

R. GROGAN & C. HENSON.

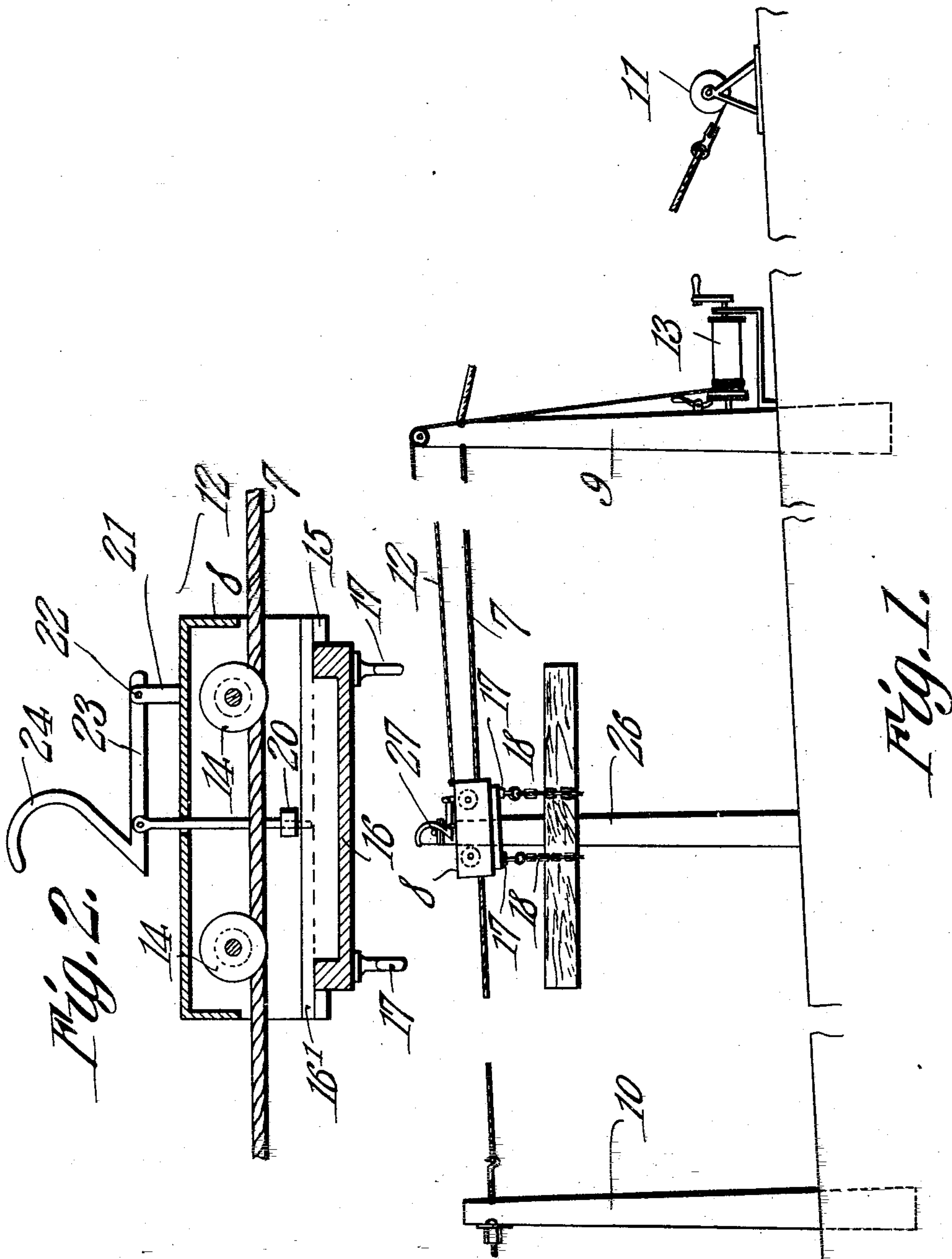
LOG CONVEYER.

APPLICATION FILED JULY 3, 1909.

