C. H. THOMPSON.
Car-Roof.

No. 207,569. Patented Aug. 27, 1878.

Fig. 1.

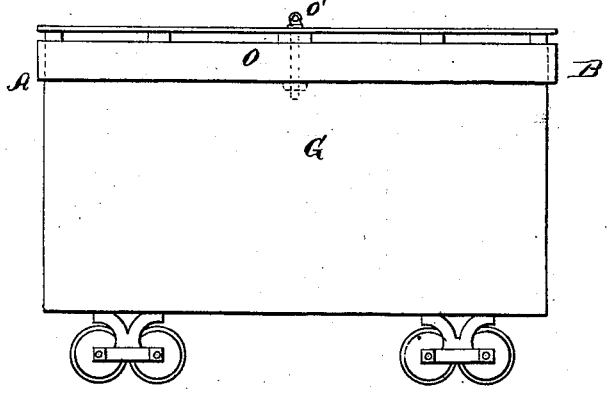


Fig. 3.

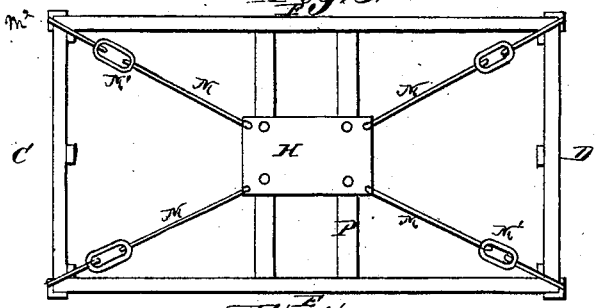


Fig. 4.

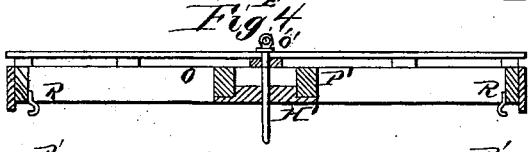
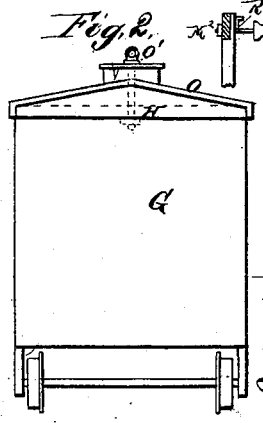


Fig. 2.



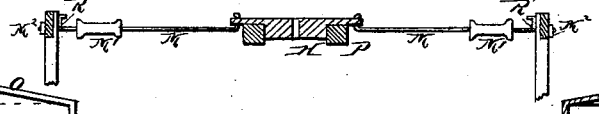
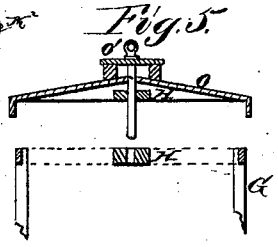


Fig. 5.



Witnesses:
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UNITED STATES PATENT OFFICE.

CHARLES H. THOMPSON, OF NEWBURYPORT, MASSACHUSETTS, ASSIGNOR OF ONE-HALF HIS RIGHT TO JOHN P. CONKLING, OF SARATOGA SPRINGS, NEW YORK.

IMPROVEMENT IN CAR-ROOFS.

Specification forming part of Letters Patent No. **207,569**, dated August 27, 1878; application filed July 26, 1878.

To all whom it may concern:

Be it known that I, CHARLES H. THOMPSON, a resident of Newburyport, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Adjustable and Independent Roofs for Railroad-Cars; and I do hereby declare that the following is a full, clear, and exact description of the invention, 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.

Heretofore the roofs of cars have generally been built onto and on a fixed part of the cars; and as the car necessarily yields and springs and strains when moving while heavily laden, the motion is communicated to the roof, causing it to leak. The same cause prevents the use of metallic roofs, and as a result several roofs are now required to be added to a car before the car-body is worn out.

The object of my invention is to obviate this difficulty; and to this end the nature of my invention consists in a car-roof made entirely independent and separate from the car-body, and connected thereto by a single bolt; and it also consists in the construction and combination of parts, as will be hereinafter more fully set forth.

In the annexed drawings, which fully illustrate my invention, Figure 1 is a side elevation of a car embodying my invention. Fig. 2 is an end elevation of the same. Fig. 3 is a plan view of a car-body. Fig. 4 is a longitudinal vertical section of the car body and roof separated. Fig. 5 is a cross-section of the same.

G represents the car-body, constructed in any suitable manner, and O is the roof of the car. This roof is built independent of the car, and enough larger than the car-body to project a short distance beyond the same on all sides.

Across the center of the car-body, at the top, are two beams, P P, to which are secured a metal plate, H. The corners of this plate are, by rods M, connected with the corners of the car-body, said rods passing through angle-irons m^2 at the corners of the car.

Each rod M is made in two parts, connected by a swivel-nut, M′, to take up any slack in the car, thus keeping it stiff and affording all the support now usually derived from the roof.

The roof O is also, in the center, provided with two cross-beams, P′, to which is fastened a metal plate, H′, to correspond with the plate H and beams P of the car-body. The two are then connected by a king-bolt, O′, having a key or nut on its lower end, said king-bolt passing through central holes in the plates.

R and R′ represent angles or brackets, to prevent the ends of the roof from rising when exposed to heavy winds or in time of accident.

When the car is laden it will strain and spring out of square when passing an uneven place in the track; but, on account of the increased size of the roof and the fact that it is only secured to the car at one point, the roof itself is not affected.

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

1. A car-roof made entirely independent and separate from the body of the car, and connected thereto at a single point only, substantially as and for the purposes herein set forth.

2. The combination of a car-body, G, having beams P P and plate H, the roof O, made separate from the car, and provided with the beams P′ and plate H′, and the central connecting-bolt, O′, substantially as and for the purposes herein set forth.

3. The combination of the car-body G, angle-irons m^2, beams P, with plate H, rods M, with swivels M′, the roof O, with beams P′ and plate H′, and the central connecting-bolt, all constructed substantially as and for the purposes herein set forth.

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

CHARLES H. THOMPSON.

Witnesses:
CHARLES H. WILDER,
THOMAS RALPH.