

(No Model.)

A. E. S. LINDSEY.

END GATE TIGHTENER FOR CARS AND WAGONS.

No. 480,664.

Patented Aug. 9, 1892.

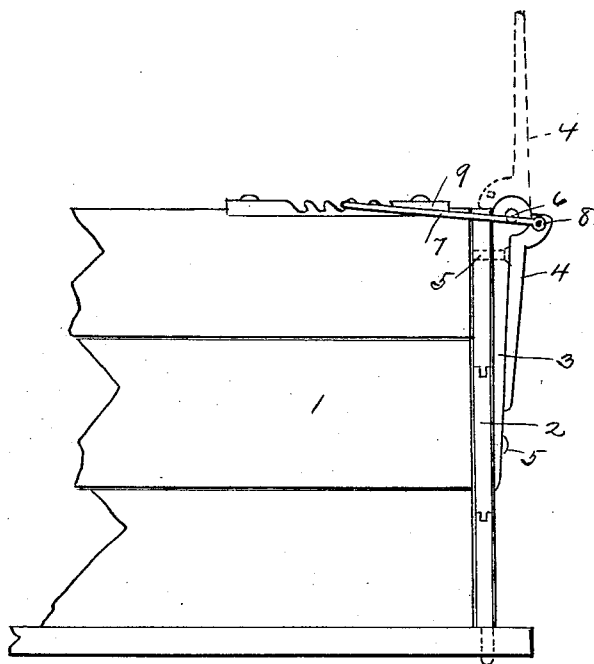


Fig. 1.

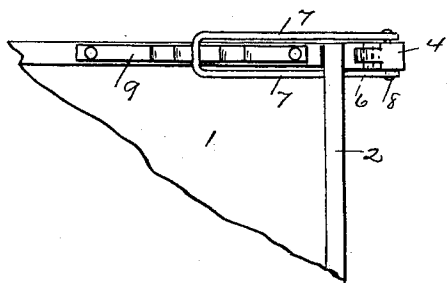


Fig. 2.

WITNESSES:

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Attest.

UNITED STATES PATENT OFFICE.

ANDREW E. S. LINDSEY, OF IMPERIAL, PENNSYLVANIA.

END-GATE TIGHTENER FOR CARS AND WAGONS.

SPECIFICATION forming part of Letters Patent No. 480,664, dated August 9, 1892.

Application filed February 19, 1892. Serial No. 422,112. (No model.)

To all whom it may concern:

Be it known that I, ANDREW E. S. LINDSEY, a citizen of the United States, residing at Imperial, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Devices for Tightening End-Gates of Railroad-Cars of all Descriptions and also Wagons, &c.; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an improved device for tightening the end-gates of coal-cars; and it consists in certain details of construction and combinations of parts, as will be fully described hereinafter.

In the accompanying drawings, Figure 1 is a side elevation of an ordinary mine-car having my improvement attached thereto, showing the same constructed in accordance with my invention. Fig. 2 is a plan view of the same.

To put my invention into practice with a mine-car 1 of ordinary construction, having a removable end-gate 2, I attach to each end of the same and near the top two castings 3, having a circular portion at the top, in which is hinged a lever 4 by means of a pivot 6. Attached to the top of the sides of the car

1 are two rack-bars 9, which are adapted to engage with a clevis 7, pivoted to each of the levers 4.

In operation the end-gate 2 is placed in position and the levers 4 made to occupy a position such as shown in dotted lines at Fig. 1 on the drawings. The clevises 7 are engaged with the rack-bars 9 and the levers 4 drawn down to occupy a position close to the sides of the castings 3, which draw the end-gate 2 tight against the ends of the car. This device will prevent the end-gate from vibrating, and thereby lessen the wear of the same.

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

In a device for the purpose described, the combination consisting of the hinge-pieces 3, secured to the end-gate 1, the rack-bars attached to the cars, the levers 4, pivoted to the said hinge-pieces 3, and the clevises 7, pivoted to the levers 4, all arranged and combined for service substantially as and for the purpose described.

In testimony that I claim the foregoing I hereunto affix my signature this 15th day of January, A. D. 1892.

ANDREW E. S. LINDSEY. [L. S.]

In presence of—

CHARLES LARGE,
M. E. HARRISON.