

(No Model.)

A. GUDMUNSEN.
RAIL JOINT.

No. 532,197.

Patented Jan. 8, 1895.

Fig. 1.

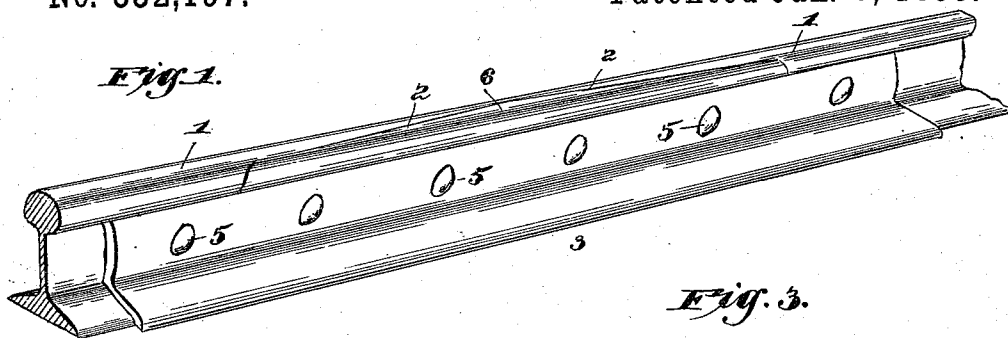


Fig. 3.

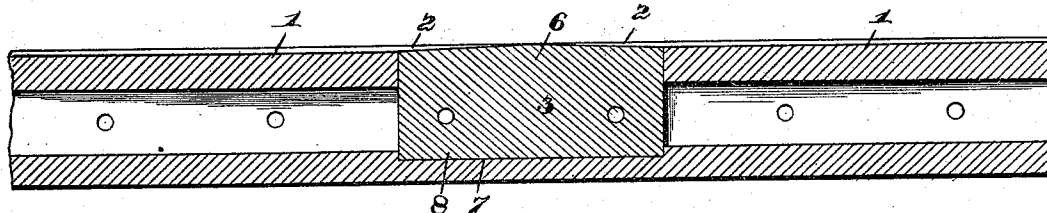


Fig. 4.

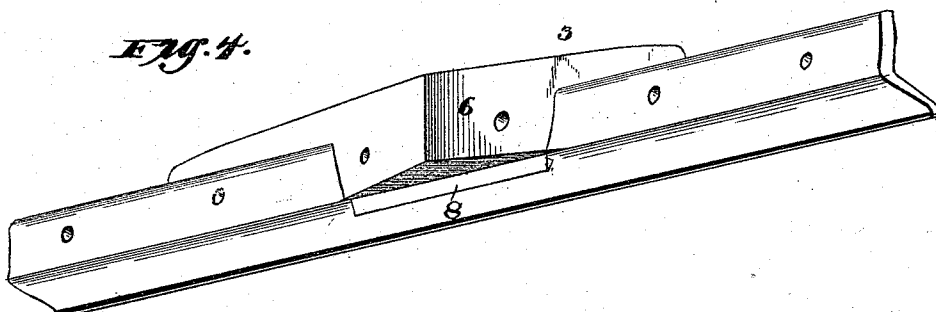


Fig. 5.

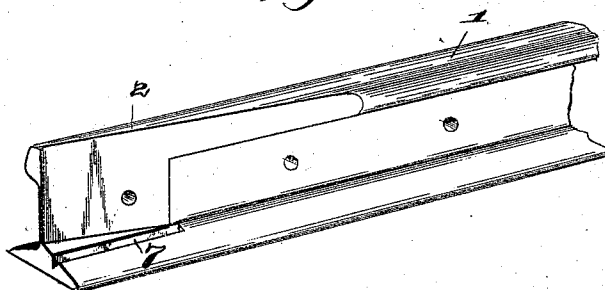
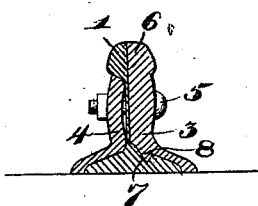


Fig. 2.



Inventor

Abraham Gudmunsen

Witnesses

Wm. Doyle
H. H. Riley

By his Attorneys.

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

ABRAHAM GUDMUNSEN, OF LEHI CITY, UTAH TERRITORY, ASSIGNOR OF
ONE-HALF TO JEREMIAH E. COTTER, OF SAME PLACE.

RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 532,197, dated January 8, 1895.

Application filed May 28, 1894. Serial No. 512,743. (No model.)

To all whom it may concern:

Be it known that I, ABRAHAM GUDMUNSEN, a citizen of the United States, residing at Lehi City, in the county of Utah and Territory of Utah, have invented a new and useful Rail-Joint, of which the following is a specification.

The invention relates to improvements in rail joints.

The object of the present invention is to improve the construction of rail joints, and to provide a simple and inexpensive one, which will form practically a continuous unbroken rail to avoid the jarring noises incident to car wheels crossing an ordinary joint, to prevent the rails sagging at their ends, and to avoid injury to road beds and rolling stock.

The invention consists in the construction and novel combination and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

In the drawings—Figure 1 is a perspective view of a rail joint constructed in accordance with this invention. Fig. 2 is a transverse sectional view of the same. Fig. 3 is a vertical longitudinal sectional view, showing the key of the fish-plate interlocking with the grooves of the rails. Fig. 4 is a detail perspective view of the inner fish-plate. Fig. 5 is a similar view of an end of one of the rails.

Like numerals of reference indicate corresponding parts in all the figures of the drawings.

1—1 designate rails, which have their adjacent ends 2 beveled at the inner faces of their tops and webs, or cut diagonally, forming slightly shouldered points, which are arranged adjacent to each other; but the bevel may be varied as desired. The rails are connected by inner and outer fish-plates 3 and 4, and horizontal bolts 5, which pass through the fish-plates and the webs of the rails in the usual manner. The outer fish-plate is of the ordinary construction, while the inner fish-plate 3 is provided with a triangular enlargement 6, which fits in the angle or recess formed by the two rails; and it provides practically a continuous rail, the enlargement taking the place of the portions cut away from the rails. The enlargement is formed integral with the inner fish-plate, and it prevents the wheels from coming in contact with and depressing

or mashing down the ends of the rails. It prevents the noises incident to the passage of car wheels over ordinary rail joints, and the consequent annoyance to travelers, and it avoids injury to the road bed and the rolling stock.

The bottom flanges at the inner sides of the rails are provided on their upper faces with longitudinal V shaped grooves 7, which receive and have interlocked in them a depending longitudinally disposed wedge-shaped key 8, formed integral with the inner fish-plate. The key is located directly beneath the triangular enlargement and interlocking with the grooves greatly strengthens the construction, and prevents any lateral separation of the parts.

It will be seen that the rail joint is simple and comparatively inexpensive in construction, that it provides, practically, a continuous rail, and combines all the advantages of such.

Changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

What I claim is—

In a rail joint, the combination of the rails, having their adjacent ends beveled at their inner sides, and provided in the upper faces of their inner bottom flanges with longitudinal V-shaped grooves, an outer fish plate, an inner fish plate having at its inner side a triangular enlargement fitting in the recess formed by the cut away portions of the rails, said inner fish plate completing the treads of the rails and arranged flush with the same, and being provided with a depending longitudinally disposed wedge-shaped key located beneath the triangular enlargement and terminating at the ends thereof and interlocking with the grooves of the rails, and the connecting bolts passing through the fish plates and the rails, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ABRAHAM GUDMUNSEN.

Witnesses:

W. F. WELSH,
JAMES HARWOOD.