Patented Nov. 2, 1909.

2 SHEETS—SHEET 1.

939,011.



Witnesses

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Fig. 3.

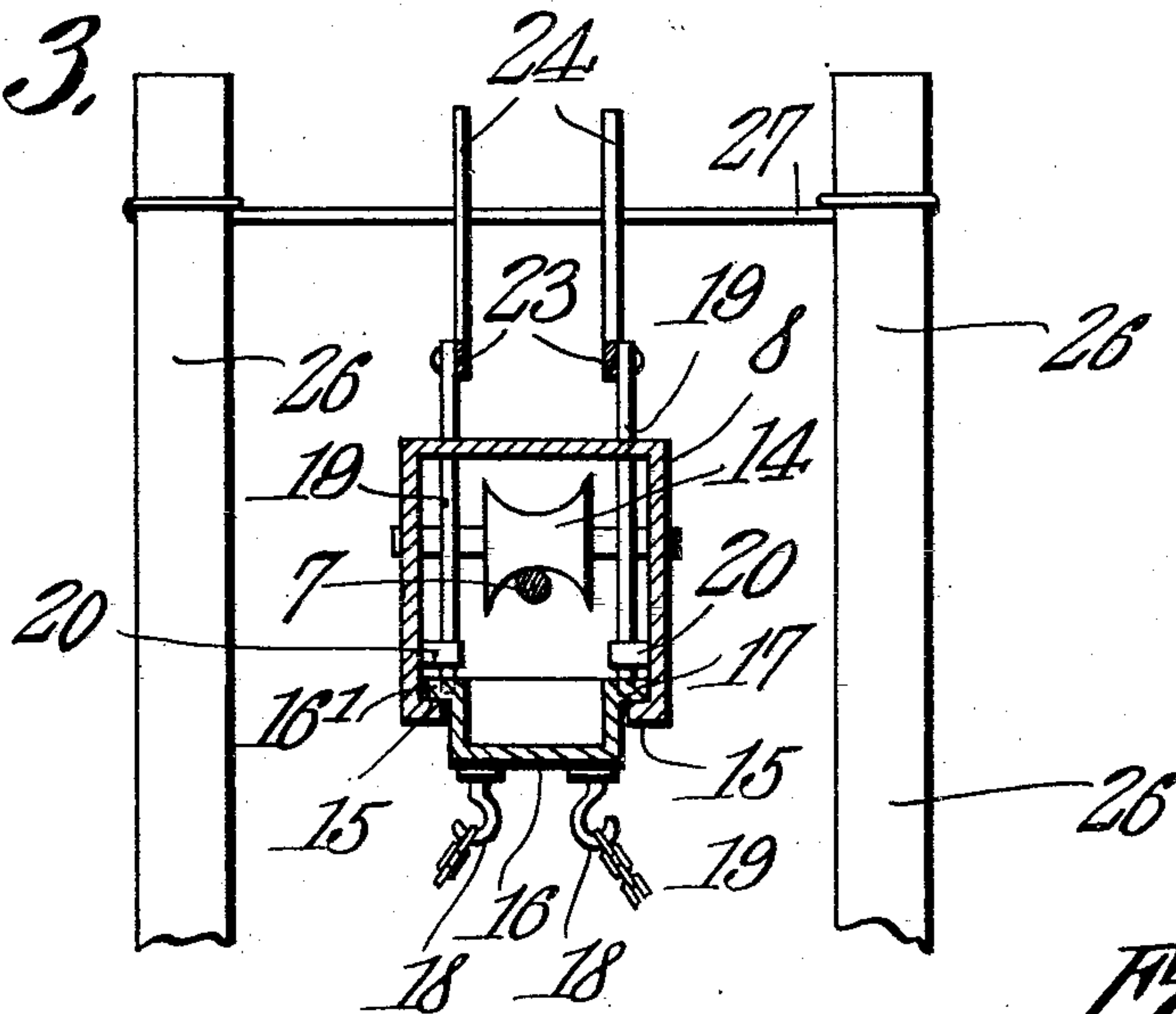


Fig. 4.

