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H. J. TALMAGE.

STRAW CONVEYER.

APPLICATION FILED JUNE 7, 1902.

NO MODEL.

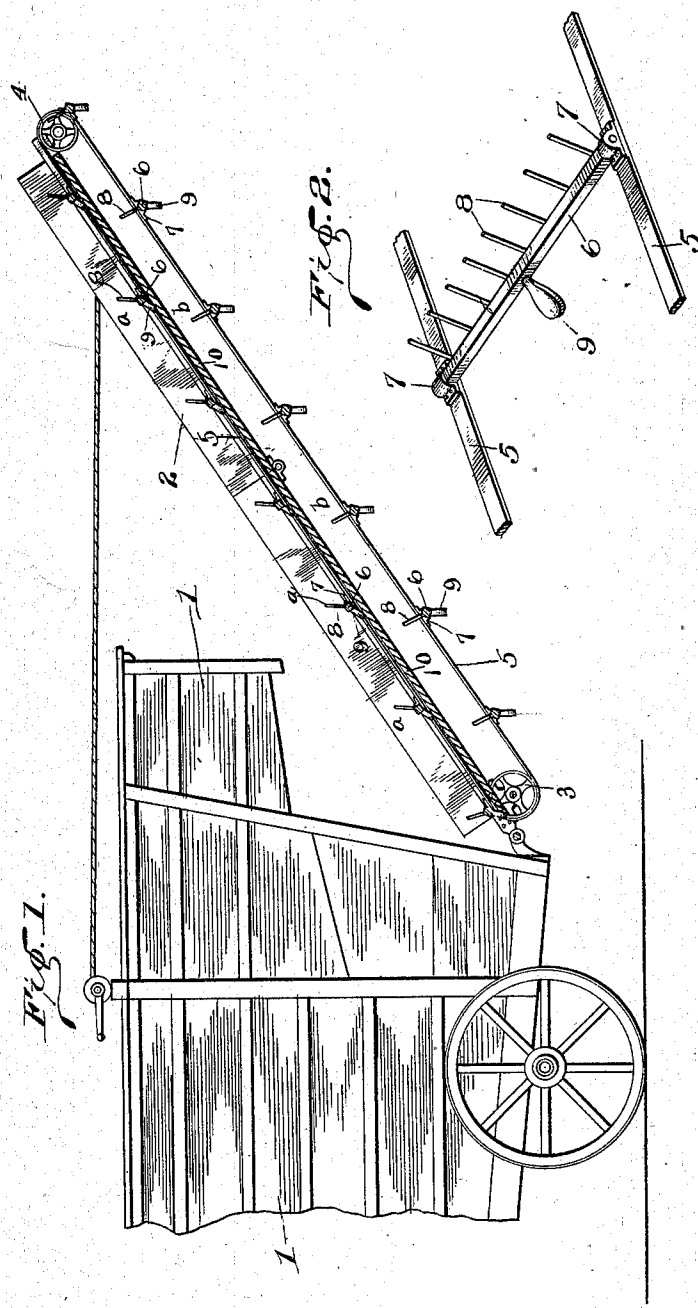


Fig. 1.

Fig. 2.

Witnesses
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UNITED STATES PATENT OFFICE.

HERBERT J. TALMAGE, OF SURPRISE, NEBRASKA.

STRAW-CONVEYER.

SPECIFICATION forming part of Letters Patent No. 723,335, dated March 24, 1903.

Application filed June 7, 1902. Serial No. 110,649. (No model.)

To all whom it may concern:

Be it known that I, HERBERT J. TALMAGE, a citizen of the United States, residing at Surprise, in the county of Butler and State of Nebraska, have invented certain new and useful Improvements in Straw-Conveyers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to threshing-machines or separators, and more particularly to the carrier connected with said machines commonly employed to convey the straw away from the machine proper and deliver it to a point where such straw is builded into a stack or rick, as is common; and my invention therefore consists of certain novel features of combination and construction of parts the preferred form or materialization whereof will be hereinafter clearly set forth, and pointed out in the claims, reference being had to the accompanying drawings, which are made a part of this application.

The prime object of my invention is to provide an endless carrier for the straw that will positively engage and carry the straw away from the machine proper and deliver it to the point where it is to be disposed in the stack, my special object being to insure that the conveyer will deliver the straw at the end of the carrier by wholly releasing the same, and thus preventing any of the straw from being withdrawn toward the machine.

A further object of my invention is to provide coöperating devices connected with the endless conveyer adapted to reliably engage the straw and promptly release it in the manner above set forth after the straw has been carried to the proper point.

Other objects and advantages will be hereinafter made clearly apparent from the following specification, which must be considered in connection with the accompanying drawings, in which—

Figure 1 is a side elevation of the rear portion of a separator, which may be of the usual or any preferred construction, showing my carrier attached thereto, the carrier-frame proper being shown in section. Fig. 2 is a detail in perspective of the movable portion of my conveyer separated from the endless belting with which it coöperates.

