(No Model.)

D. A. FLAHERTY.

CAR ROOF.

No. 452,838. Patented May 26, 1891.

Fig 1

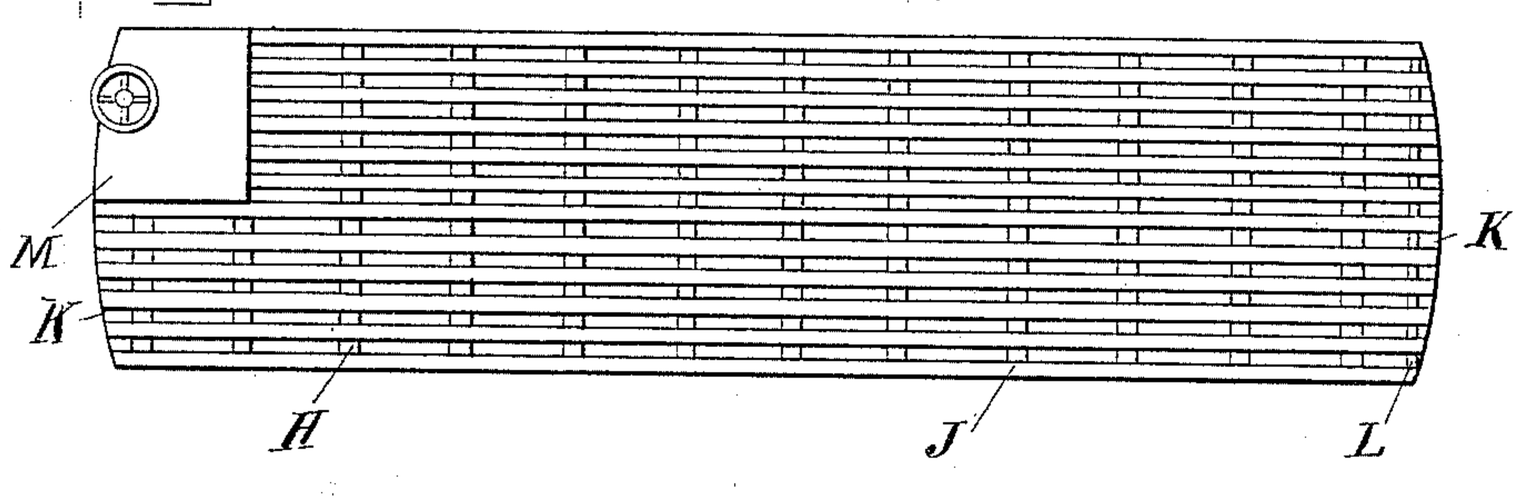


Fig. 2.