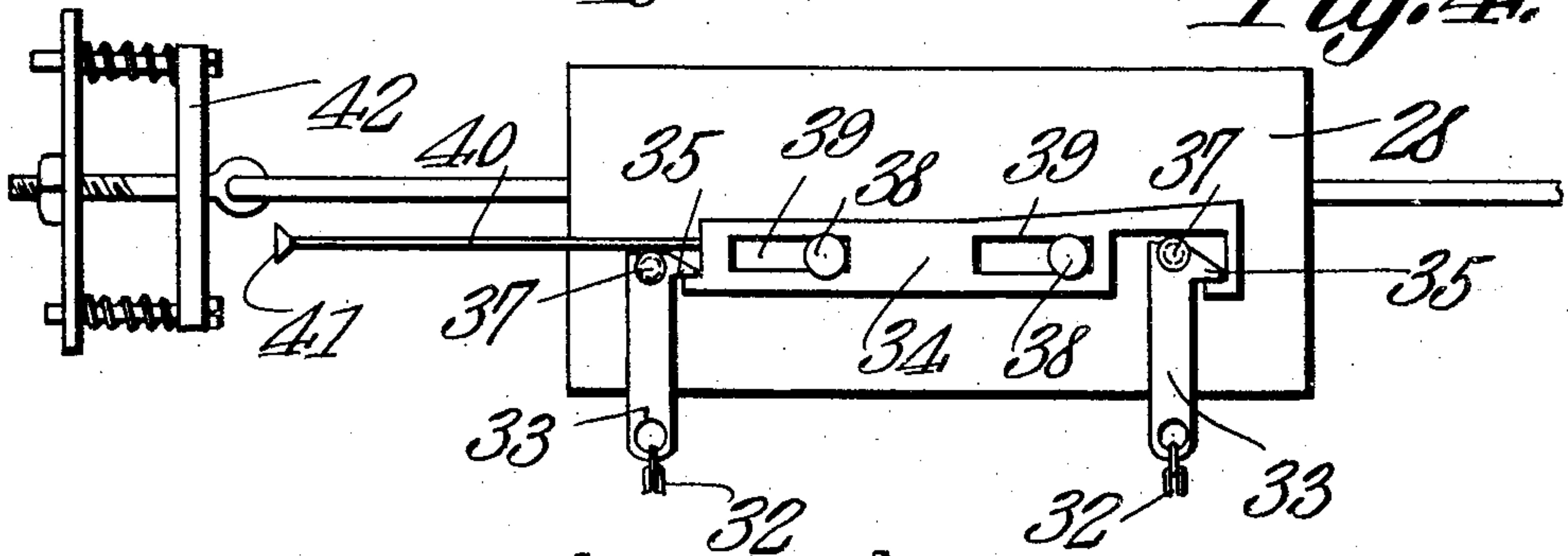
