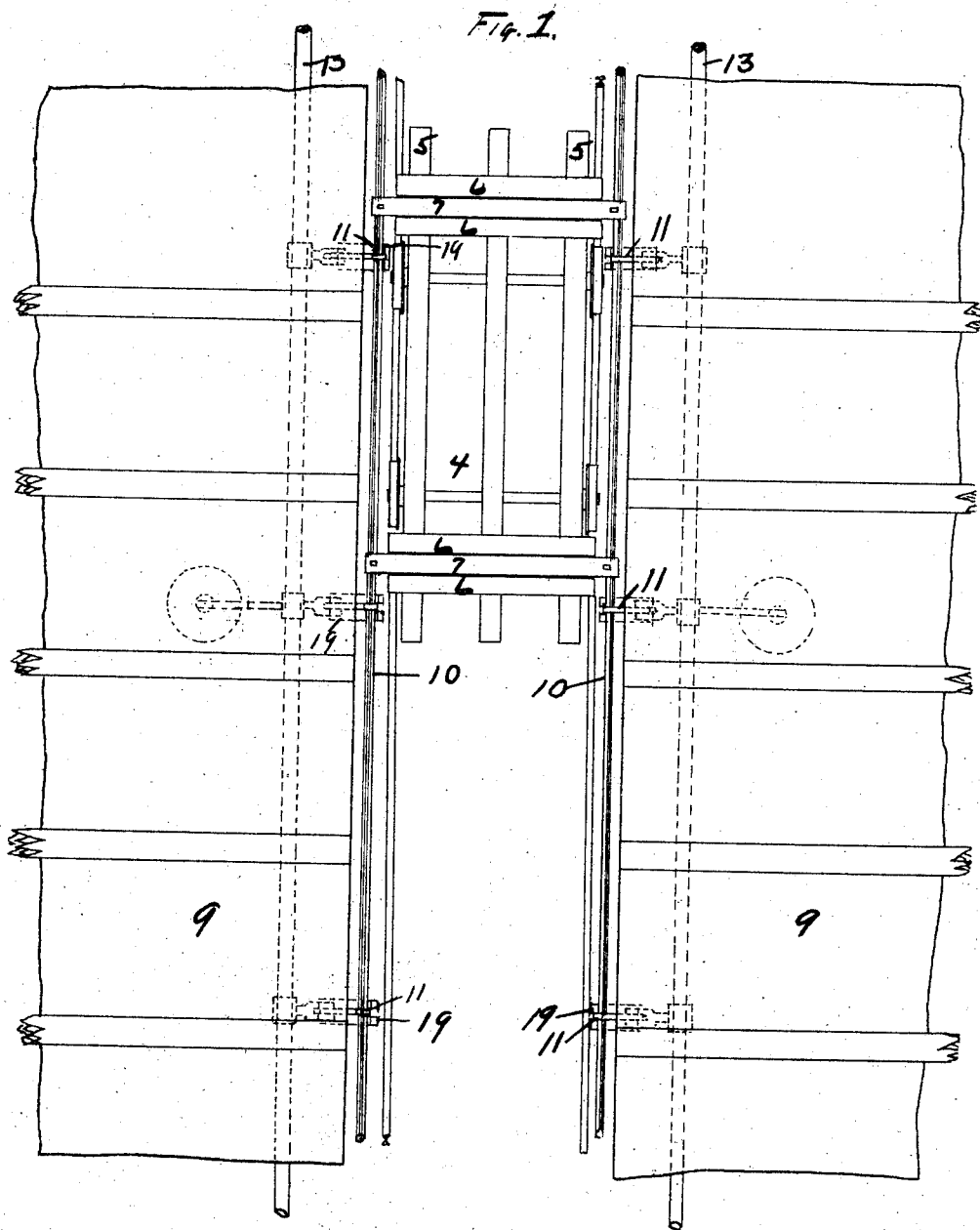


No. 883,032.

PATENTED MAR. 24, 1908.

