

L. BLESSING.
RAIL JOINT.
APPLICATION FILED MAY 18, 1912.

1,053,351.

Patented Feb. 18, 1913.

Fig. 1

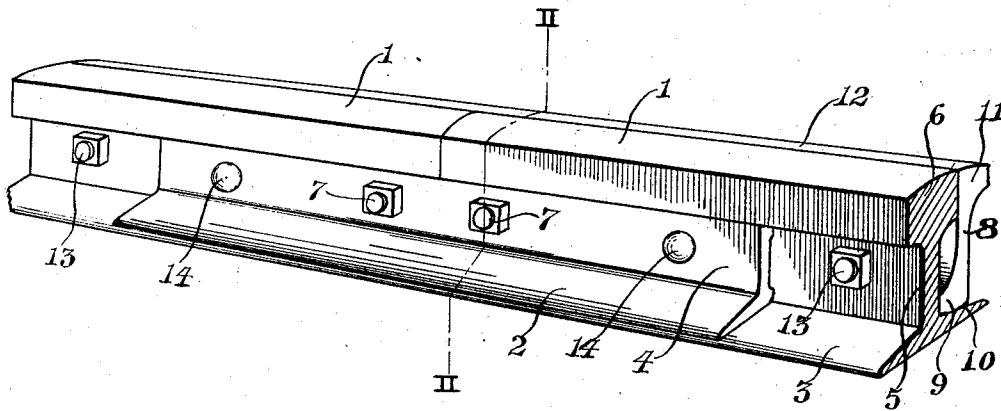
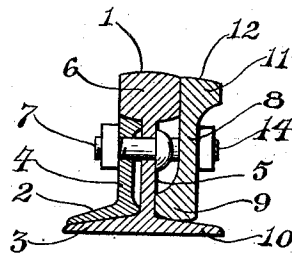


Fig. 2



Witnesses

A. M. Shannon.
Chas. W. Stauffer

Inventor

Louis Blessing

By *[Signature]*

Attorneys

UNITED STATES PATENT OFFICE.

LOUIS BLESSING, OF JACKSON, MICHIGAN.

RAIL-JOINT.

1,053,351.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, LOUIS BLESSING, a citizen of the United States of America, residing at Jackson, in the county of Jackson and State of Michigan, have invented certain new and useful Improvements in Rail-Joints, of which the following is a specification, reference being had therein to the accompanying drawings.

In the usual construction of rail-way tracks, the rails yield slightly owing to their method of support on the ties and road bed, and it is desirable that rail joints be so connected that the same degree of elasticity prevails as in the body of the rail. It is also advantageous to have the members connecting the rail end, which together therewith are commonly called when assembled "the rail joint", so disposed as to be readily applicable and if possible to be reversible in case of undue wear.

This invention relates to a rail joint whereby the meeting ends of the rail are so supported as to have the same elasticity as the rail body without affording any chance for battering or pounding the rail ends, the members of the joint furnishing a practically continuous wheel tread.

The invention consists in the matters hereinafter set forth and more particularly pointed out in the appended claims.

In the drawings, Figure 1 is a view in perspective of rail end portions and supporting and connecting members which form therewith a "rail joint"; and Fig. 2 is a view in transverse section taken on or about line II—II of Fig. 1.

As herein shown, a pair of rails have their end portions 1, which are of standard section, provided with bolt holes through the webs disposed at regular intervals through the rail webs. An inside plate has a base flange 2 resting on the inner flanges 3 of the rails and a web 4 abutting the rail webs 5 and closely fitting between the base flange 3 and the rail head 6. A pair of bolts 7 extend through the rail web holes adjacent the rail extremities and secure the inner plate firmly in position. An outer plate 8, of greater length than the inner plate, is secured in upright position on the outer sides of the rails, with its lower flange head 9 resting on the outer flanges 10 of the rails and its upper flange head 11, similar but oppositely disposed to the head 9, bearing against the rail head 6, the upper face 12 of

the head forming a substantially flush lateral extension of the rail tread. A pair of bolts 13 in the outer holes through the rail flanges clamp the outer plate 8 in position. Pivot bolts 14 each intermediate the bolts 7 and 13 extend through both plates and the rail web. As a result of this construction whatever flexion is given the rail ends causes a corresponding movement in the inner plate between the pivot bolts 14 without any tendency to shear off the securing bolts as would be the case if the latter passed through both plates and the rail webs near the ends. The tread surface of the outer plate also acts as a bridge across the gap between the rails, and the latter plate is reversible to increase its life of service. Furthermore, if the outside plate is ever knocked off accidentally as by derailment, the inner plate still secures the rails, and conversely, if the inside plate is disturbed, the outer plate acts as a keeper for the joint.

Obviously, changes in the details of construction may be made without departing from the spirit of my invention and I do not care to limit myself to any particular form or arrangement of parts.

What I claim is:—

1. The combination with abutting alined track rails, of an inside plate resting on the rail flanges, means securing the inside plate only to the rails near the rail ends, an outside plate resting on the outer rail flanges, means securing the outer plate only to the rails near its ends, and means intermediate the respective holding means of the plates for securing both plates and the rails together.

2. The combination with abutting alined track rails, of an inside plate resting on the rail flanges, means securing the inside plate only to the rails near the rail ends, an outside plate resting on the outer rail flanges, means securing the outer plate only to the rails near its ends, and means intermediate the respective holding means of the plates for securing both the plates and rails together, the outer plate forming a substantially flush continuation of the rail treads when in position.

3. The combination with abutting alined track rails, of an inside plate resting on the rail flanges, means securing the plate near the rail ends to the rails, an outside plate resting on the outer rail flanges, means securing the outer plate near its ends to the

rails, and means intermediate the respective holding means of the plates for securing the plates and rails together, the outer plate being reversible, either side forming a substantially flush continuation of the rail treads when the plate is in position.

4. The combination with abutting alined track rails, of an inside plate resting on the rail flanges, bolts securing the inside plate only to the rails near the rail ends, an outside plate resting on the outer rail flanges, bolts securing the outer plate only to the rails near its ends, and bolts intermediate the respective holding bolts of the plates for securing both the plates and the rails together.

5. The combination with abutting alined track rails, of an inside plate resting on the

rail flanges, bolts securing the inside plate only to the rails near the rail ends, an outside plate resting on the outer rail flanges, bolts securing the outer plate only to the rails near its ends, and bolts intermediate the respective holding means of the plates for securing the plates and rail together, the outer plate being reversible, either side forming a substantially flush continuation of the rail treads when the plate is in position.

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

LOUIS BLESSING.

Witnesses:

ZENESS R. WRIGHT,
W. F. McGRAW.

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