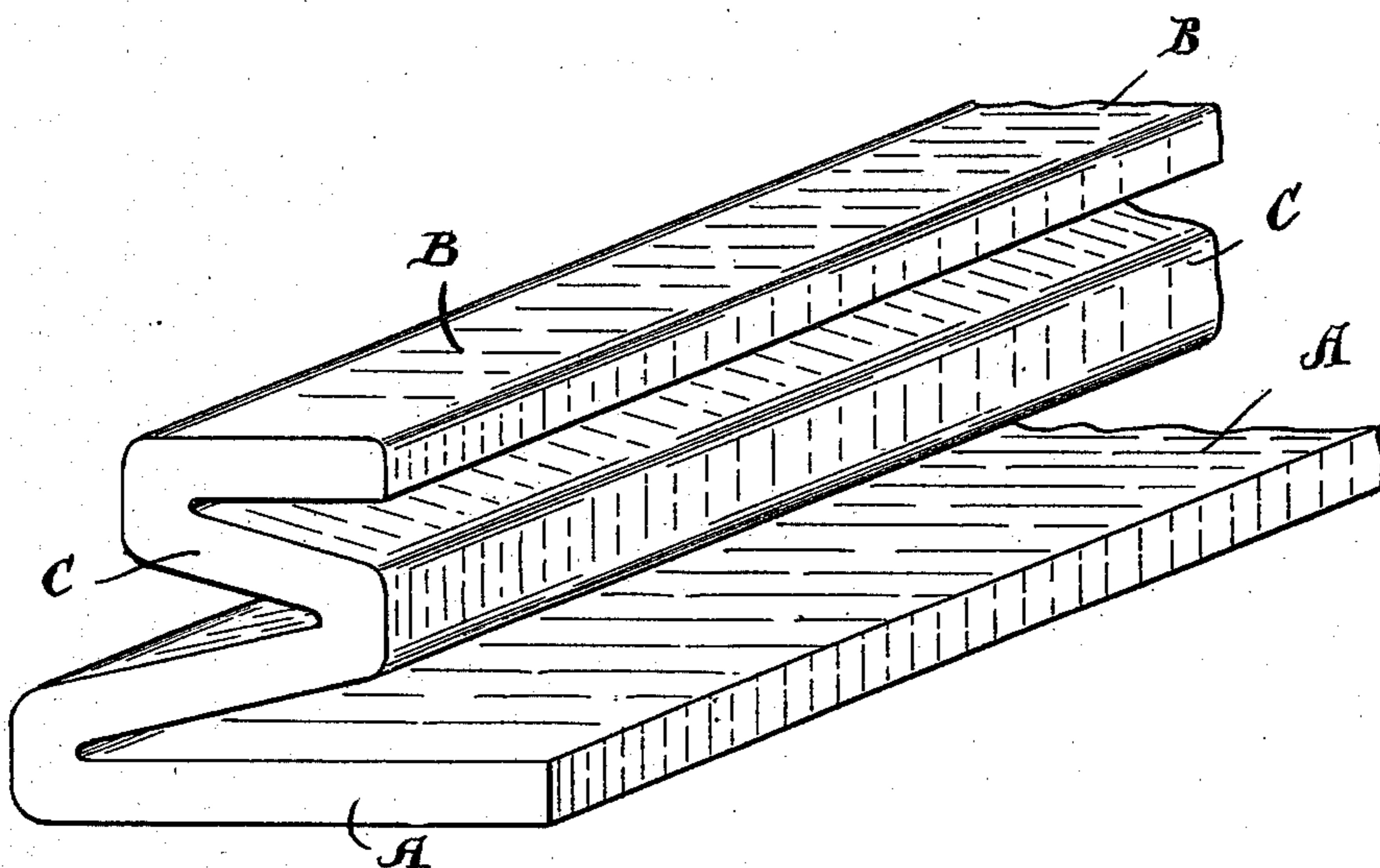


(No Model.)

H. W. LIBBEY.  
RAILROAD RAIL.

No. 412,636.

Patented Oct. 8, 1889.



Witnesses.

George D. Reid  
Timothy J. O'Connell

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# UNITED STATES PATENT OFFICE.

HOSEA W. LIBBEY, OF BOSTON, MASSACHUSETTS.

## RAILROAD-RAIL.

SPECIFICATION forming part of Letters Patent No. 412,636, dated October 8, 1889.

Application filed November 16, 1888. Serial No. 291,051. (No model.)

*To all whom it may concern:*

Be it known that I, HOSEA W. LIBBEY, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Railroad-Rails, of which the following, taken in connection with the accompanying drawing, is a specification.

10 The object of my invention is to produce a rail particularly adapted for steam-railroads, and in which there will be a certain amount of elasticity, thereby preventing to a great extent the jolting of the car occasioned by  
15 the rigid rails now in use and saving wear and tear of the running-gear.

20 The invention consists of a rail having a flat lower flange and a tread connected together by a >-shaped flange, the lower flange being of greater width than the tread or upper flange, the >-shaped web between the two acting as a spring, all as hereinafter fully described, and pointed out in the claims.

25 Referring to the accompanying drawing, the figure represents a rail embodying my invention.

30 A represents the lower flange, which rests upon the sleepers, and B is the upper flange or tread upon which the wheels of the car run. These two flanges are connected together by a >-shaped web C.

It will be seen that rails constructed as described will readily yield to the weight of a car passing over them, thereby reducing the jolting of the same, and as soon as the car has passed over it will resume its normal position. Thus the life of the rail will be much longer than rails of ordinary construction, and at the same time the wear and tear of the rolling-stock will be much reduced, while  
40 the comfort of the passengers will be much enhanced.

What I claim as my invention is—

1. A railroad-rail consisting of an upper and a lower flange connected together by a  
45 >-shaped web, substantially as and for the purposes set forth.

2. A rail for railroads, consisting of a lower flange A for securing the same to the sleepers and an upper flange B for the wheels to  
50 run upon, said flange and tread being connected together by a >-shaped web C, substantially as and for the purposes set forth.

In testimony whereof I have signed my name to this specification, in the presence of two  
55 subscribing witnesses, on this 29th day of October, A. D. 1888.

HOSEA W. LIBBEY.

Witnesses:

JAMES R. BURNS,  
CHAS. STEERE.