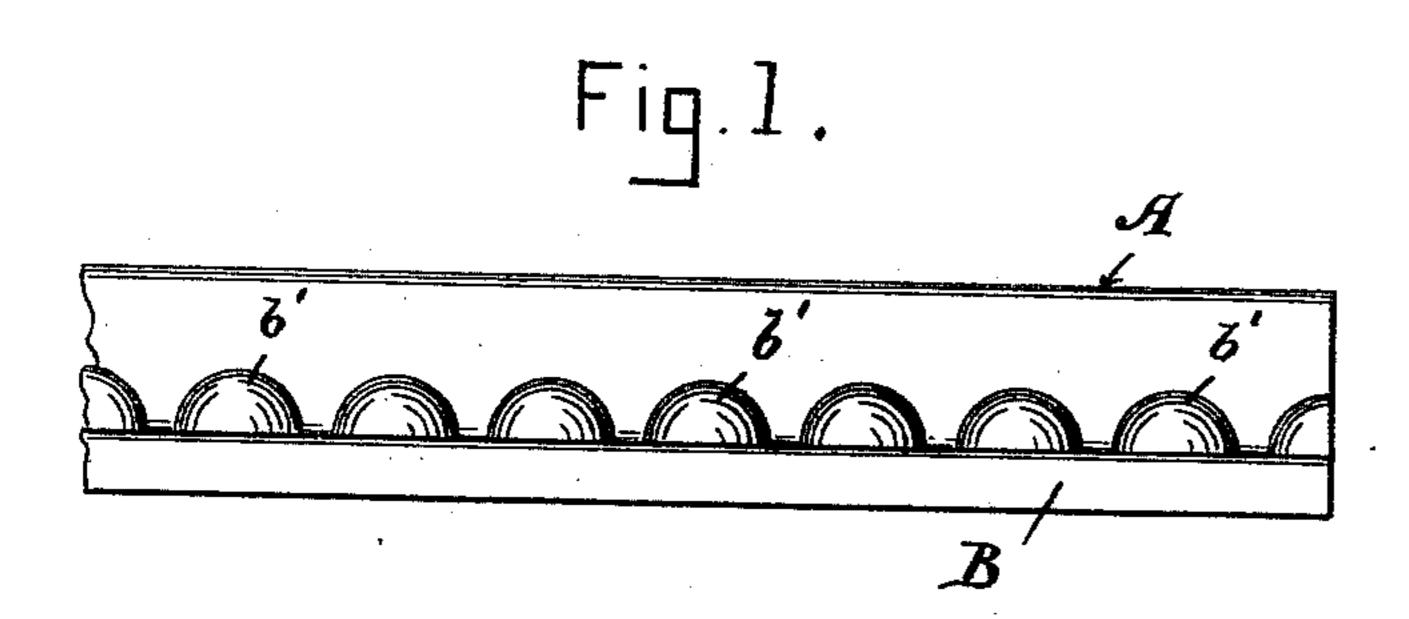
(No Model.)

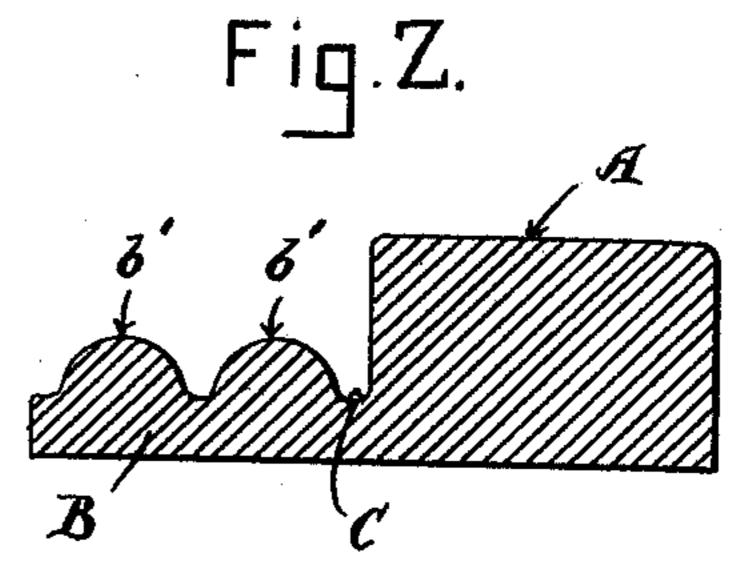
H. W. LIBBEY.

RAIL FOR STREET RAILWAYS.

No. 414,061.

Patented Oct. 29, 1889.





T. G. O. Connell 9. Reid

Hosea W. Libberg by E. Blanta. attorney

United States Patent Office.

HOSEA W. LIBBEY, OF BOSTON, MASSACHUSETTS.

RAIL FOR STREET-RAILWAYS.

SPECIFICATION forming part of Letters Patent No. 414,061, dated October 29, 1889.

Application filed September 3, 1888. Serial No. 284,429. (No model.)

To all whom it may concern:

Be it known that I, Hosea W. Libber, 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 Rails for Street-Railroads, of which the following, taken in connection with the accompanying drawings, is a specification.

The object of my invention is to produce a rail for street-railroads on which horses will not be liable to slip when stepping upon the inner flange.

The invention consists in forming the up-15 per surface of the inner flange with semispherical projections, so that a bearing will be provided for the toe of the horse when he steps upon the same.

Figure 1 represents a side view of a rail for street-railroads embodying my invention. Fig. 2 is a transverse vertical section of the same.

A represents the tread of the rail, and B the flange. The upper surface of this flange is formed with semi-spherical projections b', as shown, so that when the horse treads upon the same he is enabled to obtain a grip upon

the projecting portions b', thereby preventing slipping. The space C_r next to the tread of the rail, forms a gutter, so that rain or 30 other water may flow along the rail unhindered by the semi-spherical projections.

It will be seen that by this construction of rail all slipping of horses by treading upon the inner flange is prevented, thereby mak- 35 ing it easier for the horses to travel along the road-bed, and also preventing the liability of their falling down.

What I claim as my invention is—

A railway-rail constructed with a flange 40 having a series of semi-spherical projections and a tread projecting therefrom, the upper surface of the tread being above the semi-spherical projections to allow the flange of the car to pass over them, substantially as 45 shown and described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 22d day of August A. D. 1888.

HOSEA W. LIBBEY.

Witnesses:
CHAS. STEERE,
E. PLANTA.