T. F. ALLYN.

Improvement in Railway Car-Springs.

No. 133,074. Patented Nov. 19, 1872.

Fig 1

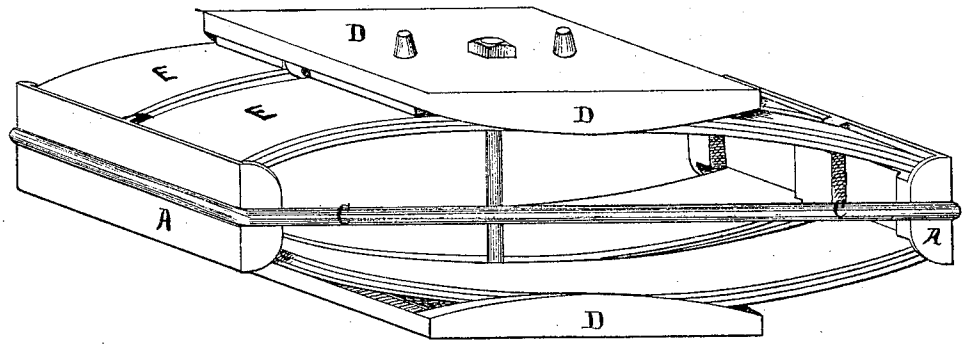


Fig 2

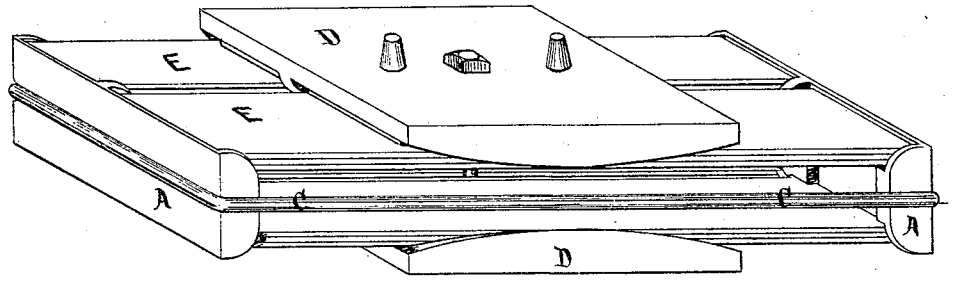
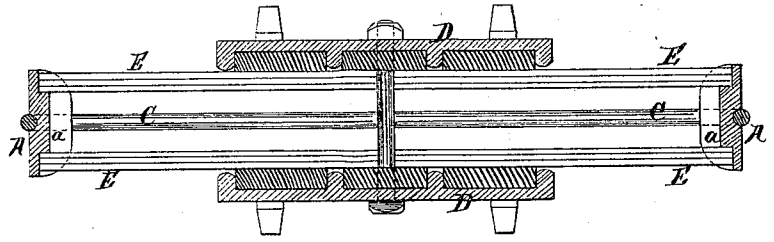


Fig. 3.



WITNESSES

H. L. Sanderson

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TIMOTHY F. ALLYN, OF NYACK, NEW YORK, ASSIGNOR TO COMBINATION CAR-SPRING COMPANY.

IMPROVEMENT IN RAILWAY-CAR SPRINGS.

Specification forming part of Letters Patent No. 133,074, dated November 19, 1872.

To all whom it may concern:

Be it known that I, TIMOTHY F. ALLYN, of Nyack, county of Rockland and State of New York, have invented a new and useful Improvement in the Construction of Springs for Railway Cars, and designed especially for freight-car use; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing and to the letters and figures marked thereon, in which—

Figure 1 is a perspective view of the spring with curved plates; Fig. 2 is a perspective view of the spring with straight plates; and Fig. 3 is a longitudinal section of the spring shown in Fig. 2.

The nature of my invention consists in combining the plates of a steel-plate spring together by means of end bearings and a non-vibrating rigid frame of wrought-iron.

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

In either figure E E are plate-steel springs; but in Fig. 1 the upper and lower springs are curved so as to form an elliptic spring, and in Fig. 2 both upper and lower springs are straight. The ends of these springs rest in bearings formed in the end clasps A A, as shown at *a a* in Fig. 3, which is a vertical longitudinal section of Fig. 2. The ends of these clasps embrace the springs, and they have projecting lips at the ends to hold the plates in place. These end clasps are held to each other by the wrought-iron frame C, which fits into and rests in a horizontal groove made in the clasps for that purpose, as shown in the drawing. In the center of the spring, above and below, are the cast-iron housings D D, having a projecting lip at each end to cover the edges of the plates, and having India-rubber bearings interposed between them and the plates, secured by recesses formed in the casting for this purpose. The housings D D have also short studs on their outer sides to retain them in place when mounted in the car-truck.

The spring-plates and the central housings may be secured to each other by screw-bolts passing through the housing and through the space between the two sets of spring-plates.

Having thus described my improved railway-car spring, what I claim therein as new, and desire to secure by Letters Patent of the United States, is—

The combination of the spring-plates E E with the end clasps A A and holding-frame C, the frame C being made in one piece, of wrought-iron, and resting horizontally in longitudinal grooves in the end clasps A A, thus securing the end clasps in place without subjecting the frame to vibration from the action of the springs.

T. F. ALLYN.

Witnesses:
WM. F. MCNAMARA,
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