

No. 671,286.

Patented Apr. 2, 1901.

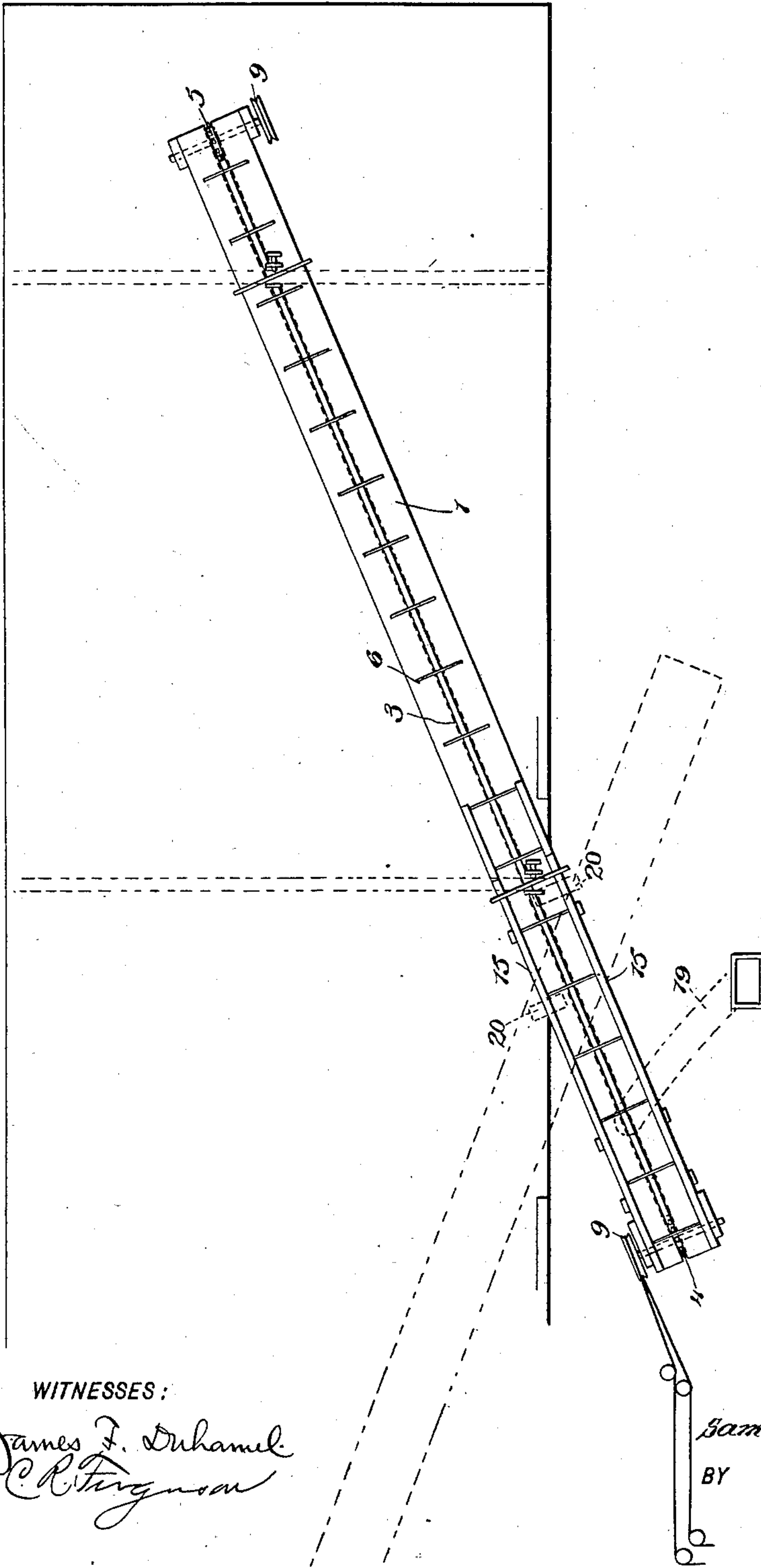
S. E. KURTZ.  
CAR LOADER.

(Application filed Dec. 5, 1900.)

(No Model.)

