I. The shaft H revolves in bearings attached to the frame-work of the machine, in such position that the rear end of the carrier, stirrer, or agitator may be over the forward edge of the first or rear plate D. The shaft I revolves in bearings adjustably secured in place by bolts or screws, which pass through slots in said bearings, so that the belts or chains F may be conveniently tightened when required. One end of the shaft I projects, and has a pulley, J, attached to it to receive the belt or chain K, which passes around a pulley, L, attached to the shaft M, by which the straw-stacker is operated. To the belts or chains F are attached cross-bars N, to which are attached teeth or fingers O, which should be of such a length as to reach nearly to the screen-plates D, as shown in Fig. 2. The belts or chains F and fingers O should be so arranged that the sides of the riddle C D E will not strike against them as the shoe B is shaken.

By this construction the chaff, stalks, &c., will be carried back by the carrier F N O while being moved laterally by the vibration of the shoe B and riddle C D E. The seed that passes through the first three plates D passes down through the machine to the floor or grain-box. The seed that passes through the fourth plate D passes out through the spout P to be carried back to the thrasher.

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

1. In combination with the shoe B, the riddle herein described, consisting of the plates D, provided with apertures in the shoulders thereof, and the fingers E, substantially as shown and described.

2. The carrier or stirrer F N O, in combination with the riddle C D E and shoe B of a grain-separator, substantially as herein shown and described, and for the purpose set forth.

JOHN LEATHERMAN CUSTER.

Witnesses:
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