

June 18, 1940.

A. C. SHERRILL

2,204,828

CONVEYER

Filed May 6, 1938

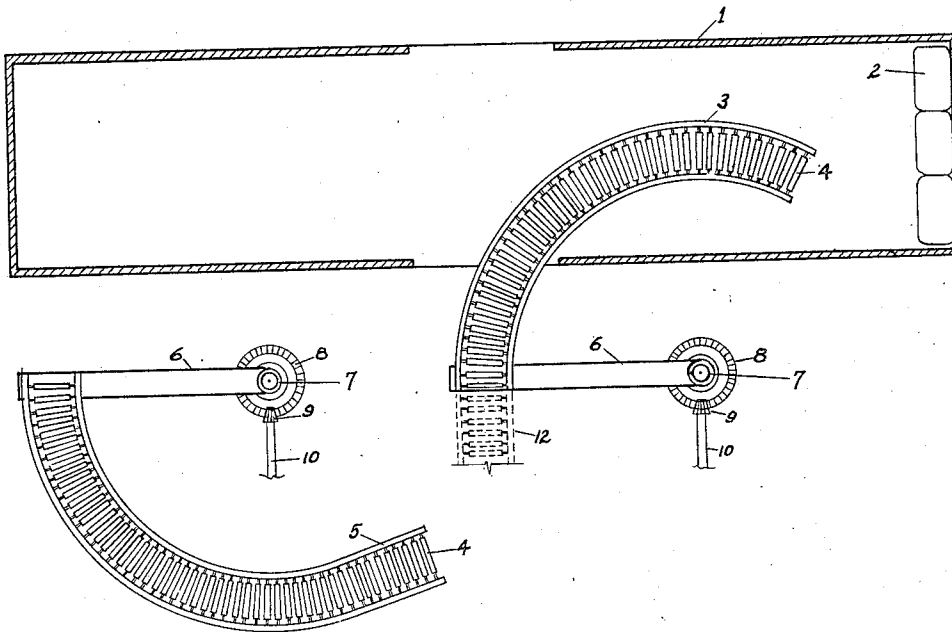


Fig. 1

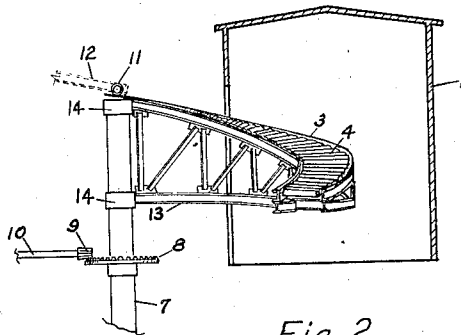


Fig. 2

Alvan C. Sherrill INVENTOR.
BY *Raymond S. Schabert*
ATTORNEY.

UNITED STATES PATENT OFFICE

2,204,828

CONVEYER

Alvan C. Sherrill, Barberton, Ohio, assignor to
Pittsburgh Plate Glass Company, Allegheny
County, Pa., a corporation of Pennsylvania

Application May 6, 1938, Serial No. 206,392

2 Claims. (Cl. 193—35)

This invention is related to conveyers for use in loading freight cars. In loading of such cars, the provision of some means by which articles or matter to be loaded are delivered to the packing or loading point in the car is often desirable. In accordance with my invention, I have devised a conveyer of simple construction whereby articles to be loaded may be delivered to any convenient point within a car to be loaded.

10 The invention will be fully understood by reference to the following specification illustrated by the accompanying drawing in which

Figure 1 is a diagrammatic plan view of two conveyers constructed in accordance with this invention, illustrating its use in connection with an ordinary box car which is shown in vertical section.

Figure 2 is a diagrammatic side view showing one of the conveyers in perspective, illustrated as used with a box car shown in horizontal section.

In the embodiment of my invention herein shown, I provide a rotatable vertical support such as a post or pedestal 7 suitably supported and journaled in bearings (not shown). Suitably constructed members 6 are secured at one end to the posts 7 at 14 and project radially therefrom, serving as means to support the truss 13 upon which the conveyer arm proper rests. The conveyer arm may be of convenient construction and as shown herein comprises side members 3 which may serve as guides and also as supports for the rolls 4 which are rotatably mounted thereupon. Preferably, the conveyer arm is constructed in the form of a helix or equivalently curved construction, supported at one end or at a point or points intermediate its ends and projects outwardly from the support 6, whereby articles supplied to the conveyer at 40 11, slide down the conveyer by force of gravity and are delivered to a point within the car without the aid of mechanical driving means.

Owing to the curved construction of the conveyer, it may be swung into the car whereby 45 articles placed thereupon may be delivered to any convenient point within the car.

In order to conveniently rotate the conveyer arm, a suitable rotating mechanism is secured to post 7. This mechanism may comprise a ring gear 8 secured at post 7 and meshing with gear 9 which is secured to shaft 10 which may be rotated by a suitable source of power not shown.

In the operation of this device, articles or material to be loaded in the car are supplied to 55 the conveyer by an auxiliary conveyer diagrammatically illustrated at 12 which engages the main conveyer with a roller contact 11. Articles so delivered fall upon the rotatable rolls 4 and slide down the conveyer to the point of discharge 60 by force of gravity. When loading of the car

is first begun, the conveyer may be swung in to the end of the car and as it is gradually loaded, the conveyer may be swung away from the load and out of the car when loading is complete.

In order to conveniently load both ends of the car, it is preferred to provide two conveyers of similar construction which are arranged to travel in opposite directions. Preferably, at least one of these conveyers is provided with a substantially uncurved portion 5 whereby, when both 10 ends of the car are loaded, articles may be conveniently supplied to the center portion of the car adjacent its doors. If desired, these conveyers may be mounted to be swung in opposite directions in a pair of intersecting arcs. By this 15 means, an auxiliary conveyer or delivery chute 12 disposed adjacent the intersection of the arcs may be used to deliver articles to either conveyer without complicated adjustment.

In the embodiment shown herein, the conveyer 20 arm is shown as being supported by and secured to arms 6 at or near the terminal portion of the arm. This is in no way necessary and occasionally, it may be desirable to support the conveyer arm at some point intermediate its ends in order 25 to reduce the torque exerted upon the arms 6 and post 7. By this means, the weight upon one side of the arms will be more or less balanced by the weight of that portion of the conveyer arm which extends over the opposite side of arms 6. 30 If desired, suitable counterbalancing devices may be provided in order to balance the conveyer arm more thoroughly as it rests upon arms 6, or the conveyer may be supported (or powered) by 35 wheels on the under side of the conveyer, or by a rail mounted on the conveyer supported by stationary wheels.

Although the present invention has been described in connection with the specific details of certain embodiments thereof, it is not intended 40 that such embodiments shall be regarded as limitations upon the scope of the invention except insofar as found in the accompanying claims.

I claim:

1. A car loading device comprising a pair of helically curved conveyer arms each mounted to be swung in substantially circular arcs through the door of a car but in opposite directions, said arcs intersecting, and an auxiliary conveyer for supplying matter to be loaded to said conveyer arms adjacent to intersection of said arcs. 50

2. A car loading device comprising a pair of curved conveyer arms each mounted to be swung in substantially circular arcs through the door of a car but in opposite directions, said arcs intersecting, and an auxiliary conveyer for supplying matter to be loaded to said conveyer arms adjacent to intersection of said arcs. 55

ALVAN C. SHERRILL. 60