(No Model.)

T. L. McKEEN.

PLATFORM TRUSS FOR RAILROAD CARS.

No. 593,676. Patented Nov. 16, 1897.

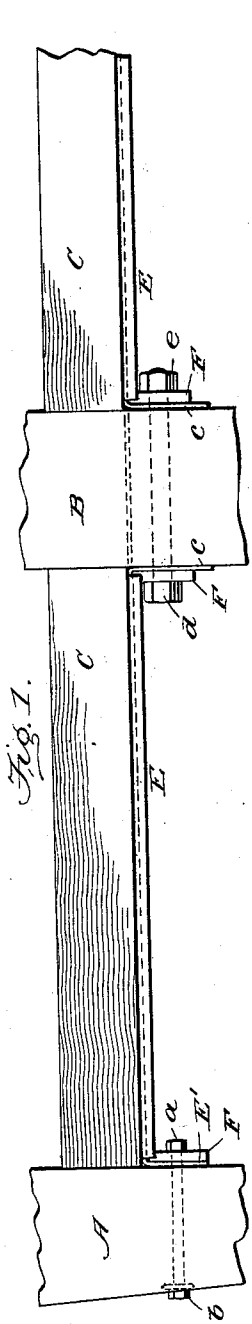

Fig. 1.

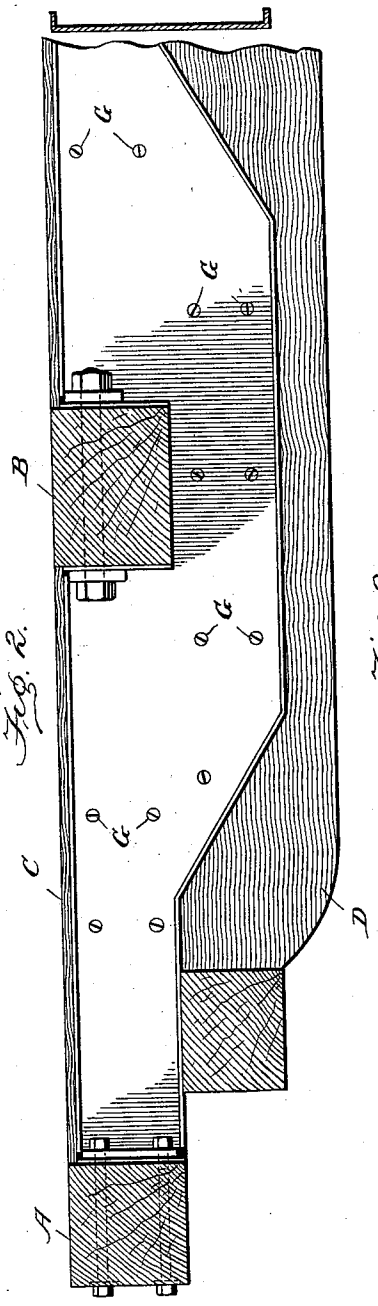

Fig. 2.

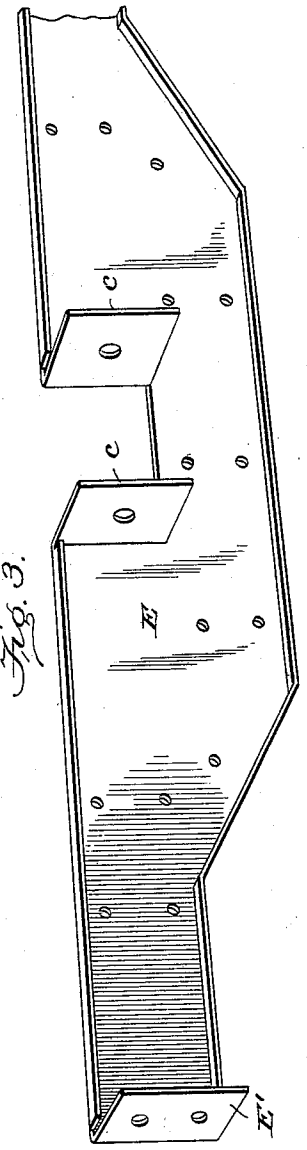

Fig. 3.