2 Sheets—Sheet 1.

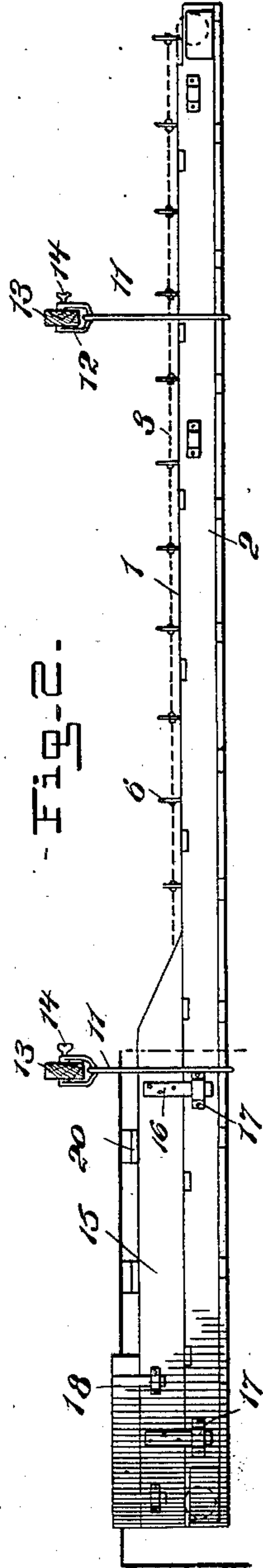
Fig. 1.



WITNESSES:

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Fig. 2.