W. D. LINK.
LOG DUMPING DEVICE.
APPLICATION FILED JULY 18, 1907.

3 SHEETS—SHEET 1.



Witnesses
E. P. Eagles
C. J. Ludwig

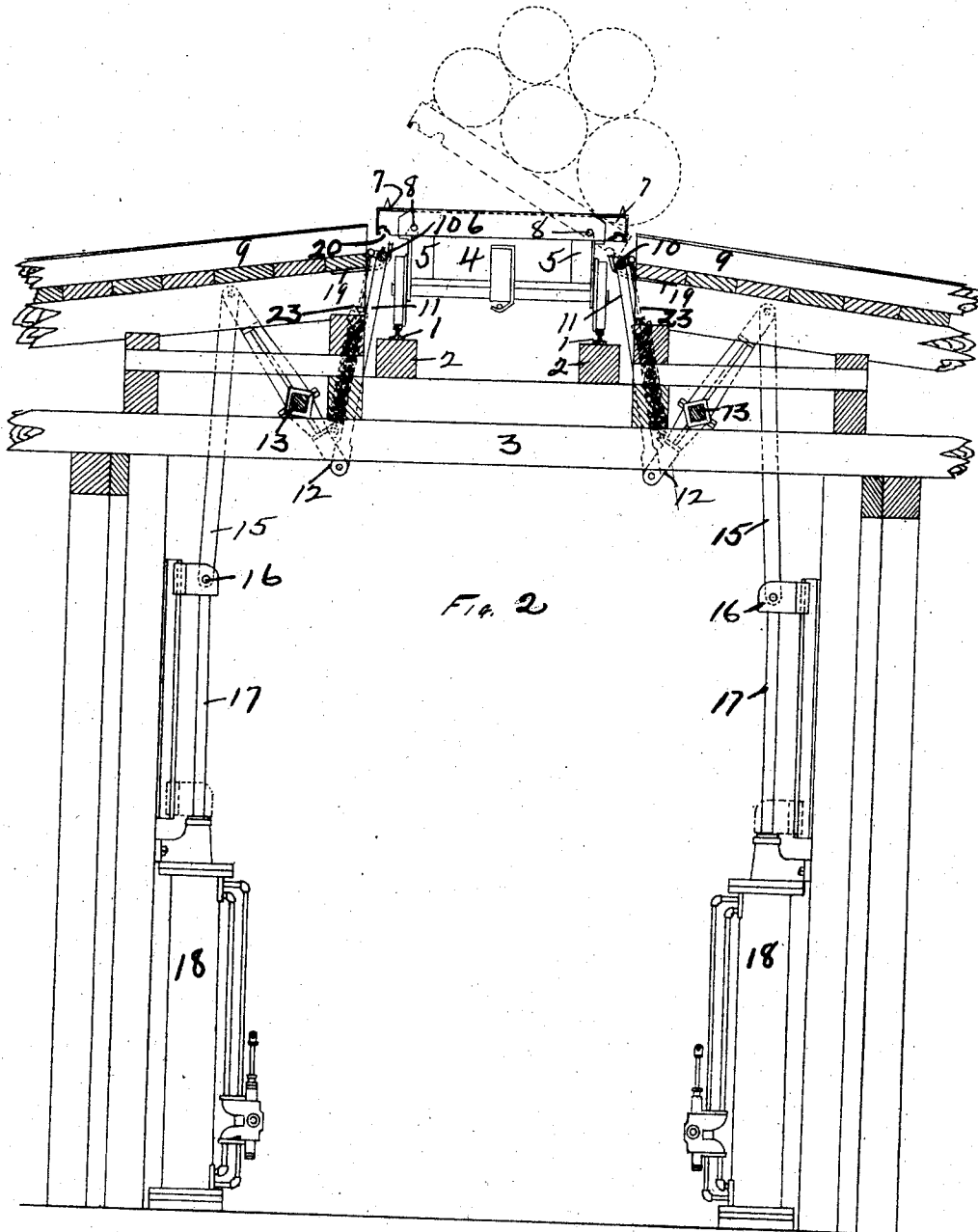
Inventor
William D. Link
H. A. C. Link
Attorney

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3 SHEETS—SHEET 2.



