

J. MILLER.
Stock-Car.

No. 202,854.

Patented April 23, 1878.

Fig. 1.

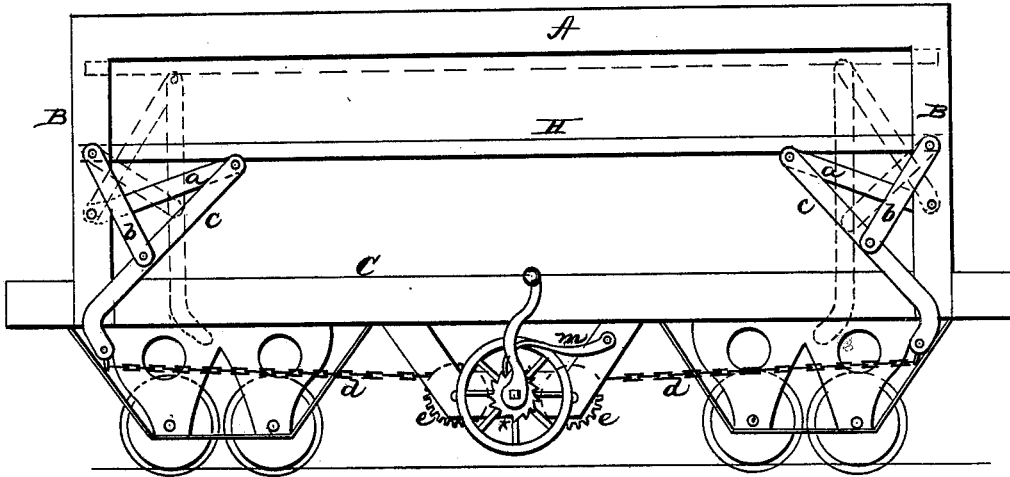
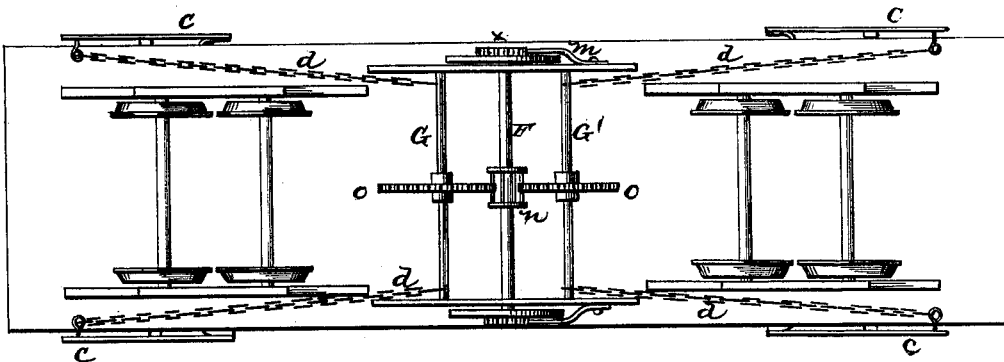


Fig. 2.



WITNESSES
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JACOB MILLER, OF WASHINGTON, PENNSYLVANIA.

IMPROVEMENT IN STOCK-CARS.

Specification forming part of Letters Patent No. **202,854**, dated April 23, 1878; application filed March 27, 1878.

To all whom it may concern:

Be it known that I, JACOB MILLER, of Washington, in the county of Washington and State of Pennsylvania, have invented certain new and useful Improvements in Stock-Cars; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention consists in the construction and arrangement of a cattle-car, in such manner that it may readily be converted into a single or double deck car, as will be hereinafter more particularly described.

To enable those skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the accompanying drawings, making part of this specification, Figure 1 represents a side, and Fig. 2 a bottom, view of my invention.

In the figures, A, B, and C represent the frame of an ordinary cattle-car, A being the top, C being the bottom, and B B being the end posts, which support the top at its ends. H represents the bottom of the upper deck. This bottom is movable, and is raised and lowered by means which will be hereinafter described.

a and *b* represent metallic bars, which have their close ends pivoted to the posts B B a short distance apart, while their loose or outer ends are pivoted to a bar, *c*, as represented. The bars *a* and *b* cross each other, and the three form a strong lever-power for raising and lowering the bottom H.

A bar runs across from the two end bars *c*, at each end of the car, from the point where the two bars *a* and *c* meet, and upon this bar the bottom H is made to rest, so that by raising or lowering the bar *c* the bottom H is raised or lowered. When the bars *c c* are made to assume a vertical position, the bottom H is raised until it fits snugly against the top A of

the car-body. When the bars *c c* assume an angle of about forty-five degrees with the bottom C, then the bottom H is lowered about half-way, and the car can then be used as a double-decker.

The levers or bars *c c* are operated and held in place in the following manner: To the lower ends of said bars *c c* are secured the chains *d d*. These chains pass under the lower floor or bottom C, and are secured at their inner ends to the shafts G G'.

G, G', and F are three shafts, which lie under the bottom A, crosswise of the car, and which are supported in suitable frame-work made for them. The center shaft, F, is provided with a gear-wheel, *n*, while the other two shafts are provided with gear-wheels *o o*, which work into wheel *n*. Upon the outer end of shaft F is a ratchet-wheel, *x*, into which catches a pawl, *m*. The shaft F is so formed at one end that a handle may be applied to it for revolving it. When the shaft F is revolved in one direction, the chains are wound around the shafts G G', whereby the levers or bars *c c* are raised, and with them the bottom H; but when revolved in the opposite direction, the levers are lowered, and, of course, with them the said bottom H.

Thus it will be seen that by simply revolving shaft F the car is converted, through the various connections, into either a single or a double deck car. The ratchet and pawl, of course, hold the parts rigidly in any desired position.

What I claim is—

In combination with the adjustable and movable bottom H, the bars *a*, *b*, and *c*, and their connection with the chains *d d*, the shafts G G', and shaft F, with their wheels, all operating as and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JACOB MILLER.

Witnesses:

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