(No Model.)

P. C. WILSON.

CONVEYER.

No. 481,837. Patented Aug. 30, 1892.

Fig. 1.

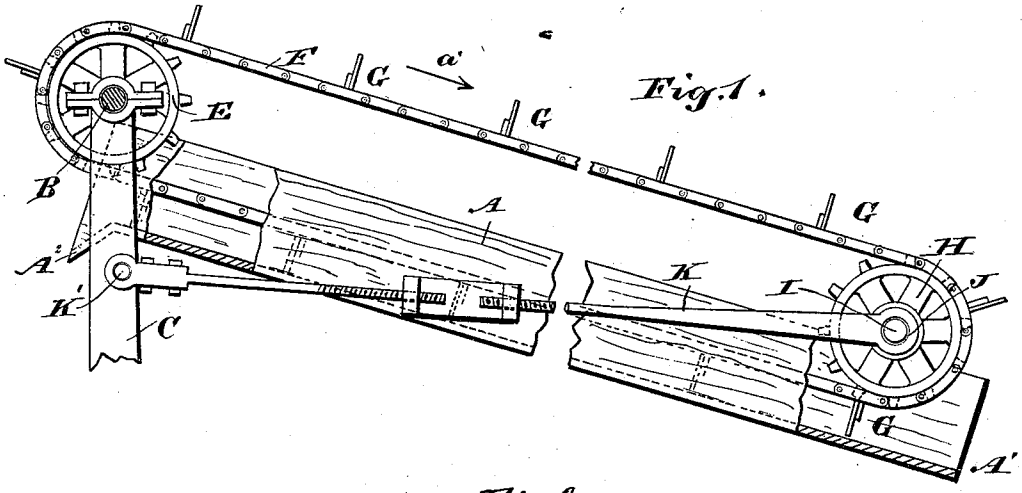


Fig. 2.

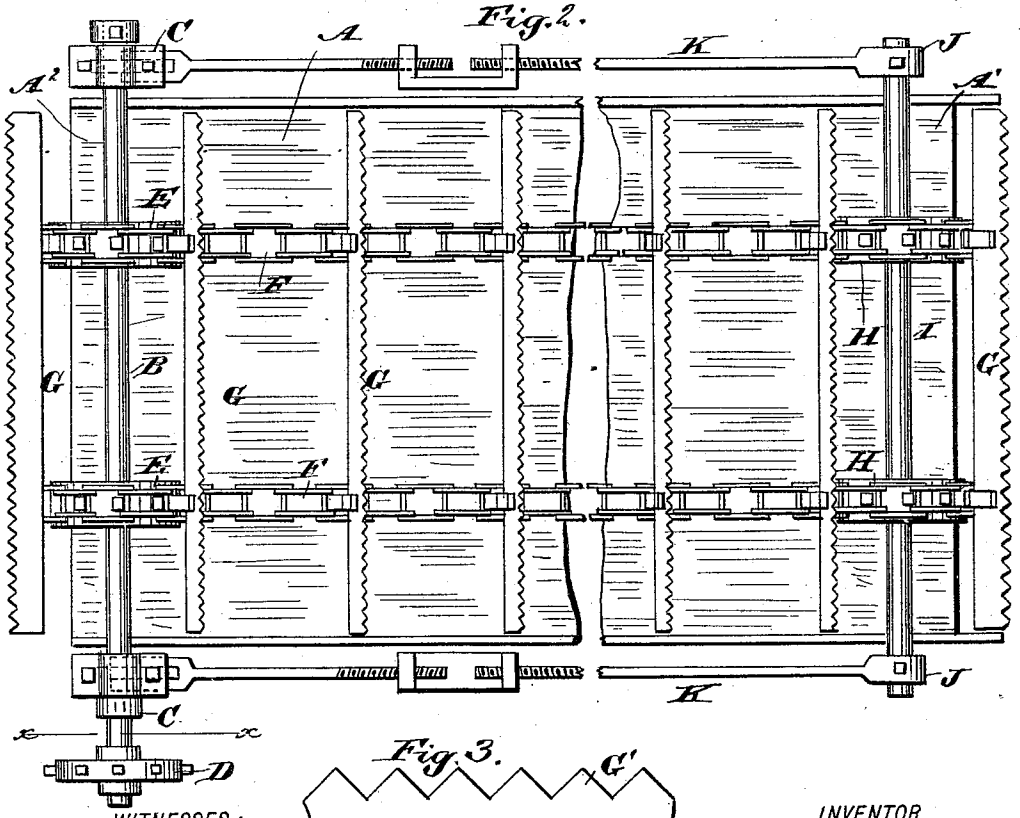
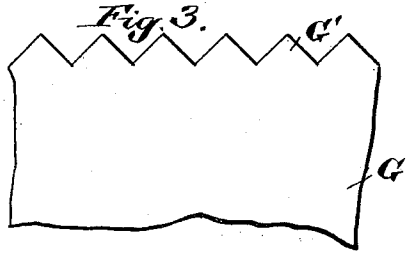


Fig. 3.