Witnesses
E. B. Engler
O. J. Ludwig

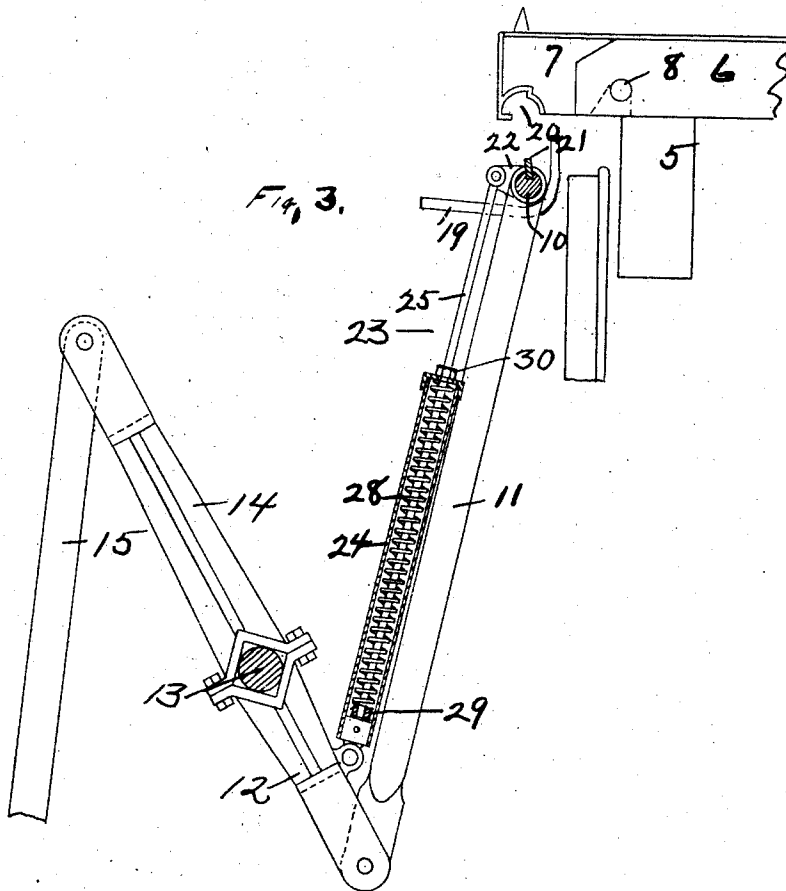
Inventor
William D. Link
By A. C. Reed
Attorney

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3 SHEETS—SHEET 3.



Witnesses
E. B. Eagles
C. Ludwig

Inventor
William D. Link
by H. E. Lord
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM D. LINK, OF ERIE, PENNSYLVANIA.

LOG-DUMPING DEVICE.

No. 883,032.

Specification of Letters Patent.

Patented March 24, 1908.

Application filed July 18, 1907. - Serial No. 384,441.

To all whom it may concern:

Be it known that I, WILLIAM D. LINK, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, have invented new and useful Improvements in Log-Dumping Devices, of which the following is a specification.

This invention relates to log dumping devices and consists in certain improvements in the construction thereof as will be hereinafter fully described and pointed out in the claims.

The object of the invention is to provide means whereby vehicles, ordinarily cars, may be dumped so that they may be unloaded expeditiously.

The invention is illustrated in the accompanying drawing.

Figure 1 is a plan view of the apparatus. Fig. 2 a cross section of the same. Fig. 3 a detail of the bolster locking mechanism for the dumping bar.

1 marks the track; 2 the stringers on which the rails are laid; 3 the trestle supporting track; 4 the car. The car is provided with the usual side beams 5. The stationary bolsters 6 are secured to the side beams 5. The two bolsters 6 are arranged a short distance apart leaving a space between them, and the tilting bolster 7 is arranged in this space.

The bolster is preferably mounted so it may tilt in either direction on the rods 8, the stationary bolsters 6 holding it in place.

The log ways 9 are arranged on each side of the track in position to receive the logs as they are dumped from the car.

It is desirable to be able to engage the bolsters and dump the cars at any position along the log ways, and also desirable to operate upon both bolsters of the car at once. In the present device this is accomplished.

Dumping bar 10 extends along the track preferably the full length of the log ways. It is connected by the thrust bars 11 with the rock arms 12. The rock arms 12, are mounted on the shafts 13. Rock arms 14 are also fixed on the shafts 13, and the rock arms 14 are connected with the pitmen 15. These pitmen are connected with the cross heads 16, and the cross heads are connected with the pistons 17, forming part of the engines 18, the engines being provided with the usual valves and other mechanism for controlling them.

It will be noted that the bars 10 are raised

at each side and that either may be operated so that the logs may be dumped either to one side or the other as desired. The shafts 13 extend preferably the full length of the bars 10, and numerous thrust bars 11, are provided so that the bar 10 may have ample support.

Bars 10 will be in position to engage the bolsters in any position the car may be placed along the log ways.

When sufficient power is provided to operate the apparatus rapidly, the bolsters are apt to over-run the bars 10 so that an undesirable shock is produced as the bolsters return under the influence of gravity. To prevent this, I prefer to lock the bolsters with the bars 10 as the bars are elevated. The bolsters are provided with the under-cut grooves 20, one at each end. The bars 10 are provided with the spline 21 extending the full length of the bars. An oscillating arm 22, extends from the bar 10 and this is connected with the rock arm 12 by the connection 23. It can readily be observed as the rock arm 12 is elevated the bar 10 will be rocked through the influence of the connection 23 and the oscillating arm 22 so that after the bar enters the groove 20, the spline 21 is turned into the under cut portion and the bar 10 and bolsters 7 are securely locked together.

