

J. G. McMICHAEL.
RAIL JOINT.
APPLICATION FILED DEC. 26, 1906.

932,052.

Patented Aug. 24, 1909.

Fig. 1

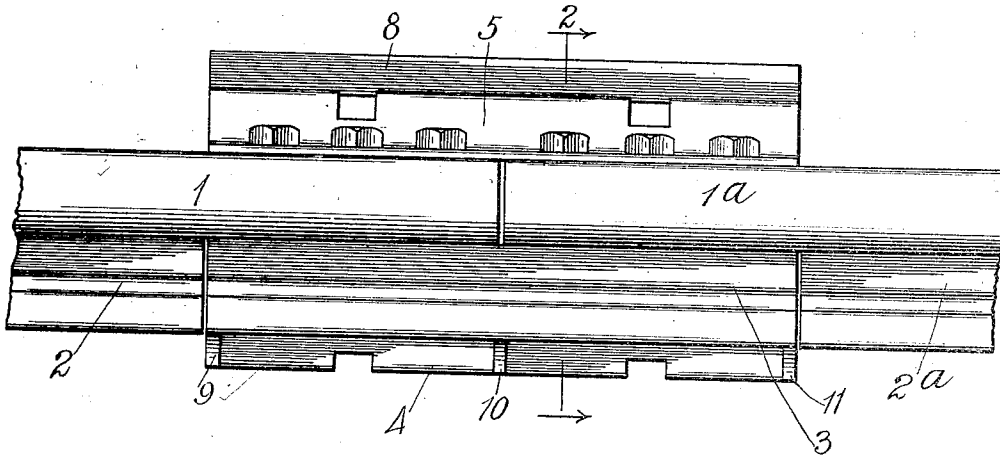
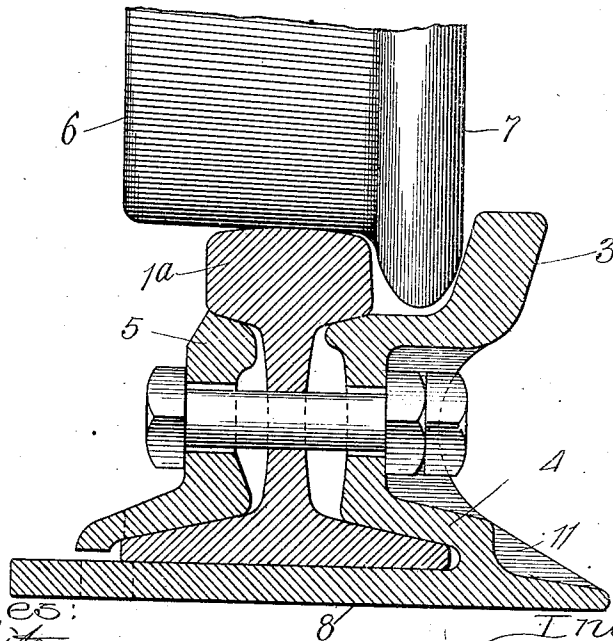


Fig. 2



Witnesses:
Ray White.
Harry R. L. White.

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UNITED STATES PATENT OFFICE.

JAMES G. McMICHAEL, OF CHICAGO, ILLINOIS.

RAIL-JOINT.

932,052.

Specification of Letters Patent. Patented Aug. 24, 1909.

Application filed December 26, 1905. Serial No. 295,322.

To all whom it may concern:

Be it known that I, JAMES G. McMICHAEL, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Rail-Joints, of which the following is a specification.

My invention relates to improvements in rail joints.

10 The salient object of my invention is to provide a rail joint member and wheel-guard in one integral construction, adapted and arranged, when said joint member is in position, for proper registration of the wheel-guard thereof with a similar wheel-guard
15 which may be fixed to the rail, or otherwise secured, and which usually extends in either direction between joints at desirable points in track construction.

20 In the drawings, Figure 1 represents a plan view of two fragments of rails with their respective ends in abutting proximity with my joint and guard applied thereto. It also shows the usual intermediate wheel-guard,
25 on each side of my joint, and registering with the wheel-guard portion thereof. Fig. 2 is a cross section taken on line 2—2 of Fig. 1.

In both views the same reference numerals indicate like parts.

30 1—1^a indicate the two abutting ends of the rails.

2—2^a indicate the terminal ends of respective sections of a wheel-guard, which may be properly associated with, or secured to the
35 rail in any suitable manner, and extend longitudinally with the rail intermediate of the joints.

3 indicates the wheel-guard portion, or rib, of the joint member 4, and when in position,
40 as shown, it registers with the usual wheel-guard sections 2—2^a, thus providing a continuous wheel-guard.

5 indicates an ordinary angle bar or fish-plate comprising the other member of the
45 joint.

6 indicates a fragment of a car wheel showing the position of the flange 7 thereof with relation to the wheel-guard 3.

The member 4 of the joint is designed to be

placed upon the inside of the rail, and the ob- 50
ject of the construction shown is to provide a wheel-guard in integral relation with said inner member of the joint, whereby the intervening space, occupied by the joint, may be
55 conveniently bridged by a section that is a part of the joint, thereby providing a continuous wheel-guard and avoiding the inconvenience of attaching separate sections to the rails or ties, to accomplish this result.

It will be observed that the base 8 of the 60
section 4 under lies the base of the rail 1, 1^a and extends beyond the base of the respective rails, thereby presenting an extended base surface which is designed to rest upon
65 the ties whether the joint be placed in relation thereto as a centrally supported joint or as a suspended joint.

The guard rib 3 is given additional strength by the ribs 9, 10 and 11 which unite
70 the base, the vertical section and the rib 3 of the member 4, and which are placed preferably, one at either end and one near the middle portion thereof.

Having thus described my invention, what I claim and desire to secure by Letters Pat- 75
ent, of the United States, is:

In a rail joint the combination with the rail, of a member adapted to lie on the inside of the rail, an integral base and guard member comprising a base underlying the rail and
80 extending therebeyond on its outer side, a folded portion overlying the rail base, a fish plate portion extending from said folded portion to underlie the head of the rail, an off-set guard portion of angular shape in cross
85 section extending outward from and then upward beside the rail to form a flange-receiving channel, and vertical bracing webs connecting the off-set guard portion with the subjacent base portion of the said member, 90
substantially as and for the purpose described.

In testimony whereof I hereunto set my hand in the presence of two witnesses.

JAMES G. McMICHAEL.

In the presence of—
FORRE BAIN,
MARY F. ALLEN.