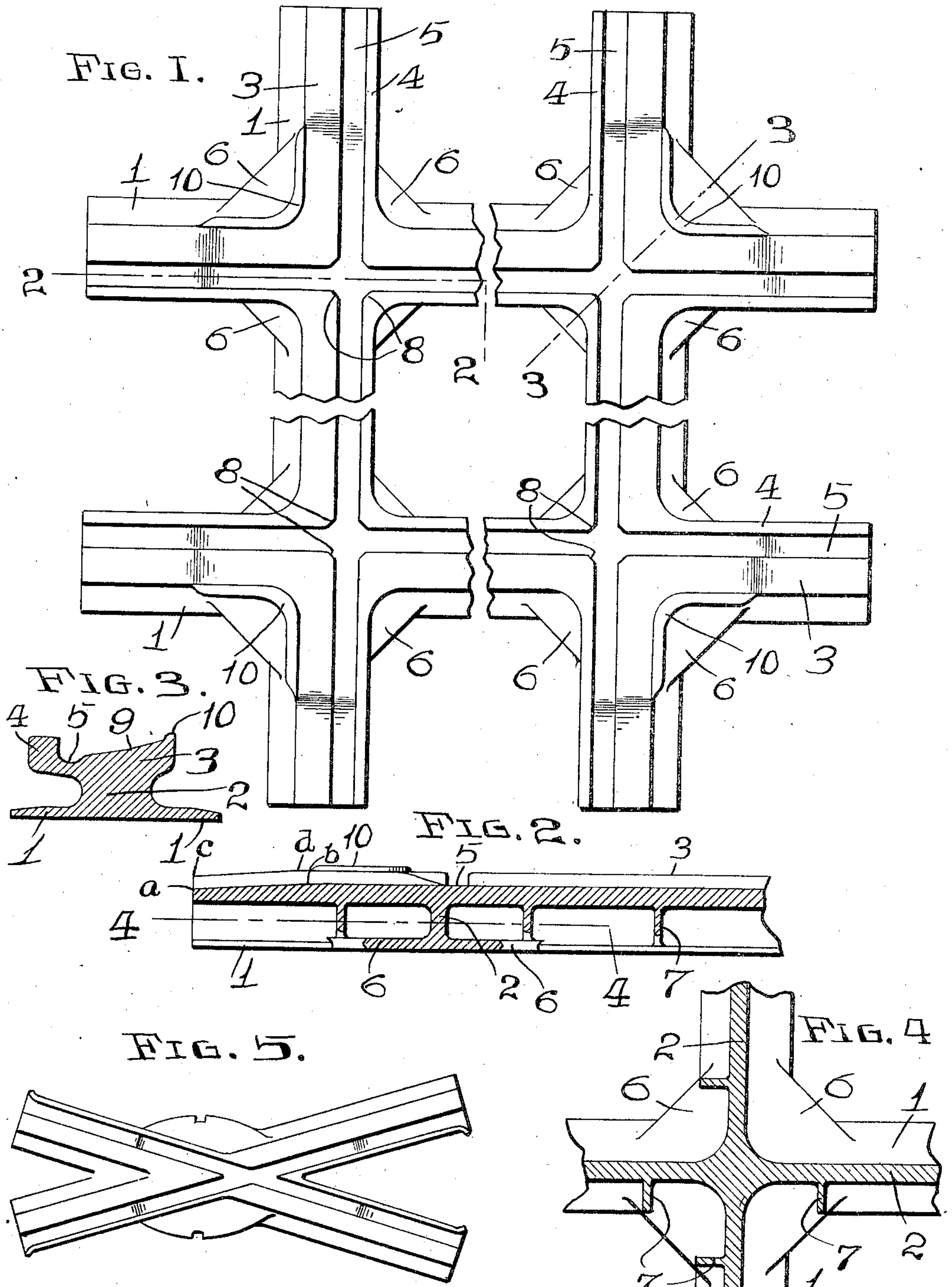


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RAILWAY CROSSING.
APPLICATION FILED JAN. 25, 1909.

917,051.

Patented Apr. 6, 1909.



WITNESSES.
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RAILWAY-CROSSING.

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To all whom it may concern:

Be it known that I, CHARLES J. GRIFFITH, a citizen of the United States, and resident of St. Louis, State of Missouri, have invented certain new and useful Improvements in Railway-Crossings, of which the following is a specification containing a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to a railway crossing, the object of my invention being to construct a crossing wherein the intersecting rails are formed integral with one another in order to provide a strong, solid and substantial construction which will readily withstand the wear of the car wheels passing over the crossing, and which crossing is so constructed as to overcome and do away with all jar and pounding incident to the passage of the car wheels over the intersecting flange grooves formed in the tops of the rails.

My invention consists in certain novel features of construction and arrangement of parts hereinafter claimed, described and shown in the accompanying drawings, in which—

Figure 1 is a plan view of a crossing of my improved construction. Fig. 2 is a vertical section taken on the line 2—2 of Fig. 1.

Fig. 3 is a cross section taken on the line 3—3 of Fig. 1. Fig. 4 is a horizontal section taken on the line 4—4 of Fig. 2. Fig. 5 is a plan view of a frog crossing constructed in accordance with my invention.