I prefer to make the connection 23 a yielding and adjustable one; and in order to make it yielding I provide pipe 24 which is connected with the arms 12 by the rod 25. The pipe 24 has the flange nut 26 and the rod 27 extends through this flange nut into the pipe. The spring 28 is arranged around the rod within the pipe.

Nut 29 is secured to the end of the rod and the spring 28 extends between the nut 29 and the flange nut 26; adjusting nut 30 is screwed onto the rod outside of the pipe so that the length of the connection 23 may be adjusted by this nut. By adjusting the length of the connection 23, the position of the spline 21 may be controlled so that it may be made to enter the under cut groove 20. By making the connection yielding it permits a further movement of the parts after it has engaged the under cut portion of the groove. This obviates the necessity for a nice adjustment and permits of locking the parts together at an earlier point in the travel of the bar 10.

In order to hold the bars 10 in position to enter the grooves 20 I provide the guides 19

which are secured to the log ways and extend upwardly so as to engage the bars 10. After the bars 10 enter the grooves they are held in position and guided by the bolsters 7. In addition to saving the bolsters and parts from shock, locking the bars 10 with the bolsters prevents the disengagement of the bars 10 from the bolsters so that the bars 10 are guided when out of engagement with the guiding bars 19 so that the return of the bars 10 to the proper place on the guides 19 is assured.

What I claim as new is:

1. In a log dumping device the combination with a track; of a dumping bar extending along the track and adapted to dump a car independently of a movement of the track; and means for actuating the bar.

2. In a log dumping device the combination with a track; of a dumping bar extending along the track; and adapted to dump a car independently of a movement of the track; and means for actuating the bar comprising a plurality of devices acting on the bar at different points.

3. In a log dumping device the combination with a track; of two dumping bars, one on each side of the track and extending along the same; and means for actuating said bars independently.

4. In a log dumping device the combination with a track; a car provided with tilting bolsters; a bar for actuating said bolsters to drop a bar independently of a movement of the track and means for actuating the bar.

5. In a log dumping device the combination with a track; of two dumping bars, one on each side of the track and extending along the same; and means for locking the bar and bolster together while the bolsters are tilted.

6. In a log dumping device the combination with a track; a car upon the track; of a dumping bar extending along the track said bar being arranged to rock; means for elevating the bar and rocking the same as the bar is elevated; a car bolster on said car being engaged by said bar with the car upon the track; and means on the bolster for locking it with the bar as the bar rocks.

7. In a log dumping device the combination with a track; a car; tilting bolsters on the car having under cut grooves therein; a dumping bar extending along the track in position to enter the grooves to tilt the bolsters; a spline along the bar adapted to engage the under cut groove and lock the bar with the bolsters as the bar rocks; and means for actuating and rocking the bar.

8. In a log dumping device the combina-

tion with a track; a rock shaft; means for operating the rock shaft; a dumping bar; rock arms on the shaft; connections between the shaft and the bar for communicating the movement of the rock shaft to the bar; an oscillating arm on the bar; a connection between rock arm and said oscillating arm to rock the bar as it is actuating; a car; a car bolster on said car; said bolster having an undercut groove into which the bar and spline enter, the spline acting on the groove to lock the bar to the bolster.

9. In a log dumping device the combination with a track; a car; tilting bolsters on the car; a bar extending along the track for tilting the bolster; locking devices for locking the bar and bolsters together, comprising an oscillating arm on said bar; a rock shaft; and a yielding connection between the oscillating arm and the rock arm for rocking the bar as it is elevated, said yielding connection comprising the pipe 24 with the flange nut 26, the rod 27 extending into the pipe; nut 29 on the end of the rod, the spring 28 between nut 29 and flange nut 26, and the adjusting nut 30.

10. In a log dumping device the combination with a track; the log way along said track; and devices adapted to engage and dump cars independently of a movement of the track at various points along the log way.

11. In a log dumping device the combination with a track; the log way along said track; and devices at each side of the track adapted to engage and dump cars independently of a movement of the track to either side at various points along the log way.

12. In a log dumping device the combination with a track; a log way along the track; a car; two tilting bolsters on the car; and means for engaging and simultaneously tilting both bolsters at various points along the log way.

13. In a log dumping device the combination with a track; a log way along each side of the track; two bolsters on the car adapted to be tilted in either direction; and devices at each side of the car for independently engaging and simultaneously tilting both bolsters at various points along the log way.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

WILLIAM D. LINK.

Witnesses:

E. B. EAGLES,
H. C. LORD.