INVENTOR

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ATTORNEYS

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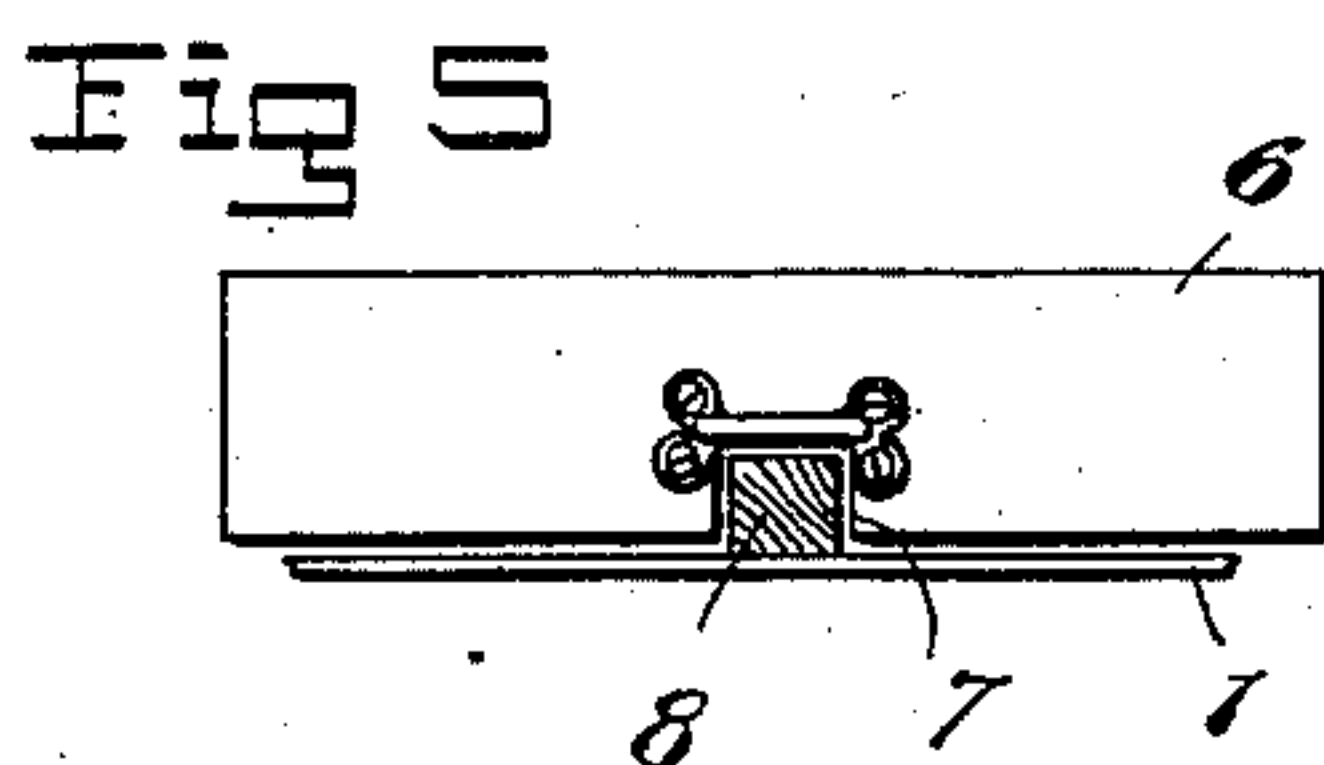
