

(No Model.)

R. T. WORTHINGTON.
and Cutting Feeder for Thrashers.

No. 233,959.

Patented Nov. 2, 1880.

Fig 1.

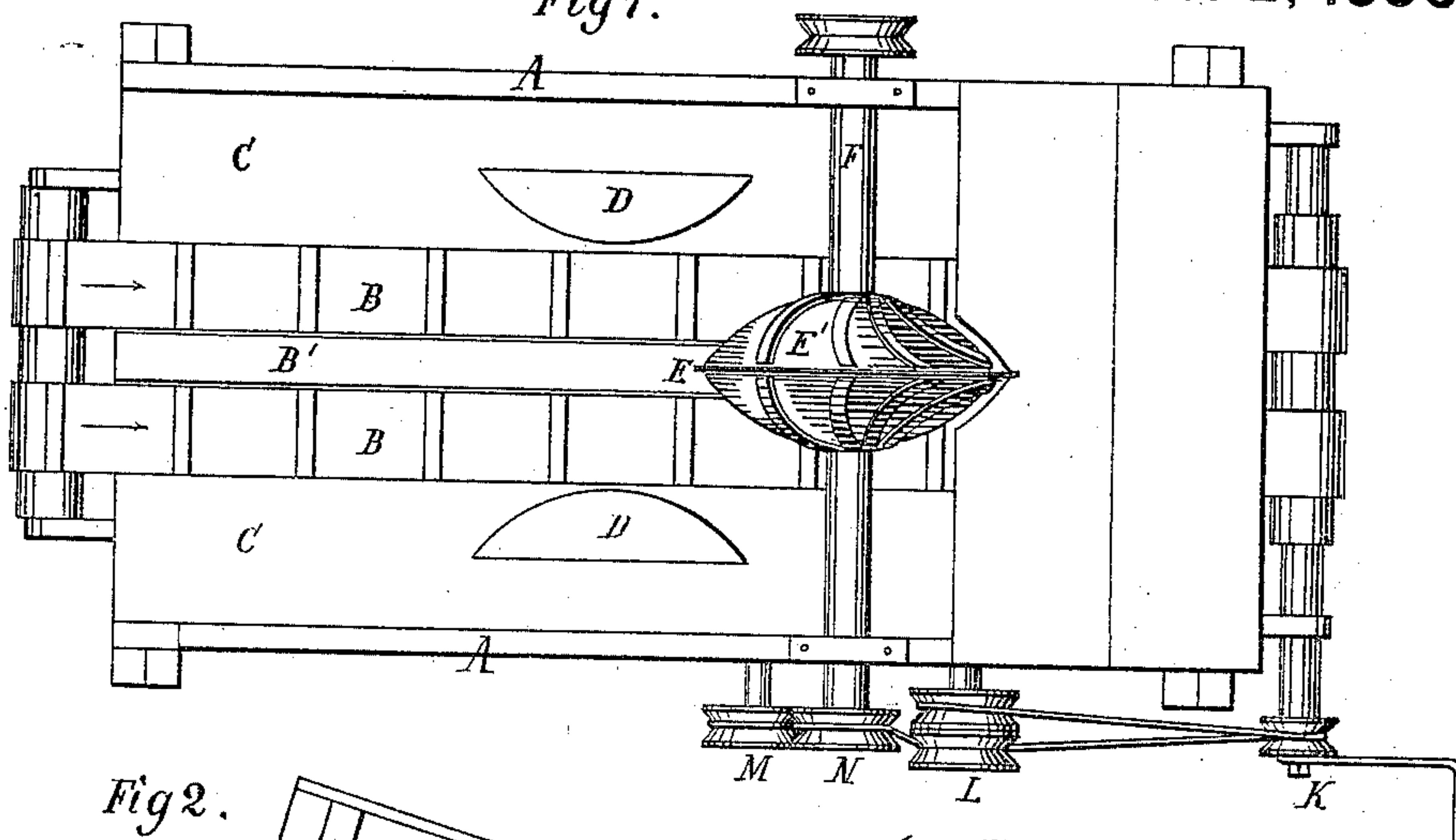
