

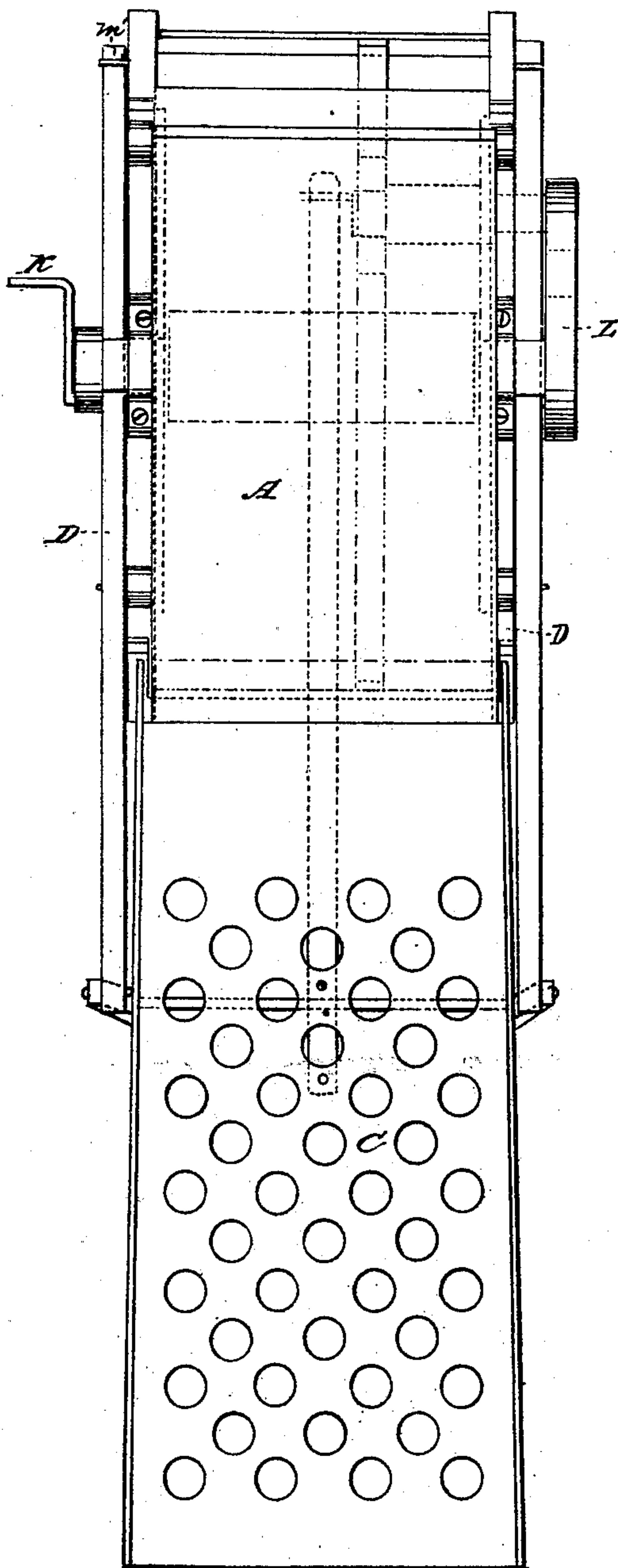
H. A. HUMMER.

Straw Carrier.

No. 99,903.

Patented Feb. 15, 1870.

Fig. 1



Witnesses:

E. W. Anderson
L. L. Kane

Inventor:

