

No. 648,851.

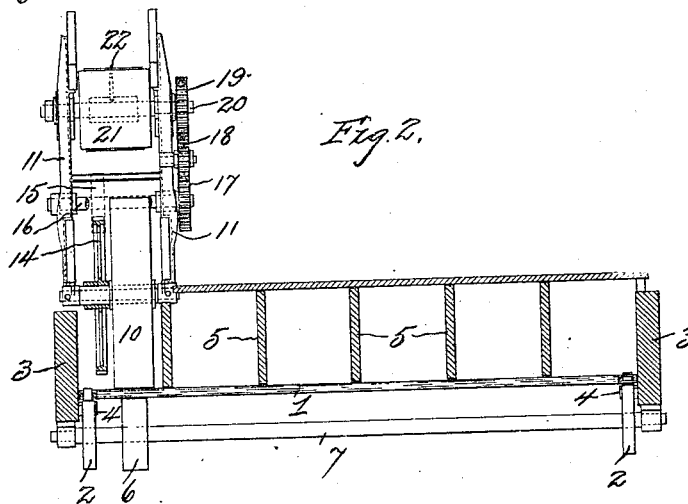
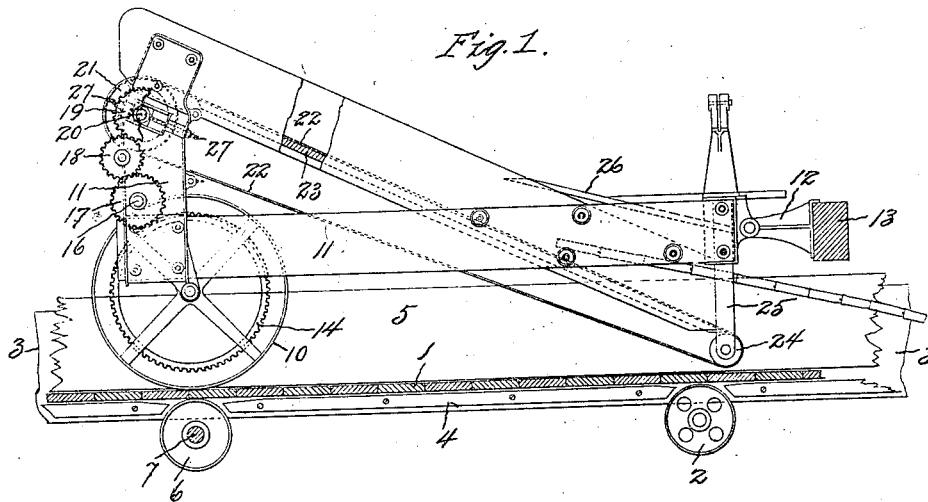
Patented May 1, 1900.

L. P. COHEN.

FEEDING MECHANISM FOR CANE CONVEYERS.

(Application filed Feb. 21, 1900.)

(No Model.)



WITNESSES:

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FEEDING MECHANISM FOR CANE-CONVEYERS.

SPECIFICATION forming part of Letters Patent No. 648,851, dated May 1, 1900.

Application filed February 21, 1900. Serial No. 8,102. (No model.)

To all whom it may concern:

Be it known that I, LOUIS PHILIPP COHEN, a citizen of the United States of America, residing at New York, in the county and State of New York, have invented certain new and useful Improvements in Feeding Mechanism for Cane-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, reference being had to the accompanying drawings, and to figures of reference marked thereon, which form a part of this specification.

My invention relates to introducers or devices for feeding sugar-cane to the carrier-belts that feed the mills, and has for its object a frictionally-run introducer, means for permitting the feeding of long cane, preventing the breakage of the slats of the conveyer, and other advantages, as will fully appear in the following description and claims.

In the drawings, Figure 1 represents a side elevation of the introducer situated in one of the conveyer subdivisions, one introducer being in each subdivision, but at different points on the conveyer; and Fig. 2 is a rear elevation of the introducer, showing it located in one of the six subdivisions of the conveyer shown in cross-section.

Similar reference characters refer to like parts.

1 is the slat conveyer, which has contact at either side on supporting-pulleys 2, and for the purpose of preventing sag between the pulleys I find it convenient to fasten below the conveyer-belt 1 and against the fixed conveyer sides 3 wooden supporting-strips 4 or angle-irons.

The conveyer is divided by partitions 5 into a number of parallel subdivisions, and I here show six such divisions. In each division is situated an introducer at different portions of the length of the conveyer, and the object of the strips 4 is to prevent the sagging of the conveyer-slats to such an extent that cane from one of the divisions will wedge under the dividing-partitions 5. The introducer is driven by frictional contact. The driving-wheel 10 rests on the slats of the conveyer-apron, and in order to take the weight of the introducer off the apron and prevent any sag

necessarily caused by the weight I place diametrically below this driving-wheel 10 a supporting-pulley 6 on a cross-shaft 7 and under the conveyer-belt. The introducer has a body or framing 11 hinged at its forward end to a bracket 12, secured on a cross-beam 13 above the conveyer, and not with the partitions, as heretofore constructed. This framing has an inclination downward in the direction of the travel of the conveyer-belt 1.

The drive-wheel 10 is secured between the framing 11 and carries a spur-gear 14, that gears with a pinion 15 on a loose driving-shaft 16, which carries on one of its ends, outside the framing, a transmitting spur-gear 17, in mesh with an idle spur-gear 18, which in turn gears with a spur-wheel 19 on the shaft 20, that carries the drum 21 for driving the apron 22 of the introducer. The shaft or axle 20 is provided with adjustable bearings to take up the slack of the belt 22 by means of bolts 27. The apron 22 travels over an inclined bottom 23, around a smaller drum or roller 24 at the opposite end of the framing 11, and is supported in depending brackets 25 close to the conveyer-apron 1. A guard 26 prevents any cane that projects above a certain height from entering the subdivisions.

I have located the main gear 14 inside the framing and enlarged the delivery end by changing the support and make a higher channel-opening to enable the feeding of long cane.

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

1. The combination with a series of stationary partitions, an endless conveyer traveling thereunder, rollers supporting the conveyer at its sides, rails between the rollers on each side, of a cane-feeding device comprising a framing hinged to a support independent of the conveyer and partitions, a friction-roller operated by the conveyer, an endless belt driven by said friction-roller delivering on the conveyer, and auxiliary means below said friction-roller and conveyer to keep said conveyer in proper relation to the partitions, substantially as set forth.

2. In combination with a series of fixed partitions and an endless conveyer traveling thereunder, of a cane-feeder hinged to a sup-

port independent and above both conveyer and partitions, a friction-roller operated by the conveyer-belt, a spur-gear driven by the friction-roller, both said spur-gear and roller
5 contained within the framing, an adjustable endless feed-belt driven by a gear-train from the spur-gear and located on one side of the framing, substantially as set forth.

3. A device for feeding cane to a conveyer,
10 comprising a framing hinged to a support independent of the conveyer, and its appertaining mechanism, a friction-roller operated by the conveyer-belt, an endless belt driven from said friction roller and delivering
15 through an enlarged mouth to the conveyer-belt, substantially as and for the purpose set forth.

4. A device for feeding cane to a conveyer,

comprising a framing hinged to a support independent and above the conveyer, a friction- 20 roller operated by the conveyer-belt and supported by an idler below the belt, a gear driven by the friction-roller, both gear and friction-roller contained within the framing, an adjustable endless feed-belt driven from 25 the gear and feeding cane through an enlarged opening to the conveyer-belt, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses. 30

LOUIS PHILIPP COHEN.

Witnesses:

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A. M. MCKNIGHT.