Referring by characters to the accompanying drawings, 1 designates the base flanges of the crossing rails, 2 the vertically disposed webs, 3 the balls of the rails, 4 the flange guards formed integral with the inner edges of the balls and between which balls and flange guards are formed flange grooves 5. The intersecting rails so constructed are formed integral with one another, and formed integral with the base flanges of the rails at the points where the same intersect are horizontally disposed strengthening flanges 6. Formed integral with the sides of the webs 2 and extending between the balls of the rails and the base flanges are vertically disposed strengthening ribs 7.

The corners of the balls of the rails and the flange guards 4, are cut away as designated by 8 at the points where the flange grooves 5 intersect, in order that the flanges

of the wheels will readily pass through said grooves at the intersecting points without grinding against said corners.

The top surfaces of the balls 3 of the rails curve gradually upward as designated by 9 from the flange grooves 5 toward the outer edges of said balls 3, which construction is for the purpose of accommodating both new wheels and old wheels, which latter are worn from use, and formed integral with the outer edges of the balls of the rails at the outer corners of the crossing are upwardly projecting ribs 10 which form guards for the treads of the wheels during their passage over the intersecting points of said rails.

The bottoms of the flange grooves 5 incline gradually upward from the outer ends of the rails toward the points where the same intersect, as shown by *a—b* Fig. 2, and the top surfaces of the balls of the rails at the outer ends are similarly inclined as designated by *c—d* Fig. 2. This construction being for the purpose of slightly elevating the treads of the car wheels from the top surfaces of the balls of the rails during the passage of said wheels across the intersecting flange grooves, thus doing away with the jar and pounding which ordinarily occurs in crossings of the ordinary construction.

A crossing of my improved construction is very strong, solid and substantial, can be constructed of any suitable material, accommodates both new and old wheels which latter are worn from use, and does away with the jar and pounding incident to the passage of the car wheels over the crossing.

I claim:

1. The herein described railway crossing comprising intersecting rails formed integral with one another, the top surfaces of the balls of which rails curve gradually upward from their inner edges to their outer edges.

2. The herein described railway crossing comprising intersecting rails formed integral with one another, the top surfaces of the balls of which rails curve gradually upward from their inner edges to their outer edges, and tread guards integral with the outer edges of the balls of the rails at the points where said rails intersect.

3. The herein described railway crossing comprising intersecting rails formed integral with one another, there being flange grooves formed in the tops of said rails and the top surfaces of the balls of which rails

curve gradually upward from the flange grooves toward the outer edges of the balls.

4. The herein described railway crossing comprising intersecting rails formed integral with one another, there being flange grooves formed in the tops of said rails, the top surfaces of the balls of which rails curve gradually upward from the flange grooves toward the outer edges of the balls, and tread guards integral with the outer edges of the balls of the rails at the points where said rails intersect.

5. The herein described railway crossing comprising intersecting rails formed integral with one another, there being flange grooves formed in the tops of said rails, the top surfaces of the balls of which rails curve gradually upward from the flange grooves toward the outer edges of the balls, and the bottoms of the flange grooves and the top surfaces of the balls of the rails being inclined gradually upward from the outer ends of the rails toward the points where said rails intersect.

6. The herein described railway crossing comprising intersecting rails formed integral with one another, the top surfaces of the balls of which rails curve gradually upward from their inner edges to their outer edges, and the top surfaces of said balls being inclined gradually upward from the outer ends of said rails toward the points where said rails intersect.

7. The herein described railway crossing comprising intersecting rails formed integral with one another, the top surfaces of the balls of which rails are curved transversely and the outer edges of said balls being higher than the inner edges.

8. The herein described railway crossing comprising intersecting rails formed integral with one another, the top surfaces of the balls of which rails are curved transversely, the outer edges of said balls being

higher than the inner edges, and flange guards formed integral with the inner edges of the balls of the rails.

9. The herein described railway crossing comprising intersecting rails formed integral with one another, the top surfaces of the balls of which rails curve gradually upward from their inner edges to their outer edges, and the corners of the balls of said rails being cut away at the points where said balls intersect.

10. The herein described railway crossing comprising intersecting rails formed with the usual base flanges, webs and balls, the top surfaces of which balls curve gradually upward from their inner edges to their outer edges, and strengthening ribs formed integral with the webs of said rails.

11. The herein described railway crossing comprising intersecting rails formed with the usual base flanges, webs and balls, the top surfaces of which balls curve gradually upward from their inner edges to their outer edges, strengthening ribs integral with the webs of said rails, and strengthening flanges integral with the base flanges of the rails at the points where the same intersect.

12. The herein described railway crossing comprising intersecting rails formed with the usual base flanges, webs and balls, the top surfaces of which balls curve gradually upward from their inner edges to their outer edges, strengthening ribs integral with the webs of said rails and the top surfaces of the balls of the rails being inclined gradually upward from the outer ends of the rails toward the points where said rails intersect.

In testimony whereof, I hereunto sign my name in the presence of two subscribing witnesses.

CHARLES J. GRIFFITH.

Witnesses:

L. S. ELMORE,
C. L. WEBER.