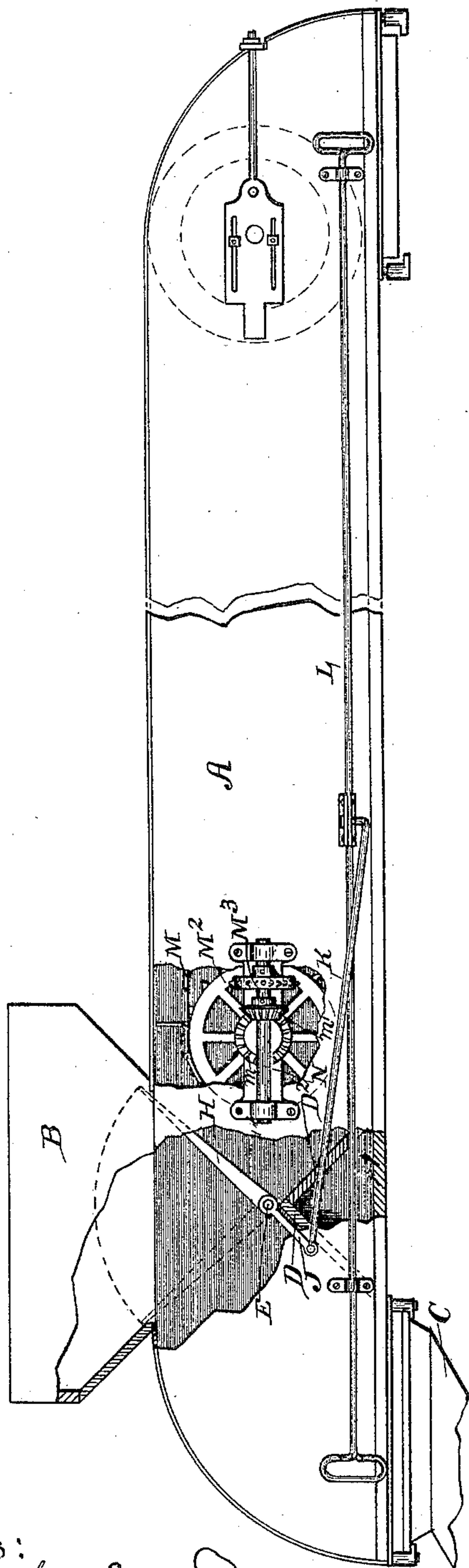


(No Model.)

J. B. BARTHOLOMEW.
GRAIN CONVEYER.

No. 446,566.

Patented Feb. 17, 1891.



Witnesses:

W. B. Smith

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Inventor:

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UNITED STATES PATENT OFFICE.

JOHN B. BARTHOLOMEW, OF DES MOINES, IOWA.

GRAIN-CONVEYER.

SPECIFICATION forming part of Letters Patent No. 446,566, dated February 17, 1891.

Application filed May 31, 1890. Serial No. 353,797. (No model.)

To all whom it may concern:

Be it known that I, JOHN B. BARTHOLOMEW, a citizen of the United States of America, residing at Des Moines, in the county of Polk and State of Iowa, have invented a new and useful Improvement in Grain-Conveyers, of which the following is a specification.

My invention relates to an attachment for use in conjunction with that class of conveyers in which a conductor is employed to convey the grain; and my object is to provide means by which the grain may be interchangeably cut off and conveyed in different directions in the same conveyer.

My invention consists in partitions which are located within the conductor beneath the opening at the bottom of the hopper, which partitions are inclined toward each other, and a pivoted gate operated from the outside of the conveyer and adapted to interchangeably establish communication between the hopper in one direction and an opening in the conductor and to cut off the passage of the grain in the other direction.

My invention consists, further, in certain details of construction hereinafter more fully described and set forth, reference being had to the accompanying drawing, in which the figure is a side view of a conveyer, partly broken away to show the interior, embodying my invention.

A represents the conveyer-conductor, and B a hopper located at one end thereof opening into the conductor. On the under side of the conductor, at each end thereof, are openings, around which the chutes C are attached.

D is a partition, the two sides of which are inclined to each other and meet at an angle, adjacent to which point a rock-shaft E is journaled within the sides of the conductor A. Attached to the rock-shaft E is a gate H, which extends from one side of the conductor A to the other.

J is an arm secured to one of the outer ends of the rock-shaft E, said arm being thus located on the outer side of the conductor A. To the arm J is pivotally connected a rod K, which extends and is secured to the horizontally-actuated rod L, which is held in such a manner on the outer side of the conductor A as to permit of its being reciprocated by the

operator in either direction approximately from the extreme ends of the conveyer.

An endless apron M passes about the sprocket-wheels M², pivoted in the sides of the conductor, one of said wheels having a beveled gear-wheel m, with which the beveled gear-wheel m' on the counter-shaft N, held on the outside of the conductor, meshes, power being applied to the sprocket-wheel M³, also fixed on the counter-shaft N.

The operation of my device is as follows: When the wagon to be loaded is on that side of the thrashing-machine from which the grain is delivered, the latter may be discharged into the hopper B, and the gate H being in the position indicated by the full lines, the entrance of the grain in, upon, or about the endless apron M is cut off by the gate and partition D and falls by gravity into the chute C, and by said chute is conducted to the wagon, being guided in its fall into the chute by the gate H and partition D, which latter together form an inclined plane from the hopper to the chute C, upon which the grain travels. When it is desired to load a wagon at a distance from the point of delivery of the grain, the operator actuates the rod L, which in turn actuates the rod K, which latter causes the lower end of arm J to describe an arc rotating the rock-shaft E, carrying the gate H into the position indicated by the dotted lines, cutting off the exit of the grain into the chute C, and, with the partition D, forming an inclined plane leading from the hopper A to the carrier, by which latter the grain is conveyed to the desired point, passing out through an opening into a chute or into the wagon.

It is now obvious that the grain may be conveyed in two different directions without reversing the direction of movement of the endless apron, and that the gate by which the grain is interchangeably cut off, together with the partitions, also serve to guide the grain in the desired direction. It is also obvious that when the grain is discharged through the chute C, which is the direction of discharge and delivery in most cases, it is not necessary to operate the endless conveyer-apron, resulting in a saving of motive power.

It is desirable in the conveying or feeding

of the grain from the hopper to the conveyer-
apron or discharge-opening that a direct plane
of feed or guideway for the grain should in
either case be provided to avoid the clogging
5 or banking of wet soggy grain, which result
will ensue when the grain is caused to turn
about angles. It is also a desirable feature
that the direction of travel of the grain may
be regulated from either end of the conveyer.

10 Having thus described my invention, what
I claim as new, and desire to secure by Let-
ters Patent of the United States, is—

The combination, with the conductor of a
grain-conveyer, of a partition secured to and
15 rising from the bottom of said conductor and
also extending transversely of said conductor,
the two sides of said partition being inclined

toward each other and meeting at an angle,
forming an apex approximately at the center
of the bottom opening of the hopper, a cut- 20
off gate extending transversely of the con-
ductor, pivoted adjacent to the said apex of
the partition, and means by which the said
gate may be operated from either end of the
conveyer to cut off or admit grain in two dif- 25
ferent directions, said gate, together with the
centrally-located partition, providing direct
guideways or planes for the grain from the
hopper to either the discharge-opening or con-
veyer-apron, as set forth.

JOHN B. BARTHOLOMEW.

Witnesses:

JOHN MCFARLAND,
THOMAS G. ORWIG.