

(No Model.)

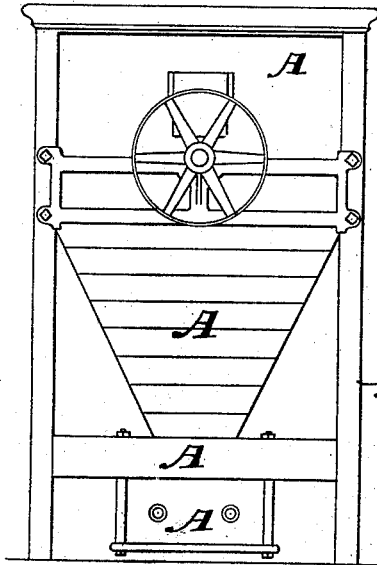
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SHIFTING GATE FOR CONVEYERS.

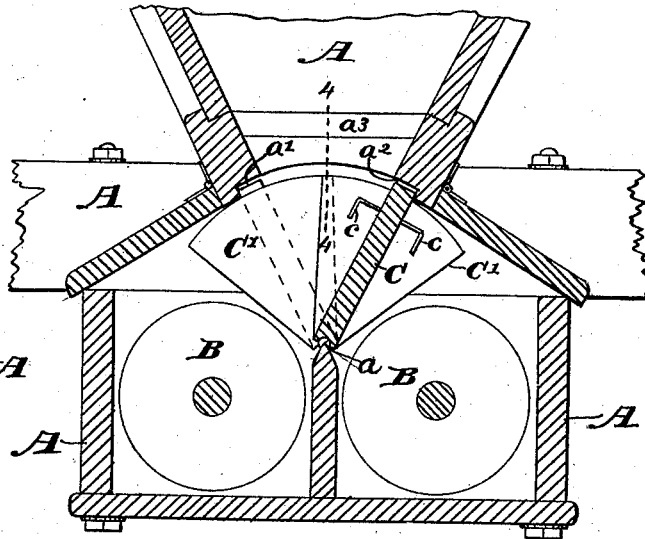
No. 382,890.

Patented May 15, 1888.

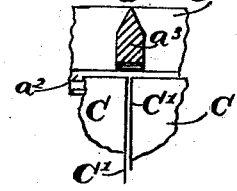
*Fig. 1.*



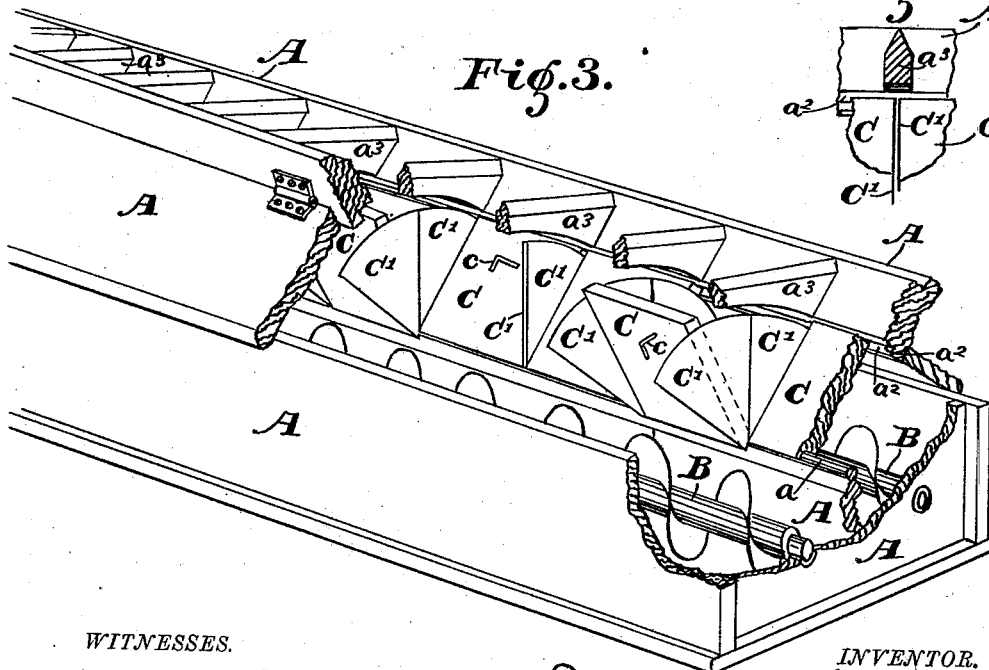
*Fig. 2.*



*Fig. 4.*



*Fig. 3.*



WITNESSES.