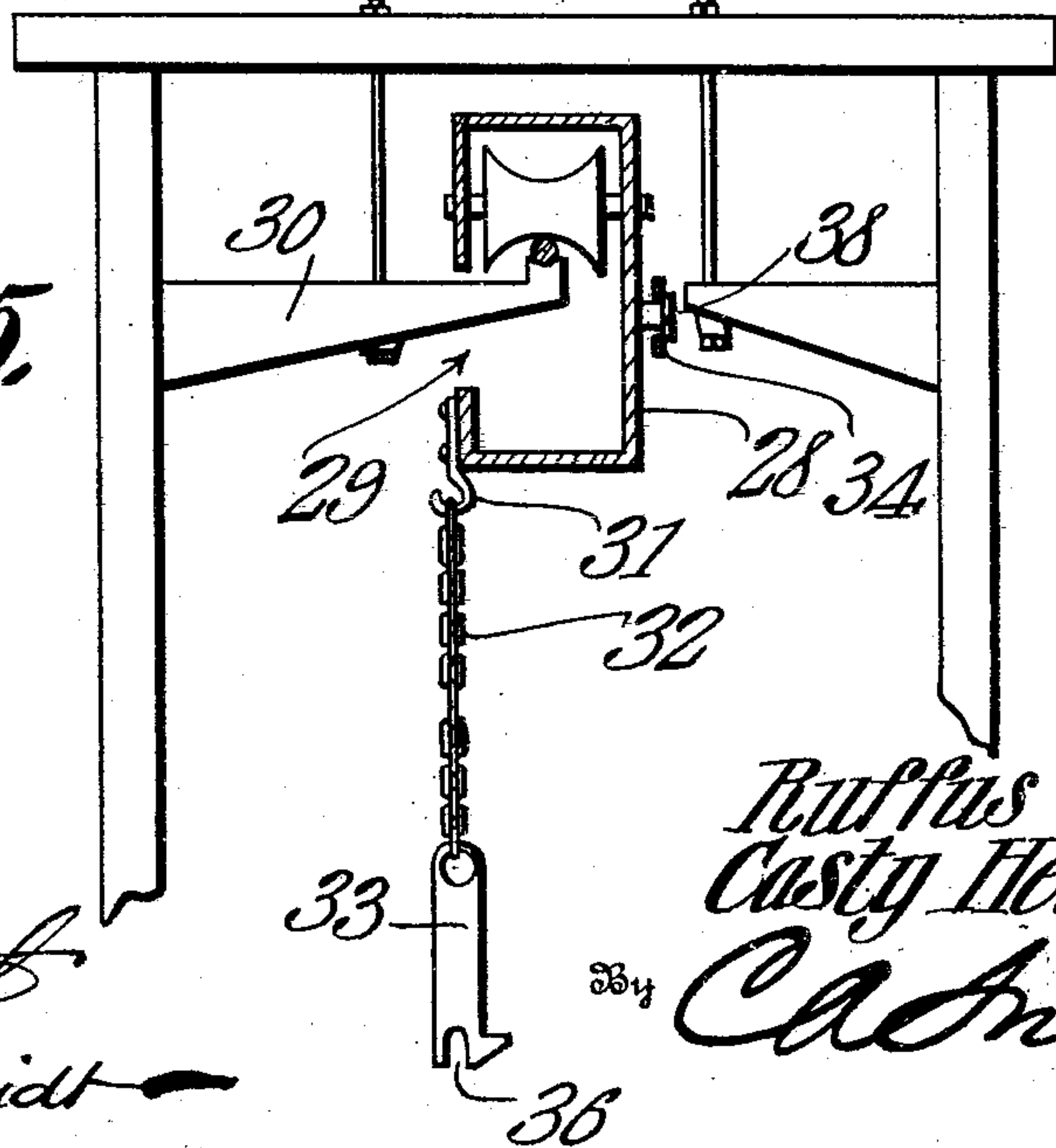