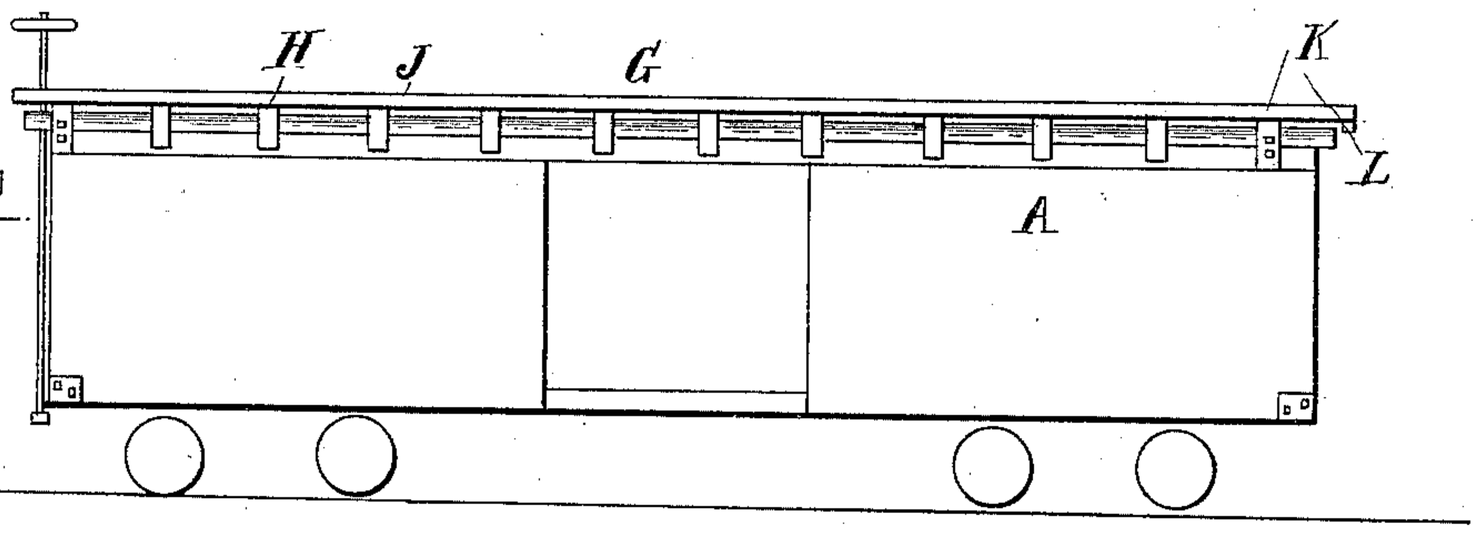
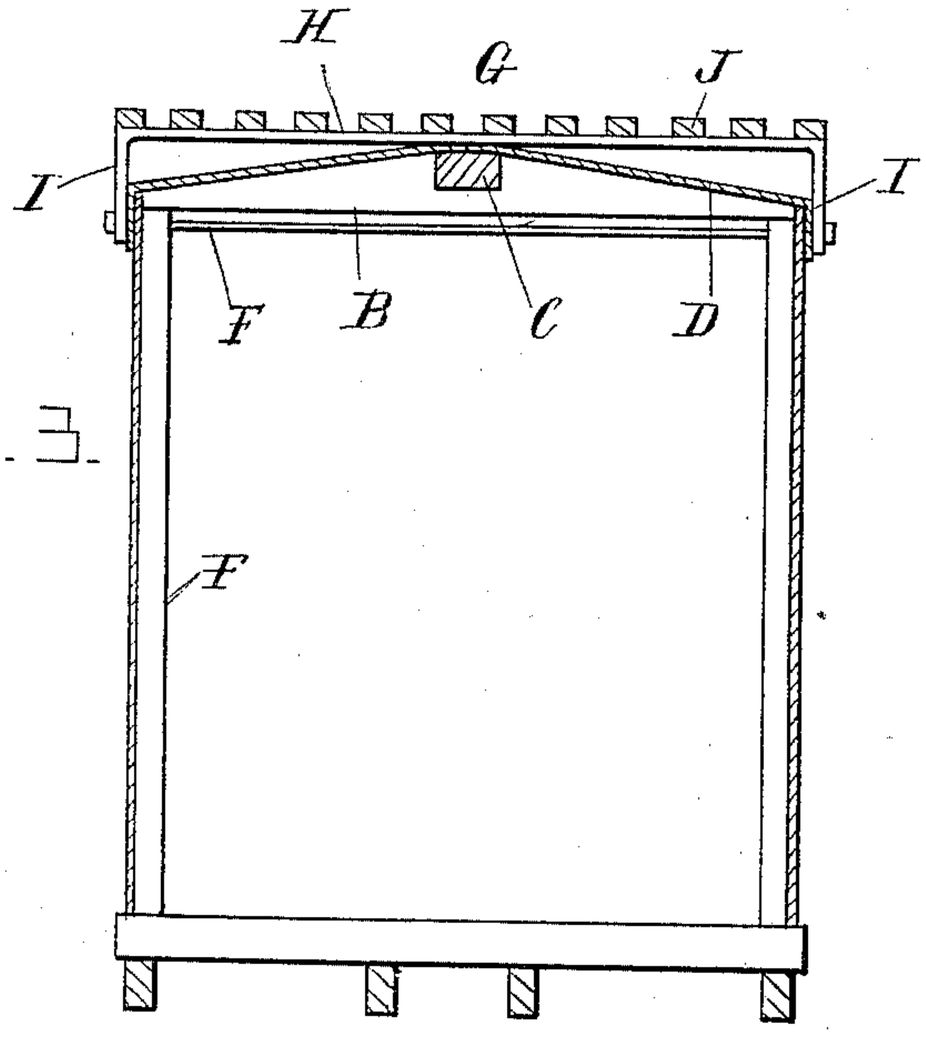


Fig. 3.



Witnesses

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P. M. Hulbert

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UNITED STATES PATENT OFFICE.

DANIEL A. FLAHERTY, OF OWOSSO, MICHIGAN.

CAR-ROOF.

SPECIFICATION forming part of Letters Patent No. 452,838, dated May 26, 1891.