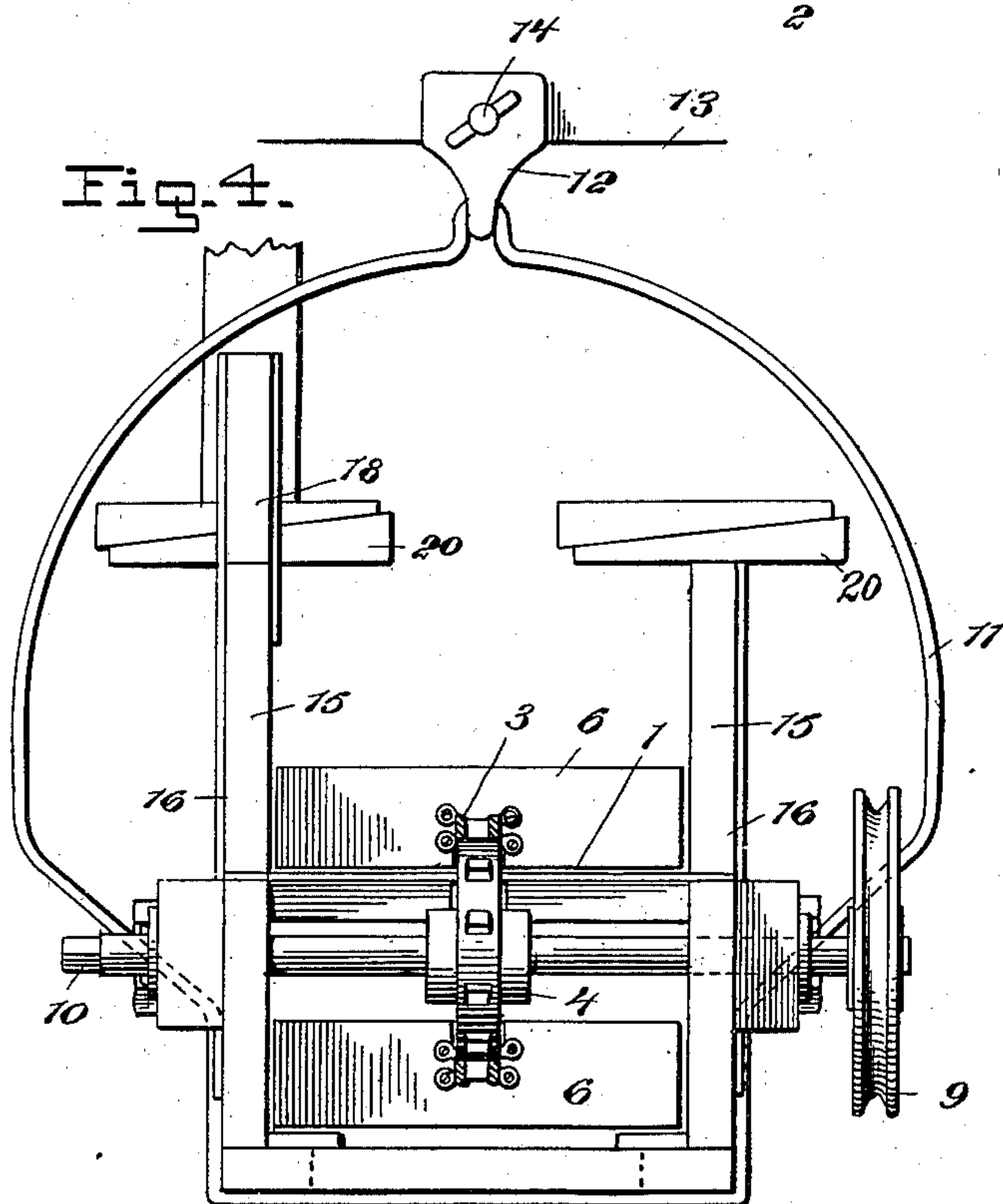
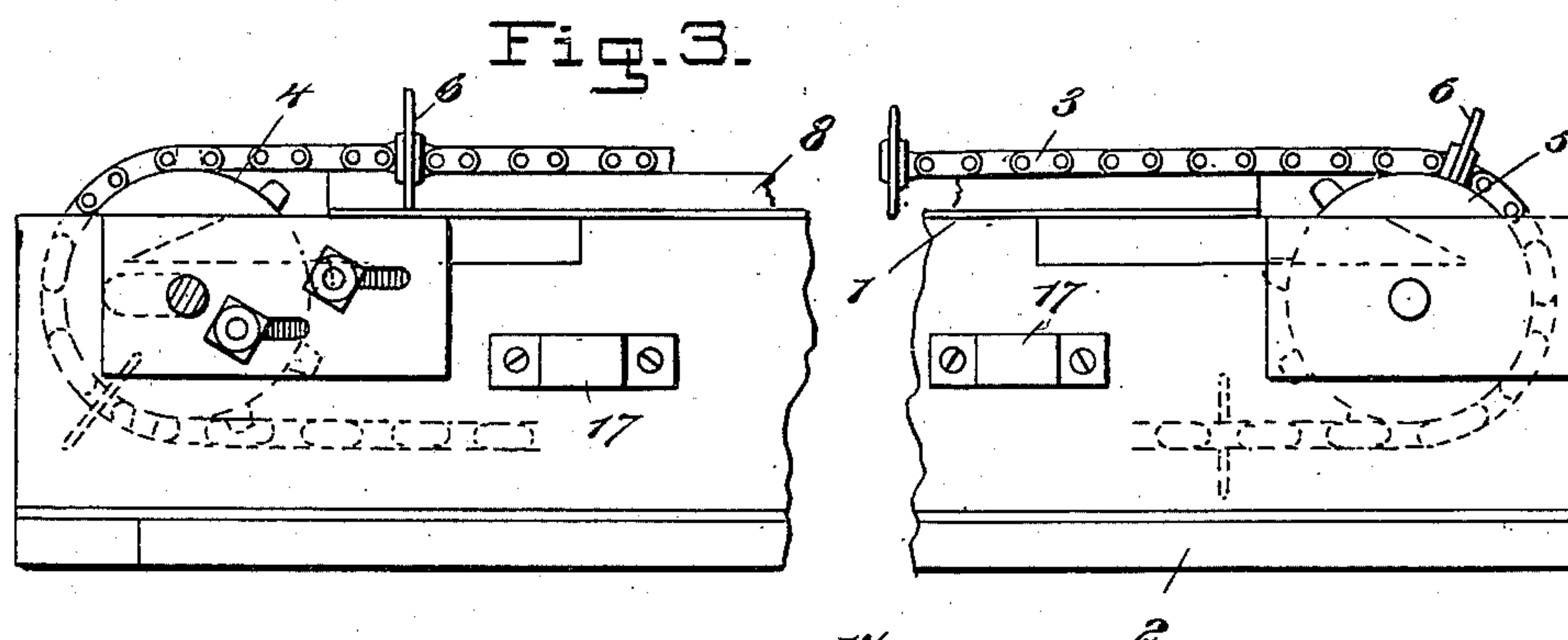
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# UNITED STATES PATENT OFFICE.

