

O. BENSINGER.  
RAILWAY RAIL.  
APPLICATION FILED NOV. 15, 1911.

1,069,520.

Patented Aug. 5, 1913.

FIG. 1

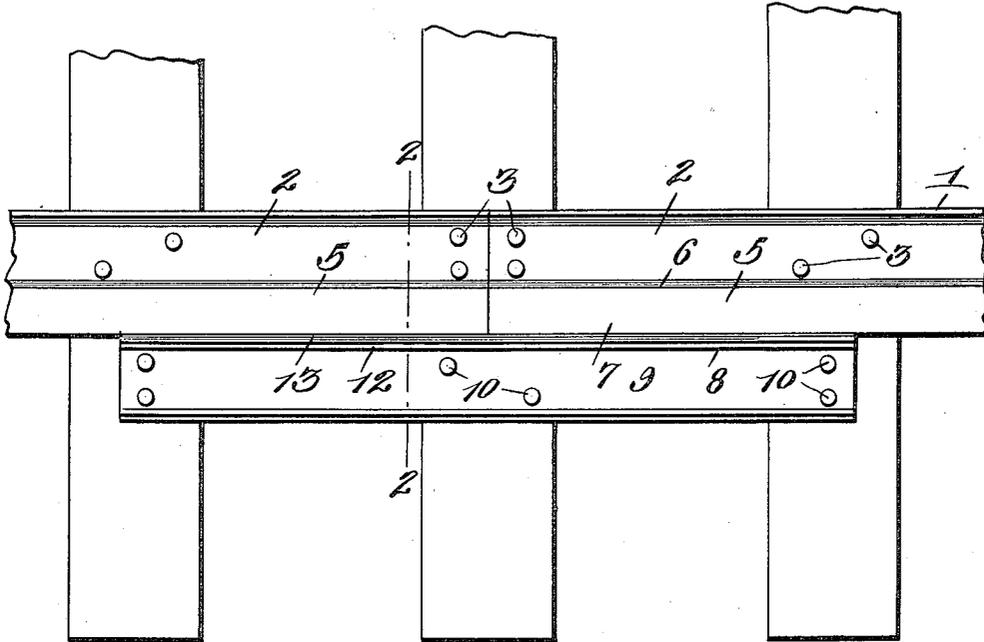
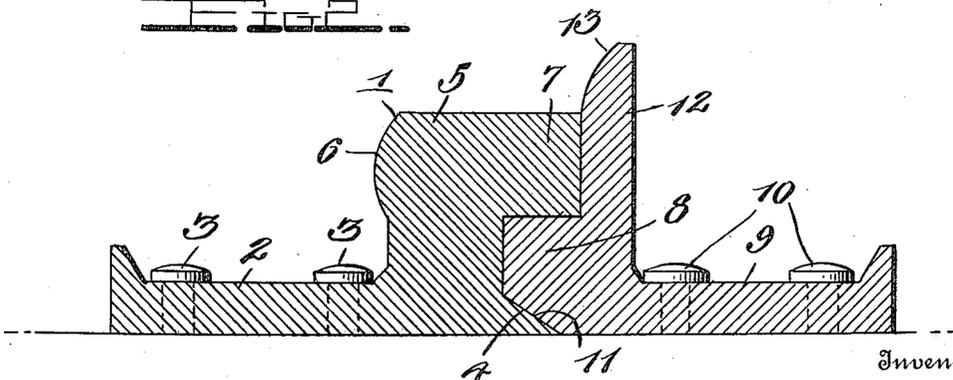


FIG. 2



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# UNITED STATES PATENT OFFICE.

OLIVER BENSINGER, OF LODI, OHIO.

## RAILWAY-RAIL.

1,069,520.

Specification of Letters Patent.

Patented Aug. 5, 1913.

Application filed November 15, 1911. Serial No. 660,390.

*To all whom it may concern:*

Be it known that I, OLIVER BENSINGER, a citizen of the United States, residing at Lodi, in the county of Medina and State of Ohio, have invented certain new and useful Improvements in Railway-Rails, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to new and useful improvements in railway rails and has for its object to provide a rail with an additional supporting rail for the main rail, extending beneath an overhanging head on said main rail whereby liability of spreading of the head by an abnormal load thereon or sinking of the rail into the surface of the tie is to a great extent eliminated, said supporting rails being arranged to overlap the abutting ends of the main rails thus holding said main rails against relative vertical movement whereby pounding of the same upon the ties at the joints in the rails is entirely overcome.

Another object is to provide a rail of this character which will possess advantages in points of efficiency and durability, is inexpensive of manufacture and at the same time, is simple in construction and operation.

With the above and other objects in view the invention consists in the novel features of construction and the combination and arrangement of parts hereinafter described, pointed out in the claim and shown in the accompanying drawings, in which—

Figure 1 is a top plan view, and Fig. 2 is a sectional view taken on the line 2—2 of Fig. 1.

Referring more particularly to the drawing 1 indicates the main rail having an extensive supporting base 2 formed on the inner side of the rail and secured to the ties by means of the spikes 3. The base on the outer side of the rail is provided with an inclined surface 4. The tread 5 of the rail is provided with an inner convex surface 6 against which the flange of the wheel will rest. This convex face 6 is provided to reinforce the inner edge of the tread of the rail to overcome the pressure and prevent the edge from bulging and also to reduce friction between the flange of the wheel and

the tread of the rail. The tread 5 is provided with an overhanging head 7 on its outer side and a supporting rail 8 is provided having an extended supporting base 9 secured to the ties by means of the spikes 10. The rail 8 is adapted to be disposed under the overhanging head 7 and abut against the web of the main rail and the underside of the head 7, the lower side of said supporting rail being provided with an inclined surface 11 to abut with the inclined surface 4 on the main rail. The supporting rail 8 is provided with an upwardly projecting guard flange 12 which abuts tightly against the outer edge of the overhanging head 7 and extends above the tread of the main rail. This guard flange is provided on its upper edge with a substantially convex inner face 13. This convex inner face 13 is provided on the guard flange so that in case the wheels strike an object on the main rail and are thrown toward the outer edge of the main rail, they will strike this convex surface and be guided back onto the main rail. These supporting rails are arranged on the ties so as to overlap the abutting ends of the main rails thus holding said main rails against relative vertical movement whereby pounding of the same upon the ties at the joints in the rails is entirely overcome.

While I have shown and described the preferred form of my invention it will be obvious that various changes in the details of construction and in the proportions may be resorted to for successfully carrying my invention into practice without sacrificing any of the novel features or departing from the scope thereof.

Having thus described my invention what is claimed is:—

The combination with a railway rail having a rectangular lateral extension projecting from one side of its head and provided with a base flange extending in an opposite direction to said extension and adapted to be secured to a supporting tie, a relatively narrow base flange projecting from the opposite side of the rail web, of a guard rail abutting against the lateral extension of said first named rail, said guard rail being provided with a longitudinal rib upon one face extending beneath the lateral projec-

tion on the head of the first named rail and  
engaging closely therewith and with the  
web and narrow base flange of said rail, said  
guard rail being provided with a base flange  
5 extending laterally from the opposite face  
thereof and adapted to be secured to a sup-  
porting tie.

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

OLIVER BENSINGER.

Witnesses:

H. W. FRAZIER,  
E. L. OVERDORF.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,  
Washington, D. C."

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