H. A. Hummer
Chipman & Hummer & Co
Attorneys

H. A. HUMMER.

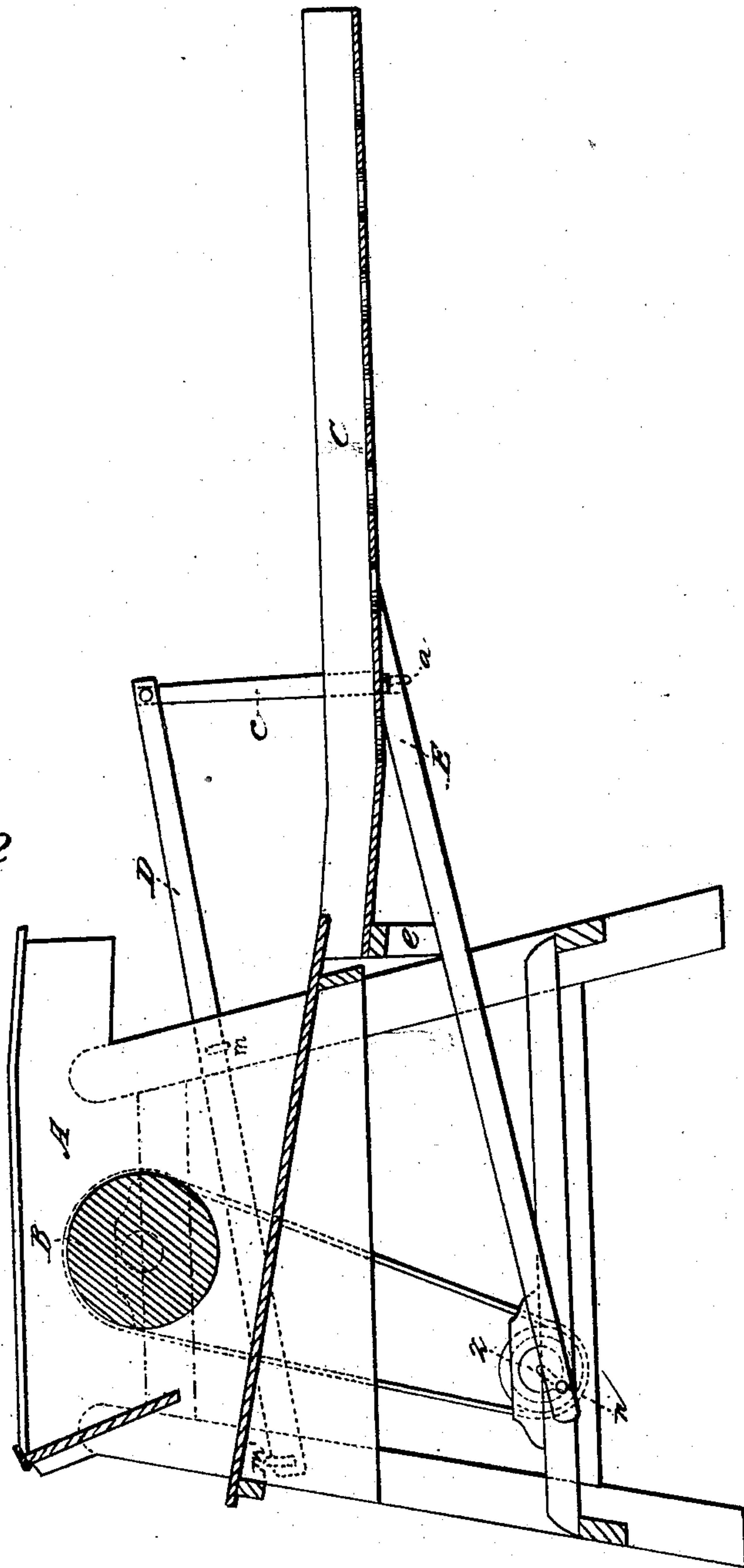
Straw Carrier.

2 Sheets—Sheet 2.

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Fig. 2



Witnesses:

E. W. Anderson

D. D. Kane,

Inventor:

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Chipman & Hummer & Co.
Attorneys.

United States Patent Office.

HERBERT A. HUMMER, OF FRENCHTOWN, NEW JERSEY.

Letters Patent No. 99,903, dated February 15, 1870.

IMPROVEMENT IN GRAIN-SEPARATORS.

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, HERBERT A. HUMMER, of Frenchtown, in the county of Hunterdon, and State of New Jersey, have invented a new and valuable Improvement in Grain-Separators; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a top view of my invention.

Figure 2 is a central vertical longitudinal section of same.

My invention relates to threshing-machines, and consists mainly in the construction and novel arrangement of devices whereby a balanced shaker is employed in such a manner as to serve an efficient purpose in the separation of the grain from the straw.

The letter A of the drawings designates the body or frame of an ordinary threshing-machine; and B, the threshing-cylinder thereof.

C represents the tray of the separator perforated and hung to the ends of the supporting-bars D D by the swinging bars c c pivoted at their lower ends to the ends of the metal bar a, secured to the bottom of the tray C.

Secured to the bottom of the tray in such a manner that its end supports the center of the metal bar a, is the connecting-rod or pitman E, formed of such length and weight that it will balance the separator between the pivot ends of the swinging bars c c.

The pitman E is secured in its angular position with regard to the bottom of the tray by the brace e, and is pivoted to the crank n formed by driving the pin eccentrically into the wooden roller or shaft z.

Over a small drum, on the end of this shaft, a band is passed, and motion thereby communicated from the drum L on the end of the axis or shaft of the threshing-cylinder.

K is the hand-crank by which the threshing-cylinder and separating tray are set in motion.

The supporting bars D D are secured to the frame of the threshing-machine, by being passed under and over the half staples m and m', attached respectively to the front and rear standards.

By the revolution of the crank-pin n, a double motion is communicated to the separating tray. Not only is it shaken backward and forward, but also it receives an up-and-down movement of great advantage, in preventing the straw from becoming packed, and thereby promoting the sifting operation.

In consequence of the manner of balancing and swinging the tray, there is little or no friction in its operation. It can be worked by a child, and with the greatest efficiency, as the grain seldom passes the middle point of the tray before being shaken out.

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

In combination with the grain-separator of a threshing-machine, the removable supports D D, provided with half staples m m', and the rigid connecting-rod E, constructed and arranged as herein shown, to balance the separator C, and to give it a vertical as well as horizontal motion, substantially as specified.

In testimony that I claim the above, I have hereunto subscribed my name in the presence of two witnesses.

HERBERT A. HUMMER.

Witnesses:

JOHN SLATER,
ALFRED BRINK.