SAMUEL E. KURTZ, OF SAC CITY, IOWA, ASSIGNOR OF ONE-HALF TO HENRY KURTZ, OF SAME PLACE.

## CAR-LOADER.

SPECIFICATION forming part of Letters Patent No. 671,286, dated April 2, 1901.

Application filed December 5, 1900. Serial No. 38,767. (No model.)

*To all whom it may concern:*

Be it known that I, SAMUEL E. KURTZ, a citizen of the United States, and a resident of Sac City, in the county of Sac and State of Iowa, have invented a new and Improved Car-Loader, of which the following is a full, clear, and exact description.

This invention relates to improvements in devices for loading grain or the like into cars; and the object is to provide a loader of simple construction adapted to be removably attached to a car and by means of which grain received from an elevator or building may be rapidly loaded into the car.

I will describe a car-loader embodying my invention and then point out the novel features in the appended claims.

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

Figure 1 is a plan view of a loader embodying my invention. Fig. 2 is side view thereof. Fig. 3 is a broken side view drawn on a larger scale than Figs. 1 and 2. Fig. 4 is an end view of the loader, and Fig. 5 is a detail view of one of the conveyer-paddles.

The loader comprises a platform 1, from which side pieces 2 extend downward, forming a box-like construction underneath the platform. It may be here stated that this platform will consist of suitable metal—such, for instance, as zinc. Movable over the platform is an endless conveyer-chain 3. This chain runs around sprocket-wheels 4 5 at the ends of the platform, and attached at intervals to the chain and extended entirely across the platform are scraper-blades 6. These scraper-blades at their central portion at the bottom are provided with notches 7, which engage over a guide-strip 8, extended longitudinally on the top of the platform. On the shafts of the sprocket-wheels are band-wheels 9 for receiving a band operated by any suitable motor; but the wheels may be operated manually by a crank placed on the angular end of the shafts. The object in putting a band-wheel at each end or in connection with the shaft of each sprocket-wheel is to provide for reversing the loader in a car—that is, when one end of the car is loaded the loader is to

be shifted to load into the other end, it being understood that the loader extends diagonally of the car, as plainly indicated in Fig. 1, with its outer end extended outward through the doorway. The device is supported in a car by means of hangers 11, which engage with clamping-clips 12, designed to be secured to rafters 13 of the car. These devices are clamped to the rafters by means of set-screws 14.

Removably connected to the sides of the loader at the end projected through the doorway are side boards 15. Attached to these side boards are metal bars 16, which engage with keepers 17, attached to the side pieces 2. If desired, an extra side piece 18 may be attached to either one of the side pieces 15, as indicated in Fig. 4. These side pieces are to prevent the outflow of grain or the like from the sides of the loader, at the projecting end thereof. The object in making the side pieces removable is so they may be employed at either end or the end projected from the car, this of course depending upon the direction in which the loader is extended in the car. It may be here stated that the loader may be changed from one end to the other without removing it from the car.

In operation the grain is delivered from an elevator or other building through a flexible chute (indicated by dotted lines 19) which delivers the material between the side pieces 15. The material falling from the conveyer will first fall into the car near the doorway. Then as the grain forms side boards by stacking up at each side the car fills gradually toward the other end. Then the loader is placed in the opposite end of the car, which is similarly loaded.

The loader is prevented from swinging by means of two reverse wedges 20, placed between each of the side boards 15 and the top sill of the door-casing.

A loader embodying my invention has a capacity of about one thousand bushels per hour if operated by hand and about three thousand bushels per hour if operated by an engine.

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



1. A device for loading grain or the like into cars, comprising a platform, means for suspending the platform from the ceiling of a car, an endless chain movable over the platform, scrapers carried by said endless chain, and side boards extended upward from the platform at the end extended through the doorway of the car, the sides of the platform within the car being open so that material may first discharge from the sides at the end nearest the doorway, substantially as specified.

2. A device for loading grain or the like into cars, comprising a platform, an endless chain movable over said platform, scraper-blades attached to the said chain and having notches at the under edge, a longitudinal guide-strip extended into said notches, and means for suspending the loader from the ceiling of a car and diagonally thereof with its receiving end projected through the doorway of the car, substantially as specified.

3. A device for loading grain or the like into a car, comprising a platform, hangers for receiving said platform, clamping-clips attached to said hangers and adapted for en-

gagement with rafters of the car, reverse wedges adapted to be placed between the side boards of the platform and the top sill of the car-door frame, and an endless conveyor movable over said platform, substantially as specified.

4. A device for loading grain into a car, comprising a platform placed diagonally in the car and having one end projected through the doorway thereof, means for suspending the platform from the car-ceiling, a sprocket-chain movable over the platform, blades mounted at intervals on said chain, sprocket-wheels at the ends of the platform with which the chain engages, driving-pulleys on the shafts of said sprocket-wheels, and upwardly-extended side boards at the outwardly-projected end of the platform, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

SAMUEL E. KURTZ.

Witnesses:

PHIL. SCHALLER,  
M. F. SALOSEK.