Referring to the numerals on the drawings, 1 designates the separator or threshing-machine proper of any preferred construction, while 2 indicates the straw-carrier common to all of this class of machines, said carrier being attached to the separator in the usual manner. At either end of the carrier 2 are the belt-wheels 3 and 4, the lower one of which is disposed in proper relationship with the driving-belt or other source of power, which is commonly effected by extending the shaft upon which the lower set of wheels are mounted, so as to provide a seat for the driving-pulley to be disposed thereon.

The endless belting or apron conveyer 5 is disposed around the sets of wheels 3 and 4, so that said belting will be continuously moved. It is common to connect these endless belts thus disposed upon the wheels 3 and 4 by a plurality of cross sections or cleats extending transversely across the carrier-frame 2, as it is by said cleats that the straw, chaff, or the like is carried upward to the end of said frame 2 and delivered to the position where it is to be disposed in the stack.

It will be understood that the conveyer-belts may be composed of leather or other suitable material or may consist of sprocket-chains or the equivalent.

Instead of following the usual custom of riveting cross-cleats to the two belts or conveyers 5 I provide a plurality of cross bars or sections 6, which are provided at each end with suitable journals, whereby said cross-bar may be rotatably mounted in suitable bearings 7, said bearings being rigidly secured to and carried by the conveyer-belts 5, as will be made clearly apparent by reference to Fig. 2. The cross bars or sections 6 are provided with a plurality of fingers 8, said fingers being so disposed that they will be directed upwardly and outwardly from said cross-bars at an angle from the plane of their travel of about forty-five degrees, more or less. The cross-sections 6 are provided on their lower sides or upon the side opposite said fingers with the counterpoise 9, which may be made in any preferred way, though preferably formed as shown in Fig. 2, wherein it will be

observed that said counterpoise 9 is disposed in the central portion of the bar 6, and gravity is therefore relied upon to hold the fingers in an elevated position while the cross-bars 6 are moving upward upon the floor or platform 10 of the carrier-frame 2, it being understood that the counterpoise 9 will drag upon said floor 10 of the carrier during its outward travel, and thus dispose said fingers in an elevated position, insuring that the straw or the like upon the floor of the carrier will be forced upward and outward to the point where it is to be delivered to the stacker. As soon as one of the bars 6 has reached the upper end of the carrier the counterpoise 9 having passed beyond the extreme end of the floor-section 10 of the carrier will swing downward into a vertical position, thereby turning the cross-bar 6 in its bearings and disposing the fingers in a substantially vertical position, and since said fingers are then turned downward around the upper wheels said fingers will be cleanly withdrawn from the mass of straw or the like, no portion of said straw adhering to said fingers. When the cross-bar shall have moved downward upon the under side of the floor-section 10 to the lower end thereof, the counterpoise will again be brought into contact with the upper side of said floor-section, and thus dispose the fingers in an upwardly and outwardly inclined position, insuring that they will thus reliably engage the mass of straw or the like upon the floor and carry the same up the incline of said floor to repeat the operation of withdrawal of said fingers when the upper end of the floor has been reached.

It will be understood that by keeping the fingers 8 in an upright position throughout their travel they are in no wise permitted to come in contact with the straw while passing from the upper to the lower end of the carrier on their return, and since said fingers are positively and cleanly withdrawn from the mass of straw I guard against the possibility of any of such material being again reconveyed downward to the lower end of the carrier.

While I have described my invention as being attached to an ordinary threshing-machine, I desire it to be understood that it may be used in connection with any and all classes of elevators where a reliable straw-carrier is desirable.

Believing that the advantages and manner of using my invention have thus been made fully apparent from the foregoing specification, considered in connection with the accompanying drawings, further reference to the details is deemed unnecessary.

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

1. The herein-described endless carrier comprising the combination with a suitable frame-section, of an endless belting properly mounted upon carrying-wheels and adapted to cooperate with said frame-section; a floor carried by said frame-section; a series of cross-bars rotatably mounted in bearings on said endless carrier, each of said cross-bars being provided with a plurality of fingers and a counterweight adapted to hold said fingers in position to engage the straw and drop, downward into a vertical position when the end of the carrier has been reached whereby the fingers will be withdrawn from the mass of straw or the like all substantially as specified and for the purpose set forth.

2. The combination with the platform or floor, of a pair of endless carriers, one for each side of said platform; suitable supporting-wheels for said carriers; a plurality of cross-bars rotatably mounted on said carriers, each bar having a plurality of fingers standing in a common plane, each bar also having a counterpoise extending in a plane at an obtuse angle to the plane of the fingers whereby when the counterpoise is resting upon the platform the fingers will be inclined upwardly and outwardly until the upper end of the platform is reached when the counterpoise will drop downward by gravity and withdraw the teeth longitudinally from the straw as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

HERBERT J. TALMAGE.

Witnesses:
W. H. GREENSLIT,
S. R. SEVERNS.