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PLATFORM-TRUSS FOR RAILROAD-CARS.

SPECIFICATION forming part of Letters Patent No. 593,676, dated November 16, 1897.

Application filed February 20, 1897. Serial No. 624,299. (No model.)

To all whom it may concern:

Be it known that I, THOMAS L. McKEEN, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Platform-Trusses for Railroad-Cars; 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 appertains to make and use the same.

My invention relates to certain new and useful improvements in platform-trusses for railroad-cars. It has for its object simplicity in construction, lightness, and great strength, and is designed to prevent the downward sagging of the platform, which is liable to occur in cars as at present constructed involving continuous platforms and vestibules, which adds largely to the weight and thus causes much trouble and expense in keeping the framework of the wooden platforms in their proper position and in repair; and with these ends in view my invention consists of a truss composed of a single piece of plate metal punched and bent into shape to embrace the end sills of the car and platform and also the longitudinal sills of the car and platform in such manner as to give rigidity and strength thereto.

In order that those skilled in the art to which my invention pertains may know how to make and use my invention, I will proceed to describe the same, referring by letters to the accompanying drawings, in which—

Figure 1 is a partial plan view showing my improved truss as applied to the end and longitudinal sills of a platform and car. Fig. 2 is a central longitudinal section of a car-bottom frame with my improved truss in position, and Fig. 3 is a perspective view of my improved truss or plate.

Similar letters indicate like parts in the several figures of the drawings.

A is the end sill of the platform, and B the end sill of the car.

C represents the longitudinal sills, and D the draft-timber or subsill under the longitudinal sills of the platform and car, all constructed and arranged together in the usual manner.

E is a wrought-iron or steel plate of any suitable gage or thickness. This plate is bent at right angles on each end, as seen at E′, to constitute wings, which are secured in place against the platform-sill A by screw-bolts *a* and nuts *b*, or by any other suitable means. It is also cut and bent intermediate of its ends to constitute wings *c*, which rest against and are secured to the car-sill B by screw-bolts *d* and nuts *e*, or by any other suitable means, and to strengthen the angle of the wings metal plates or square washers F may be employed, as shown. These washers F, as most clearly shown at Fig. 1, are arranged with one edge bearing against the body of the truss-plate and with the interior flat face against the wing thereof, so that when the securing bolts and nuts are in place the angle formed between the wing and body of the truss-plate is stiffened and braced firmly by the washer.

As clearly shown at Figs. 2 and 3, the truss-plate E lies against the draft-timber or subsill D, if any be employed, to which and the longitudinal sill C it is firmly secured by a series of bolts or screws G.

From the construction and arrangement shown it will be seen that the cross and longitudinal sills and the draft-timber or subsill (if any be used) are all braced and united together, making them practically one piece and giving great rigidity and strength to the structure as a whole.

As shown more clearly at Fig. 2, either the upper or lower edge of the truss-plate, or both, may be bent at right angles to constitute strengthening-flanges, thus adding to the strength and stiffness of the truss, but it will be understood, of course, that these flanges may be dispensed with.

What I claim as new, and desire to secure by Letters Patent, is—

1. A truss-plate for strengthening the end and longitudinal sills of railroad-cars consisting of a single plate of wrought-iron or steel having end wings to contact with the platform end sill, and wings or flanges intermediate of its ends to embrace the end sill of the car, and adapted to be secured in place to constitute a brace, substantially in the manner described.

2. In a railroad-car the combination with the platform end sill, the end sill of the car and the longitudinal sills, of a truss-plate composed of a single piece of wrought-iron or steel having a wing at its front end bearing against the end sill of the platform, and wings intermediate of its ends embracing and bearing against the two sides of the end sill of the car, the said truss-plate being secured in position substantially as described.

3. In combination with the end sills of the platform and car, and the truss-plate formed with wings as described, washers interposed between the wings of the truss-plate and securing bolts and nuts, and having one edge bearing against the body of the truss-plate and the interior face against the wing, substantially as and for the purpose set forth.

4. In combination with the end sills of the platform and car, and winged truss-plate provided with flanged edge or edges, flat plates or washers interposed between the wings of the truss-plate, and securing bolts and nuts, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS L. McKEEN.

Witnesses:

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