No. 647,750. Patented Apr. 17, 1900.

W. F. HUNT.

CONVEYER FOR COAL, ORE, &c.

(Application filed Mar. 6, 1899.)

(No Model.)

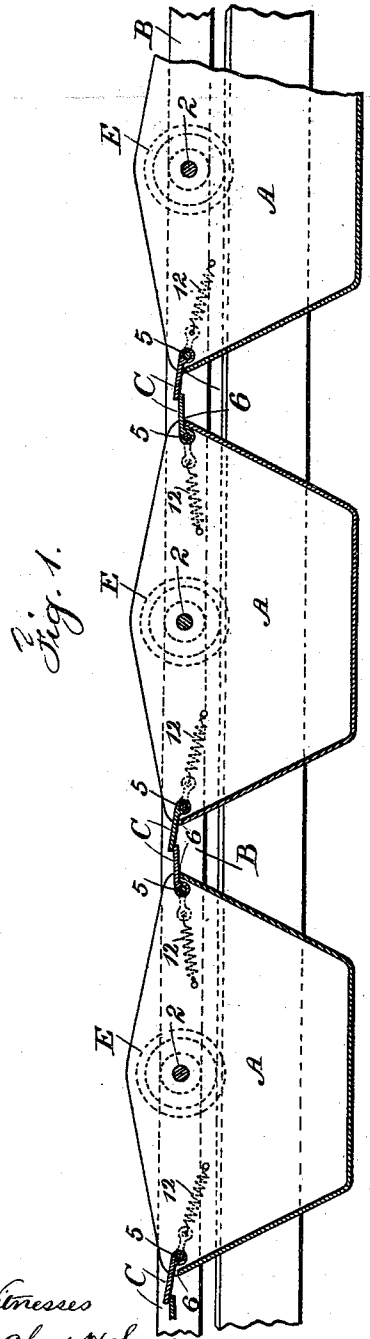


Fig. 1.

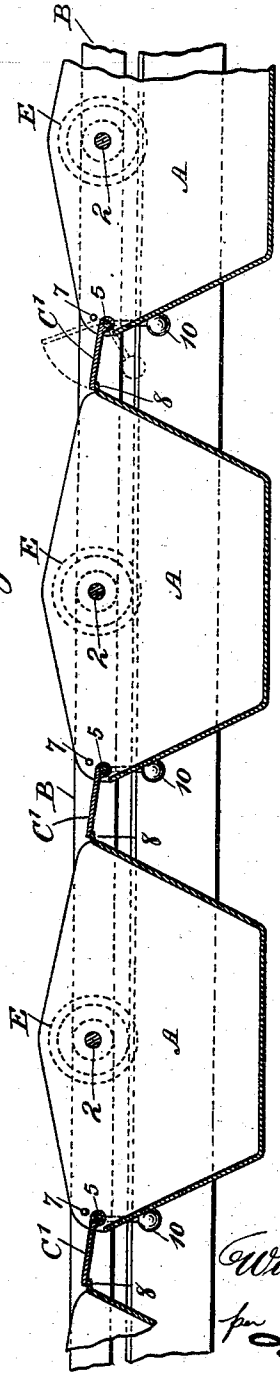


Fig. 2.

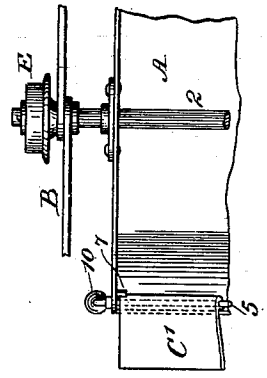


Fig. 3.

Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM F. HUNT, OF NEW YORK, N. Y., ASSIGNOR TO THE C. W. HUNT COMPANY, OF SAME PLACE.

CONVEYER FOR COAL, ORE, &c.

SPECIFICATION forming part of Letters Patent No. 647,750, dated April 17, 1900.

Application filed March 6, 1899. Serial No. 707,825. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. HUNT, a citizen of the United States, residing at New York, (West New Brighton,) in the county of Richmond and State of New York, have invented an Improvement in Conveyers for Coal, Ore, and other Materials, of which the following is a specification.

Conveyer-buckets have been connected up in endless series, there being a chain at each side or else a rope or other device with suitable connections upon which the gravity-buckets are pivoted, and these buckets have been dumped at the desired place and sometimes have been employed for delivering coal at one place to a furnace and taking up the ashes and discharging them at another place. In order to allow these buckets to hang freely by gravity and turn upon their pivots as the direction of the conveyer may change, it has been necessary to allow a small space between one bucket and the next, and where the material has been delivered from a spout or chute such material has passed between one bucket and the next to a greater or less extent, and lips have been provided upon the edges of the buckets to overlap one another, and these lips generally being rigid have required to be changed in the direction of the lap according to the direction of motion of the conveyer in relation to the lap of the lips.