WITNESSES:

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PINKNEY C. WILSON, OF PATTERSON, LOUISIANA.

CONVEYER.

SPECIFICATION forming part of Letters Patent No. 481,837, dated August 30, 1892.

Application filed March 12, 1892. Serial No. 424,721. (No model.)

To all whom it may concern:

Be it known that I, PINKNEY C. WILSON, of Patterson, in the parish of St. Mary's and State of Louisiana, have invented a new and Improved Conveyer, of which the following is a full, clear, and exact description.

The invention relates to conveyers such as are used in cane-mills for carrying the crushed cane from one mill to another or for conveying bagasse from the mill or for other purposes.

The object of the invention is to provide a new and improved conveyer which is simple and durable in construction, very effective in operation, and arranged to adjust itself automatically, according to the amount of material to be conveyed.

The invention consists of a sprocket-chain carrying knives and passing over sprocket-wheels, of which one is mounted in fixed journals and the other in journals carried by pivoted arms.

The invention also consists of certain parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the improvement, partly in section, on the line $x\ x$ in Fig. 2. Fig. 2 is a plan view of the same, and Fig. 3 is an enlarged face view of one of the knives.

The improved carrier is provided with a suitably-constructed box A, open at the top and at its ends and placed in any desired inclined position, as is plainly shown in Fig. 1. In practice the upper end of the box A is pivotally connected with the standards C, and its lower end adjustably connected with the mill to receive the material therefrom. At the lower open end A′ the material or stock to be conveyed is placed and at the upper end is arranged an outlet-chute A^2 for discharging the material. Above the upper end of the box A is arranged a transversely-extending shaft B, mounted to turn in suitable bearings secured to the upper ends of the standards C, erected alongside the sides of the box A.

On the outer end of the shaft B is secured a sprocket-wheel D, connected by a sprocket-chain with a suitable mechanism for imparting a rotary motion to the said shaft B. On the latter are secured two or more sprocket-wheels E, extending into the open upper end of the box A, and over the said sprocket-wheels pass the sprocket-chains F, of any approved construction and carrying transversely-extending knife-blades G, reaching at the lower halves of the chains into the box, close to the bottom thereof. The outer edges of the knife-blades are formed with teeth G′, so that the knife-blades take a good hold of the material to be conveyed through the box A. The lower ends of the chains F pass over sprocket-wheels H, mounted to turn loosely on a shaft I, extending over the lower end of the box A. The shaft I is secured in suitable bearings J, formed or secured on the free ends of arms K, pivoted at K′ to the standards C, previously mentioned. Each of the arms K is preferably made adjustable, as is plainly illustrated in the drawings.

In using this carrier motion is given to the chains F in the direction of the arrow a' by revolving the shaft B from the drive-wheel D. The material to be conveyed is fed into the lower end A′ of the box, and the knives G take hold of the material, pushing the same forward in the box A to finally discharge the material over the chute A^2 at the upper end of the box A.

It will be seen that the knives G engage the material and rest on the same as the shaft I is mounted in the pivoted arms K, so that the lower ends of the chains and the sprocket-wheels H and shaft I have a tendency to press the knives into firm contact with the material under treatment.

It will further be seen that when the quantity to be fed forward increases the arms K swing upward, so as to admit more material under the lower parts of the chains and the knives G. As the latter are placed suitable distances apart more or less material can be carried forward in the box A between two adjacent knives, as the material is not obstructed except by those parts of the chains extending between the two knives.

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

A conveyer comprising a box or chute, up-

rights adjacent to one end thereof, one elevator-shaft being journaled in bearings on said uprights, longitudinally-adjustable arms pivoted to the said supports below the said shaft, extending toward the opposite end of the chute, and having the other elevator-shaft journaled in their free vertically-swinging ends, and the endless elevator mounted on the said shafts, whereby the outer end of the elevator may be set at any desired distance from the bottom of the chute and yet freely swing upward to prevent choking, substantially as described.

PINKNEY C. WILSON.

Witnesses:
JOHN EXNICIOS,
W. W. BETHEL.