F. LEADBETER.

Improvement in Grain-Thrashers.

No. 132,969. Patented Nov. 12, 1872.

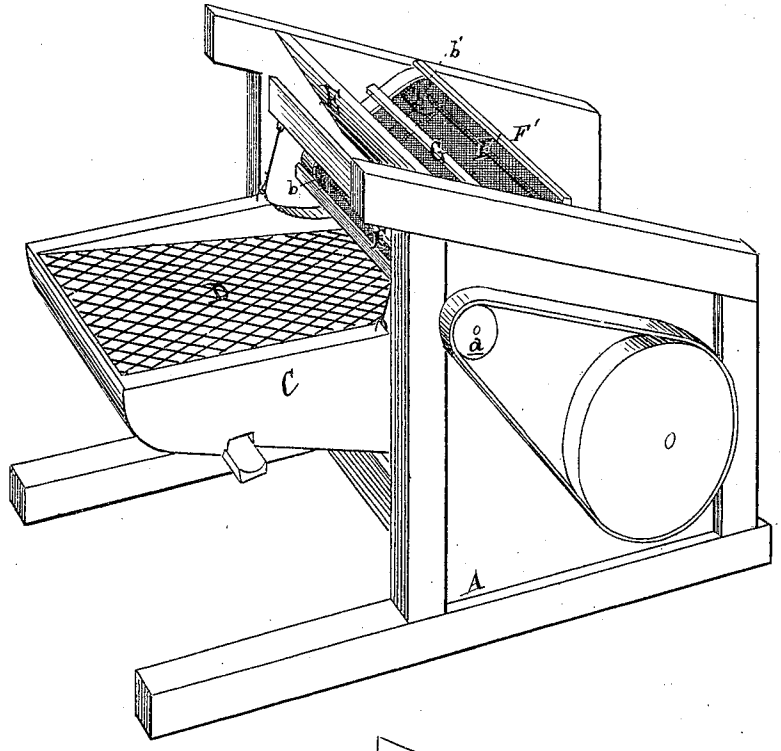


Fig. 1

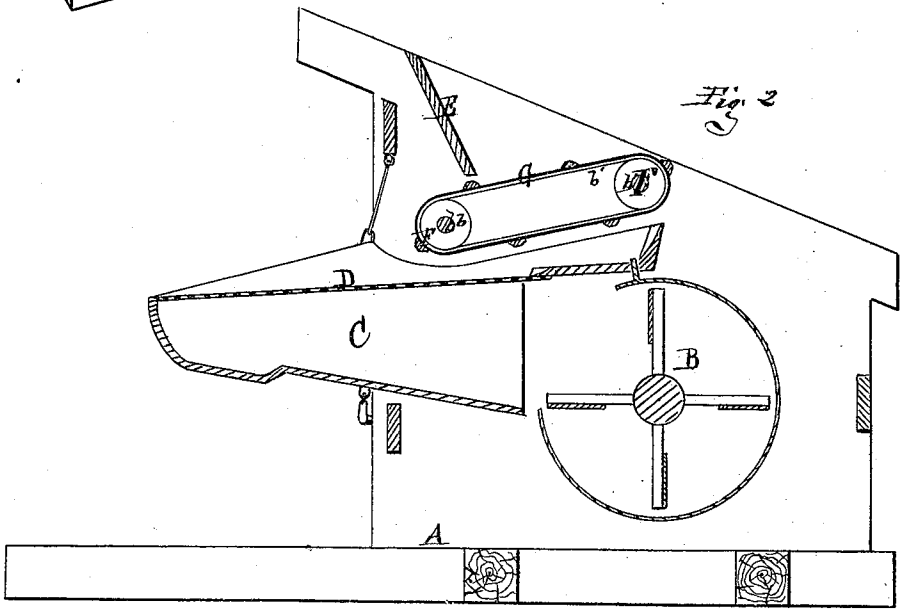


Fig. 2

ATTEST:

H. F. Eberts.

T. S. Sprague

INVENTOR

Frederick Leadbeter

per attorney

Thos S. Sprague

# UNITED STATES PATENT OFFICE.

FREDERICK LEADBETER, OF YPSILANTI, MICHIGAN.

## IMPROVEMENT IN GRAIN-THRASHERS.

Specification forming part of Letters Patent No. **132,969**, dated November 12, 1872.

*To all whom it may concern:*

Be it known that I, FREDERICK LEADBETER, of Ypsilanti, in the county of Washtenaw and State of Michigan, have invented a new and useful Improvement in Grain-Separators; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon and being a part of this specification, in which—

Figure 1 is a perspective view of that part of a thrashing-machine in which the fanning-mill is located and operates, showing my improvement in position; and Fig. 2 is a vertical longitudinal section of the same taken on the line *x x* in Fig, 1.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to an improvement in the method of delivering the thrashed grain to the separating-screens of thrashing-machines, whereby all choking of the screens is obviated and the full force of the blast is expended upon a uniform stream of thrashed grain falling across it, thereby rendering the separation of impurities more perfect and preventing the waste of grain. The invention consists in the interposing and employment of a short raddle between the grain-belt and screen, which raddle receives the grain from the grain-belt and distributes it upon the screen in the manner more fully hereinafter set forth.

In the drawing, A represents a portion of the frame-work of a grain-thrashing machine, in which are placed the blast-fan B and vibrating-separator C with one or more screens, one of which is seen at D; and E is the grain-board, which heretofore has been employed for directing the thrashed grain falling from the end of the grain-belt to the screen below. From irregular feeding at the thrashing-cylinder the thrashed grain would frequently fall in masses thereon and choke the said screen; with my improvement it may be retained or removed, as it is not essential to its operation. Transversely in the frame of the machine I journal the shafts F F′, the former having one end projecting out of the frame to receive a pulley, *a*, from which it receives motion from one of the slow-moving pulleys of the machine, but in the drawing is shown as being moved from the pulley of the fan-shaft, which, of course, would give it too high a speed. On the shafts, within the casing of the machine, are placed the drums or pulleys *b b′*, near to said casing; and over these pulleys runs a raddle, G, composed of a pair of belts, to which are secured, at intervals, transverse wooden slats, with an apron secured between the slats and belt.

As the thrashed grain with its impurities fall from the end of the grain-belt they are received on the central part of the upper limb of the inclined raddle, which delivers them to the screen below its lower end. In the full-sized thrasher there is a space about one foot in height between the end of the raddle and the screen, across which the grain falls, which gives the blast a chance to drive off the lighter impurities from the grain, so that such impurities cannot fall thereon to choke it.

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

The combination of the grain-board E, endless carrier G, and screen D, the several parts being arranged to operate substantially as and for the purpose set forth.

FREDERICK LEADBETER.

Witnesses:

FREDERICK EBERTS,

H. S. SPRAGUE.