Fig. 5.



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UNITED STATES PATENT OFFICE.

RUFFUS GROGAN AND CASTY HENSON, OF CANTON, NORTH CAROLINA.

LOG-CONVEYER.

939,011.

Specification of Letters Patent.

Patented Nov. 2, 1909.

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To all whom it may concern:

Be it known that we, RUFFUS GROGAN and CASTY HENSON, citizens of the United States, residing at Canton, in the county of Haywood, State of North Carolina, have invented a new and useful Log-Conveyer, of which the following is a specification.

This invention relates to log conveyers of that type characterized by a suspended cable which forms a trackway on which a carriage, having log supporting means, travels.

The invention relates more particularly to the carriage, and its object is to provide the same with means for automatically releasing the load, and to this end it consists in the novel construction and arrangement of parts to be hereinafter described and claimed, reference being had to the drawings hereto annexed, in which,

Figure 1 is an elevation of one form of the invention. Fig. 2 is a longitudinal section of the carriage, and Fig. 3 is a cross section thereof. Fig. 4 is an elevation of another form of carriage, and, Fig. 5 is a cross section thereof.

In the drawings, 7 denotes a suspended cable which forms a trackway on which the carriage 8 is mounted for travel. The cable is supported at its end by posts 9 and 10 respectively. That end of the cable which is supported by the post 9 is connected to a hauling apparatus 11, the cable passing through an opening made in said post. The opposite end of said cable is made fast to the post 10. To one end of the carriage is made fast a hauling line 12 which is wound on a drum 13 provided with suitable operating means. The trackway is inclined in the direction of the place at which the logs are to be deposited, and the hauling line is provided for returning the carriage. The hauling apparatus 11 is for the purpose of letting out the cable 7 so that it may sag or lower, whereby the log is lowered to the ground.

The carriage is a box-like structure between the side walls of which are mounted wheels 14 which run on the cable the axles of the wheels being mounted in said side walls. The end walls of the carriage are cut away to clear the cable. The carriage is open at the bottom, and at the lower ends of the end walls are inturned flanges 15 forming ledges on which a slide 16 is supported. The slide has at its opposite sides outturned flanges 16' which are engageable

with the flanges 15, and the slide carries depending hooks 17 to which the ends of chains 18, which are passed around the log, are connected, the connection being such that the chains may be applied to and removed from the log. Each end of the slide is equipped with a pair of laterally spaced hooks, in order that two chains may be passed around the log.

In the flanges 15 and 16' are registering openings which are adapted to be entered by latches 19 for locking the slide to the carriage. The latches are in the shape of rods which pass through openings in the top of the carriage, and through guides 20 on the side walls of the carriage, on the inside thereof. On the top of the carriage are mounted brackets 21 to which are pivoted at 22, one of the ends of levers 23, the opposite ends of which are in the shape of hooks 24. The hook shaped ends of the levers are loosely connected to the latch rods 19, by reason of which it will be evident that when the lever swings upwardly, the latch rods will be withdrawn from the openings in the flanges 15 and 16', whereby the slide is released. At the place where the logs are to be deposited, are located two posts 26 which are connected by a wire or cable 27 extending transversely of the trackway, above the same, and located in the path of the hook 24.

In operation, the log is suspended from the slide 16, and after locking the same to the carriage, the latter is permitted to run down the trackway by gravity to its destination, by paying out the line 12. When the hooks 25 strike the cross wire 27, the latches release the slide, after which the trackway is lowered by means of the apparatus 11 until the log is in contact with the ground. The carriage is then pulled back by the hauling line 12 whereby the slide is released, the latter readily slipping off the carriage as the weight of the log is now not borne by the carriage, the log resting on the ground as already stated. After the log has been released, the slide is placed back on the carriage and the carriage is returned by the hauling line for the next log. The latches work tight in order that they will not drop back into locking position when the carriage is being lowered.

The apparatus herein described is very simple in structure, and is reliable in operation. The release of the log is readily con-

trolled from a distance. The posts 26 will be placed wherever it is desired to deposit the logs.

In the modified form of apparatus shown in Figs. 4 and 5, the carriage is indicated at 28. This carriage is also a box-like structure which is open at its ends to let the cable through, the wheels of the carriage being mounted on the inside thereof. One of the side walls of the carriage is cut away to form an opening 29 in order that the carriage may clear the supporting arms 30 of the cable. This form of apparatus can be employed with a trackway of considerable length requiring a plurality of supporting posts.

Upon one side of the carriage are secured by means of hooks 31 or other suitable means, one of the ends of chains 32, the other ends of which carry latches 33, which are engageable with a keeper 34, slidably mounted upon one of the side walls of the carriage on the outside thereof. The latches are flat plates which are connected at one end to the chains and have at their opposite ends a hook 35. At this end of the latches their edges are recessed as indicated at 36. On the aforesaid side walls of the carriage are headed studs 37 which are adapted to enter the recesses 36 when the latches are in locking position, to prevent the latter from slipping off the carriage sidewise. The keeper 34 is a flat plate which is slidably mounted on the side wall of the carriage, the latter having headed studs 38, which extend through longitudinal slots 39 made in the plate, whereby the latter is held in place on the carriage. At its ends the keeper plate is suitably shaped to engage the hooks 35. The slots 39 are of sufficient length to permit the keeper to slide rearwardly to release the latches.