Application filed June 2, 1890. Serial No. 354,024. (No model.)

To all whom it may concern:

Be it known that I, DANIEL A. FLAHERTY, a citizen of the United States, residing at Owosso, in the county of Shiawassee and State of Michigan, have invented certain new and useful Improvements in Car-Roofs, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to car-roofs; and the invention consists in the peculiar construction of a platform forming an auxiliary roof, arranged above the ordinary slanting car-roof and having a flat upper surface, whereby the entire top of the car may be utilized as a runway for the brakeman; and, further, in the constructing of this roof with an extension at the end of the car, whereby the space between the cars is bridged, or nearly so; and, further, in the peculiar construction, arrangement, and combination of the various parts, all as more fully hereinafter described.

In the drawings which form a part of this specification, Figure 1 is a plan view of the car-roof to which my invention is applied. Fig. 2 is a side elevation. Fig. 3 is a vertical cross-section through Fig. 2.

In the present state of the art cars are constructed with a running-board along the peak of the roof and ending with the end of the car. In wet and freezing weather it makes a very dangerous operation for the brakemen to run along such board and at the end of the car to jump across the intervening space. The car brake-wheel being located upon one side of the car, the brakeman is obliged to stand upon the slanting roof while applying the brakes, which is an extremely hazardous and difficult undertaking in certain conditions of the weather. To overcome these objections I have constructed a platform forming an auxiliary car-roof as follows:

A is the body of the car.

B are the roof-girders, which have their upper surfaces inclined downwardly in both directions from the ridge-pole C. Upon these girders any suitable roofing material may be placed. I preferably use a metallic roof, such as D, laid over the girders in any suitable manner.

E are the tie-bolts, which pass through the upper ends of the studs F, tying the sides and the roof-timbers firmly together.

This construction is the same as is ordinarily used in building car-roofs at the present time, and upon this roof so constructed I arrange a flat platform, forming an auxiliary roof G, which consists of the cross-bars H, preferably of metal, and resting centrally upon the peak of the roof, and having the downwardly-projecting arms I at the ends extended down the sides of the car and suitably apertured to receive the tie-bolts E. This forms a flat bearing upon which I secure in any suitable manner the slats J, forming a supplemental flat slatted roof the entire length and width of the car and touching the main roof only at the peak. This is an advantage, in case a metallic roof is used, in preventing the accumulation of rust at the points of contact, and in case a wooden roof is used preventing the rotting of the wood at the meeting surfaces. I extend these slats beyond the end of the car to form the extension K, the ends being secured together by means of the connecting-bar L. The outer edge of this extension is curved to accommodate the motion of the car on curves, &c.; but centrally the extensions of two adjoining cars would nearly touch, which is plainly shown in Fig. 1.

M is a platform, preferably of solid planking, arranged around the brake-wheel, so as to give a firmer footing in handling the wheel.

In constructing a roof of this kind, as the auxiliary roof takes nearly all of the load and all of the wear from the running of the brake man, I can construct the main roof much lighter than has heretofore been the case and attach my platform, forming my auxiliary roof, without any particular increase in the cost of manufacture.

It is evident that the brakeman, having a flat surface the entire width of the car, can move about without danger of falling, even in extreme weather, and by bridging the space between the ends of the car can pass from one to the other without being obliged to jump. In utilizing the tie-bolts E to support the ends of the cross-bars H it simplifies the construction of the car, the only additional expense

on that point being the extra length of the tie-bolts as compared with cars built in the usual manner.

What I claim as my invention is—

1. In a freight-car, the combination, with the inclined roof, of a flat platform above the same and extending beyond the ends and to the sides thereof, and supports secured to the sides of the car, on which the outer edges of the platform rest, substantially as described.

2. In a freight-car, the combination, with the inclined roof, of a flat platform extending entirely over the same and cross-bars having depending ends secured to the sides of the car for supporting the platform, substantially as described.

3. In a freight-car, the combination, with the inclined roof, of a straight slatted platform above the roof and cross-bars having depending ends secured to the sides of the car for supporting the platform, substantially as described.

4. In a freight-car, the combination, with the inclined roof, of the flat platform forming an auxiliary roof G, consisting of the bars H, arms I, slats J, and the tie-rods E, passing through the arms I and through the top of the car, substantially as described.

In testimony whereof I affix my signature, in presence of two witnesses, this 18th day of March, 1890.

DANIEL A. FLAHERTY.

Witnesses:
M. B. O'DOGHERTY,
P. M. HULBERT.