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# UNITED STATES PATENT OFFICE.

DANIEL W. MARMON, OF INDIANAPOLIS, INDIANA, ASSIGNOR TO THE  
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## SHIFTING GATE FOR CONVEYERS.

SPECIFICATION forming part of Letters Patent No. 382,890, dated May 15, 1888.

Application filed June 5, 1885. Serial No. 167,735. (No model.)

*To all whom it may concern:*

Be it known that I, DANIEL W. MARMON, of the city of Indianapolis, county of Marion, and State of Indiana, have invented certain new and useful Improvements in Shifting Gates for Conveyers, of which the following is a specification.

My said invention relates to that class of shifting cut-off gates for double conveyers whereby the flow of grain or material may be directed into either one of two conveyers arranged side by side and cut off from the other at will.

The object is to produce such a construction and arrangement of said shifting gates and adjacent parts as will insure that none of the material shall pass between the several gates or between the gates and the sides of the machine, which shall at the same time be inexpensive in construction and convenient and easy to mount and operate, as will be hereinafter more particularly described.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is an end elevation of a bolting-reel provided with my invention; Fig. 2, a detail section, on an enlarged scale, showing the conveyers, gates, and adjacent parts separately; Fig. 3, a perspective view of the same, and Fig. 4 a detail sectional view on the dotted line 4 4 in Fig. 2.

In said drawings the portions marked A represent the casing or frame-work of the machine, B the conveyers, and C my improved shifting gates.

The casing or frame-work A is constructed with particular reference to this invention. The central partition between the conveyers is rounded or beaded on its upper edge, *a*, upon which correspondingly-formed grooves in the lower edges of the gates rest. The sides also have grooves *a'* *a''*, which, when the gates are moved to one side or the other, overhang the top edges of said gates, and thus said gates and said sides form a substantially continuous incline. Between each pair of gates is also arranged a cross-partition, *a''*, which extends over the sheet-metal ends of the gates, and

thus prevents any of the material from passing between said ends. The top of this cross-partition is tapered to an edge, and thus any lodgment of the material thereon is prevented.

The conveyers B are or may be the ordinary conveyers, and need no special description.

The shifting gates C are each provided with a concave groove in the lower edge corresponding to the convex-surfaced edge or bead *a*, and rest thereon. At each end these gates are provided with sheet-metal wings *C'*, which are of sufficient width to overlap each other when the gates are inclined in opposite directions, and thus provide a complete partition between each pair of said gates when in this position. These ends are much more economical than similar ends which extend entirely across, as but little more than one-half the material is required to construct them which is employed in the construction of the common ends. The upper edges of said wings come directly beneath the cross-partitions *a''*, and thus the material is prevented from getting between them, and the gates are also thereby prevented from being lifted out of position after the several parts are put together. Each of the gates is preferably provided upon each side with a handle, *c*, by which it can be conveniently thrown from one side to the other as it is desired to shift the flow of material from one to the other of the conveyers. Small stops (which may be simply brads) should be placed in or on the bead *a* between each pair of the gates to prevent any endwise movement thereof.

I am aware that shifting gates for conveyers have been produced which were provided with hinges or pivots to secure them in position. Said hinges or pivots are more expensive both in themselves and in the matter of applying them to use, as they require special fitting. My rounded or beaded edge on the partition and the corresponding grooves in the lower edges of the gates are produced in fitting the lumber for use in the machine and require no such special fitting. The gates, when made, can also be put in place without difficulty and need no other fastenings to hold them there than the cross-pieces which cover their ends,

and consequently all hinges, pivots, or other fastening devices are entirely dispensed with, which I am not aware has heretofore been done.

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

The combination of the casing A, a central partition thereto, conveyers on each side of said partition, shifting gates mounted on said partition and provided with ends C', each of which is of just sufficient size to overlap the edge of that on the adjacent gate when it is

turned in the opposite direction, and the cross-partitions  $a^3$ , which are arranged above and cover said ends, substantially as shown and described, and for the purposes specified. 15

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 1st day of June, A. D. 1885.

DANIEL W. MARMON. [L. s.]

In presence of—

CHARLES L. THURBER,  
E. W. BRADFORD.