From one end of the keeper plate 34 projects a stem 40 having at its outer end a head 41 adapted to strike a bumper 42 mounted in the path thereof, at the place where the log is to be deposited. When the stem strikes the bumper, the keeper plate is slid rearwardly, whereupon the latches are released, and drop as shown in Fig. 5, thus releasing the log.

While we have described the apparatus particularly as used for conveying logs, it is to be understood that it may be used to convey other articles and that it may be arranged in a double track system, the carriage descending on one track serving to cause the return of an empty carriage on the other track.

Having thus described our said invention, what we claim as new and desire to protect by Letters Patent is:—

1. In a conveyer, an elevated trackway, a carriage mounted thereon, a slide mounted on the carriage, log holding means on the slide, a latch for locking the slide to the

carriage, a trip device on the carriage for releasing the latch, and means for operating the trip device.

2. In a conveyer, an elevated trackway, a carriage mounted thereon, a slide mounted on the carriage, log holding means on the slide, a latch for locking the slide to the carriage, a trip on the carriage for releasing the latch, and means for actuating the trip device, said means being mounted adjacent to the trackway in the path of said device.

3. In a conveyer, an elevated trackway, a carriage mounted thereon, said carriage having laterally directed flanges on its bottom, a slide having flanges engageable with the flanges of the carriage, and said flanges having alined openings, a latch stem engageable with said openings, a lever operatively connected to the latch stem for withdrawing the same, means for actuating the lever, and log holding means on the slide.

4. In a conveyer, an elevated trackway, a carriage mounted thereon, said carriage having laterally directed flanges on its bottom, a slide having flanges engageable with the flanges of the carriage, said flanges having alined openings, a latch stem engageable with said openings, a lever operatively connected to the latch stem for withdrawing the same, a trip device located adjacent to the trackway in the path of the lever, and log holding means on the slide.

5. In a conveyer, an elevated trackway, a carriage mounted thereon, said carriage having laterally directed flanges on its bottom, a slide having flanges engageable with the flanges of the carriage, and said flanges having alined openings, a latch stem engageable with said openings, a lever operatively connected to the latch stem for withdrawing the same, said lever being hook-shaped at one of its ends, a trip device extending transversely of the trackway in the path of the hook-shaped end of the lever, and log holding means on the slide.

6. In a conveyer, an elevated trackway, a carriage mounted thereon, chains connected at one of their ends to the carriage, latches carried by the other ends of the chains, a keeper mounted on the carriage and engageable with the latches, and means for releasing the keeper.

7. In a conveyer, an elevated trackway, a carriage mounted thereon, chains connected at one of their ends to the carriage, latches carried by the other ends of the chains, a sliding keeper mounted on the carriage, and engageable with the latches, and means mounted adjacent to the trackway in the path of the keeper for tripping the same to release the latches.

8. In a conveyer, an elevated trackway, a carriage mounted thereon, chains connected at one of their ends to the carriage, latches carried by the other ends of the chains, a

sliding keeper mounted on the carriage and engageable with the latches, a stem projecting from the keeper, and a bumper mounted in the path of the stem for tripping the
5 keeper to release the latches.

9. In a conveyer, an elevated trackway, a carriage mounted thereon, chains connected at one of their ends to the carriage, latches carried by the other ends of the chains, said
10 latches having notched edges, headed studs on the carriage adapted to enter said notches,

a keeper mounted on the carriage and engageable with the notches, and means for releasing the keeper.

In testimony that we claim the foregoing 15 as our own, we have hereto affixed our signatures in the presence of two witnesses.

RUFFUS GROGAN.
CASTY HENSON.

Witnesses:

G. N. HENSON,
F. R. MEASE.