The present invention relates to movable lips hinged upon the buckets approximately in line with the inner edges in such a manner that each lip is free to rise at the outer edge by contact with the lip of the adjacent bucket sufficiently for the bucket to clear the lip of the adjacent bucket, and means are provided to limit the motion of the lip as it rises and also as it falls after the adjacent bucket passes out of contact with it and also for returning the lips to a normal position.

In the drawings, Figure 1 is a longitudinal section illustrating the general character of the present invention. Fig. 2 is a similar section illustrating the present invention in one of the different forms in which it may be used, and Fig. 3 is a plan view showing the corner of one of the buckets fitted with a hanging weight to return the lip to its normal position.

The buckets A are formed of any desired size or shape and provided with pivots at 2, upon which the buckets hang by gravity from the chains or connecting-ropes B, which pass one at each side of the buckets, so as to connect them up in endless series, and the chains are provided with rollers or wheels, E running upon stationary tracks, as usual; and I remark that the present invention is available with gravity-buckets that are connected up in endless series between chains or ropes and adapted to receive coal, ore, ashes, or other material at one place and deliver the same at another place. The lips C instead of being rigid are pivoted at 5 adjacent to the edges of the buckets and approximately in line with the inner edges of said lips, and they are supported at a slightly-inclined position, or nearly horizontal, in any suitable manner, and one lip laps slightly upon the other, so that any material that might otherwise fall between one bucket and the next is diverted by the lips into one or the other of the adjacent buckets and cannot fall between such buckets.

I find it advantageous to pivot the lips closely adjacent to but within the edges 6 of the buckets, so that such edges may form stops to limit the downward movements of the lips.

I have represented in Fig. 1 lips C, that are substantially similar upon the opposite edges of the buckets, and in this figure is illustrated the fact that one lip laps upon the other slightly, so as effectually to bridge over or close the aperture or space between one bucket and the next.

In Fig. 1 I have shown a spring 12 applied to each lip C, and said springs are each connected at one end to an arm on the pivot of the lips and at their other ends to the buckets, and said springs prevent the lips being lifted too far and oblige them to return to a normal position.

If desired, a stationary lip 8 can be employed at one side of one bucket and a pivoted lip at the adjacent side of the adjoining bucket, as illustrated at C′, Fig. 2. In this instance the pivoted lip is shown as above the stationary lip and bridging the space between the buckets, and it is adapted to move either

in one direction or the other by the contact with its outer edge of the rigid lip 8, and the rigid lip 8 may be arranged to always approach the pivoted lip from below. The pivoted lip C′ is, however, shown as adapted to swing in both directions and be returned to a normal position, preferably slightly inclined upward, and for this purpose any suitable mechanism may be employed, preferably a swinging weight 10 on one end of the pivot 5, that will return the lip to its normal position, but will allow such lip to yield either one way or the other way, according to the direction of approach of the adjoining bucket or the lip thereof. With this lip C′ a stop 7 may be so located as to limit the swing of the pivoted lip in such a manner that the weight 10 will exert sufficient force to return the pivoted lip to a normal position.

I claim as my invention—

1. In a conveyer having buckets and connections for uniting the buckets in endless series, the combination with the buckets, of lips, pivots for some of the lips approximately in line with the inner edges of said lips for connecting said lips near the edges of the buckets, and means for controlling the movements of said lips on their pivots and returning them to a normal position, substantially as specified.

2. In a conveyer having buckets and connections for uniting the buckets in endless series, the combination with the buckets, of lips, pivots therefor approximately in line with the inner edges of the lips for connecting said lips near the edges of the buckets, and means for returning the lips to their normal positions after they have been swung on their pivots, substantially as specified.

3. In a conveyer, the combination with the pivoted buckets and the connections uniting the same in an endless series, of lips bridging the intervening spaces between the buckets, pivots therefor approximately in line with the inner edges of such lips for connecting said lips near the edges of the buckets, and means for automatically retaining said lips in a normal position and for returning them to the normal position after they have been swung on their pivots, substantially as specified.

Signed by me this 3d day of February, 1899.

WM. F. HUNT.

Witnesses:
GEO. T. PINCKNEY,
E. E. POHLÉ.