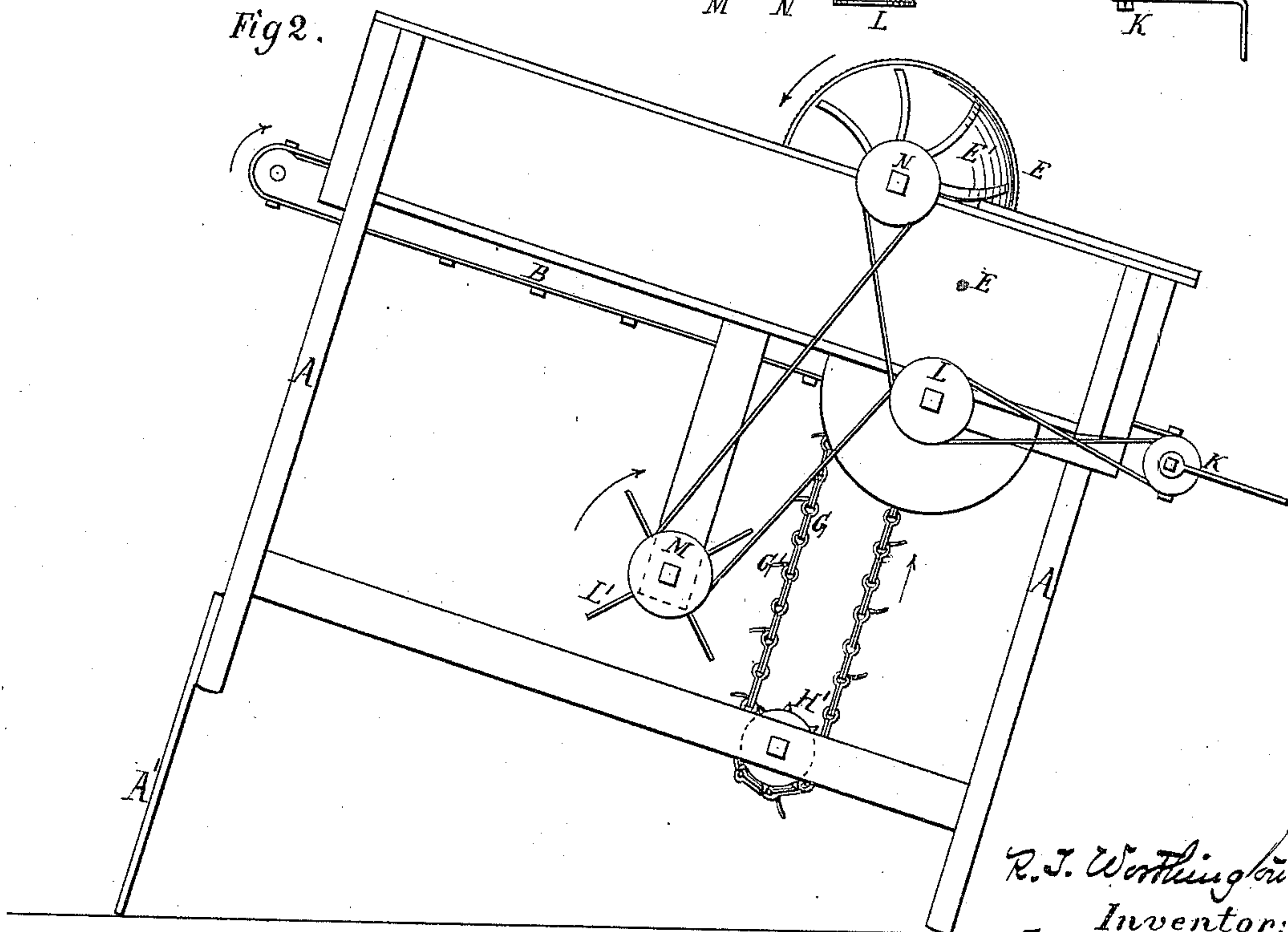
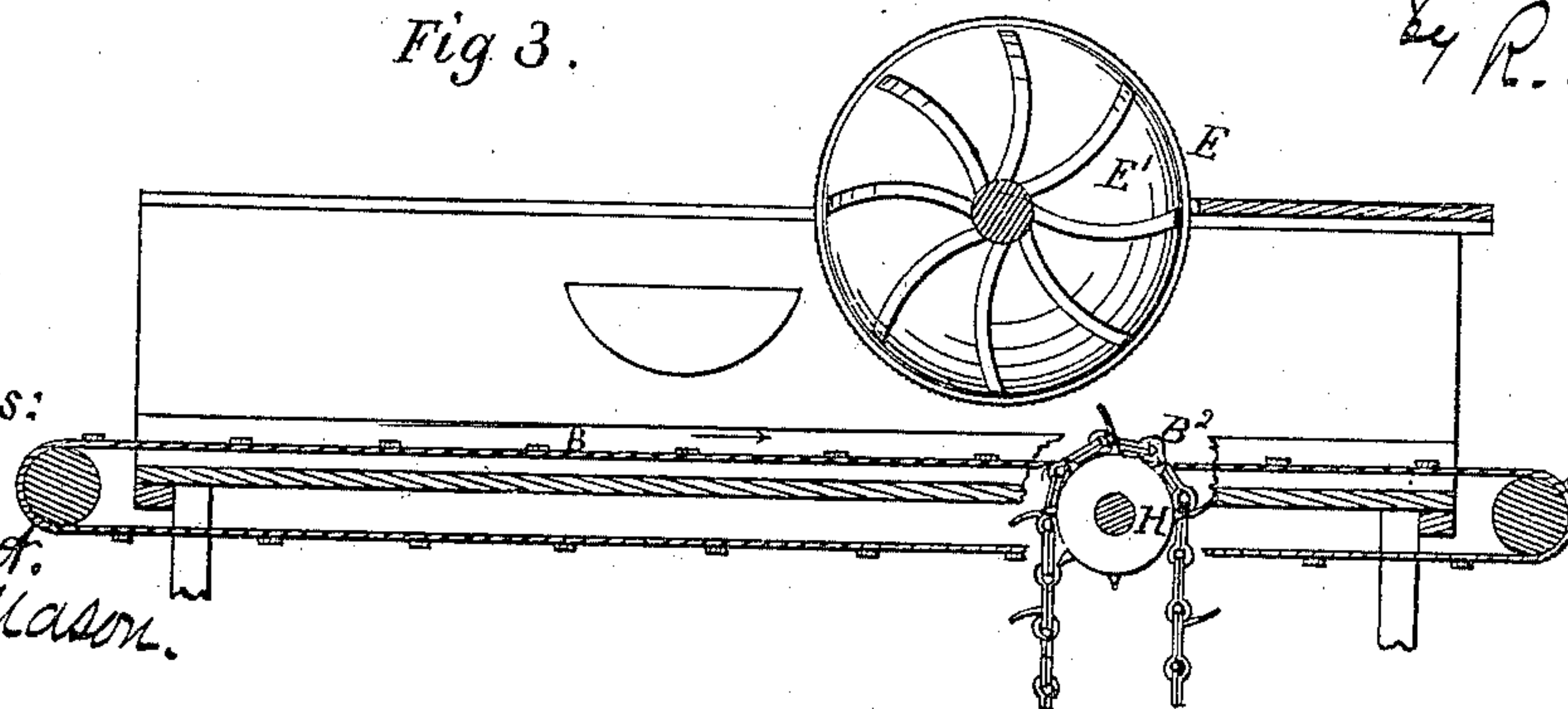


Fig 2.



R. T. Worthington
Inventor:
By R. Mason,
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Fig 3.



Witnesses:

A. Ruppert.
J. F. Mason.

UNITED STATES PATENT OFFICE.

RICHARD T. WORTHINGTON, OF CHILLICOTHE, OHIO.

BAND-CUTTING FEEDER FOR THRASHERS.

SPECIFICATION forming part of Letters Patent No. 233,959, dated November 2, 1880.

Application filed May 3, 1880. (No model.)

To all whom it may concern:

Be it known that I, RICHARD T. WORTHINGTON, of Chillicothe, in the county of Ross and State of Ohio, have invented a new and
5 useful Improvement in Band-Cutting Feeder for Thrashing-Machines, of which the following is a specification.

My invention relates to that class of machines which are specially adapted for cutting the bands of sheaves, spreading the grain, and supplying the same to the thrasher, the band being separated from the straw and discharged below the machine.

In the annexed drawings, making a part of
15 this specification, Figure 1 is a plan view. Fig. 2 is a side elevation. Fig. 3 is a longitudinal vertical section.

The same letters are employed in all the figures in the indication of identical parts.

20 A is the frame of the machine, fitted at the outer end with folding legs A', by extending which proper inclination may be given to the feeder.

B B are endless belts, running around pulleys at the ends of the machine, and separated by a longitudinal bar, B', which is slotted at B² to permit the withdrawal of the band.

The belts run in the bottom of the trough C C, furnished with deflectors D D, attached
30 on each side for the purpose of directing the sheaves, which are fed in longitudinally under the cutter E, which is preferably a circular saw with fine teeth.

The saw is hung on the rotating shaft F, and has fitted on each side convex hubs E' E', which extend from the shaft nearly to the edge of the saw. These hubs are segments of a sphere, and are intended to spread the sheaf when the band is cut, and so loosen and
40 detach the band that it may be readily seized by the teeth of the clearer, which project through the slot B².

The hubs E' E' have attached to their outer faces radial and curved cleats E², which are intended to assist in carrying the straw forward when the band has been cut, and also, by their inclination, to force downward and outward the ends of the severed band, so as more completely to relax it to facilitate its engagement
50 by the teeth of the clearer. This clearer is

formed by an endless chain, G, running around sprocket-wheels H H', and formed with hooks G', intended to engage the severed bands and draw them down through the slot B².

I is a cylinder, formed with projecting arms I', arranged to rotate with their points in such relation to the chain that they shall catch any band which may hang to the hooks G' and detach the same.

The machinery is driven from the pulley K
60 by a single belt, which extends down from the pulley K to a double pulley, L, being crossed, thence down to a lower pulley, M, on the end of the cylinder-shaft I, thence up and around the pulley N on the end of the shaft F, thence
65 under the pulley L to the pulley K. Thus, by means of a single belt, I give operation to all parts of the machine.

I do not claim the invention, broadly, of the carrying-belts, the cutter, the divider, or the
70 clearer, for all these parts have been independently employed in other machines; but my cutting mechanism is distinguished from any before used in such machines in this: that the double-convex divider or spreader is at-
75 tached to the sides of the cutter and serves to force apart the ends of the band the instant that it has been severed. The clearing mechanism is distinguished from what has been heretofore known in this, that it is made to
80 act in engaging the band while the sheaf is being automatically carried forward, and is used in combination with the spreader, which forces the ends of the severed wire apart so as to facilitate its seizure by the teeth of the
85 clearer.

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

1. A cutter revolving in the line of the carrying-trough and having convex hubs attached to its sides so as to perform, simultaneously, the operation of cutting and spreading, substantially as set forth.

2. A rotary cutter placed in the line of the trough, having convex hubs attached to the sides of the cutter, and provided with cleats,
95 substantially as set forth.

3. In combination with the rotating cutter, and convex spreader attached to the sides of the cutter, endless carrying-belts B B, and in-
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intermediate slotted bar B', and rotating clearer, the points G' of which are arranged to pass through the slot and draw out the band while the sheaf is being automatically carried toward the thrasher, substantially as set forth.

5

In testimony that I claim the foregoing I

have hereunto set my hand and seal this 20th day of April, 1880.

RICHARD TOWNSLEY WORTHINGTON. [L. s.]

Witnesses:

M. J. WORTHINGTON,
GEORGE KERN.