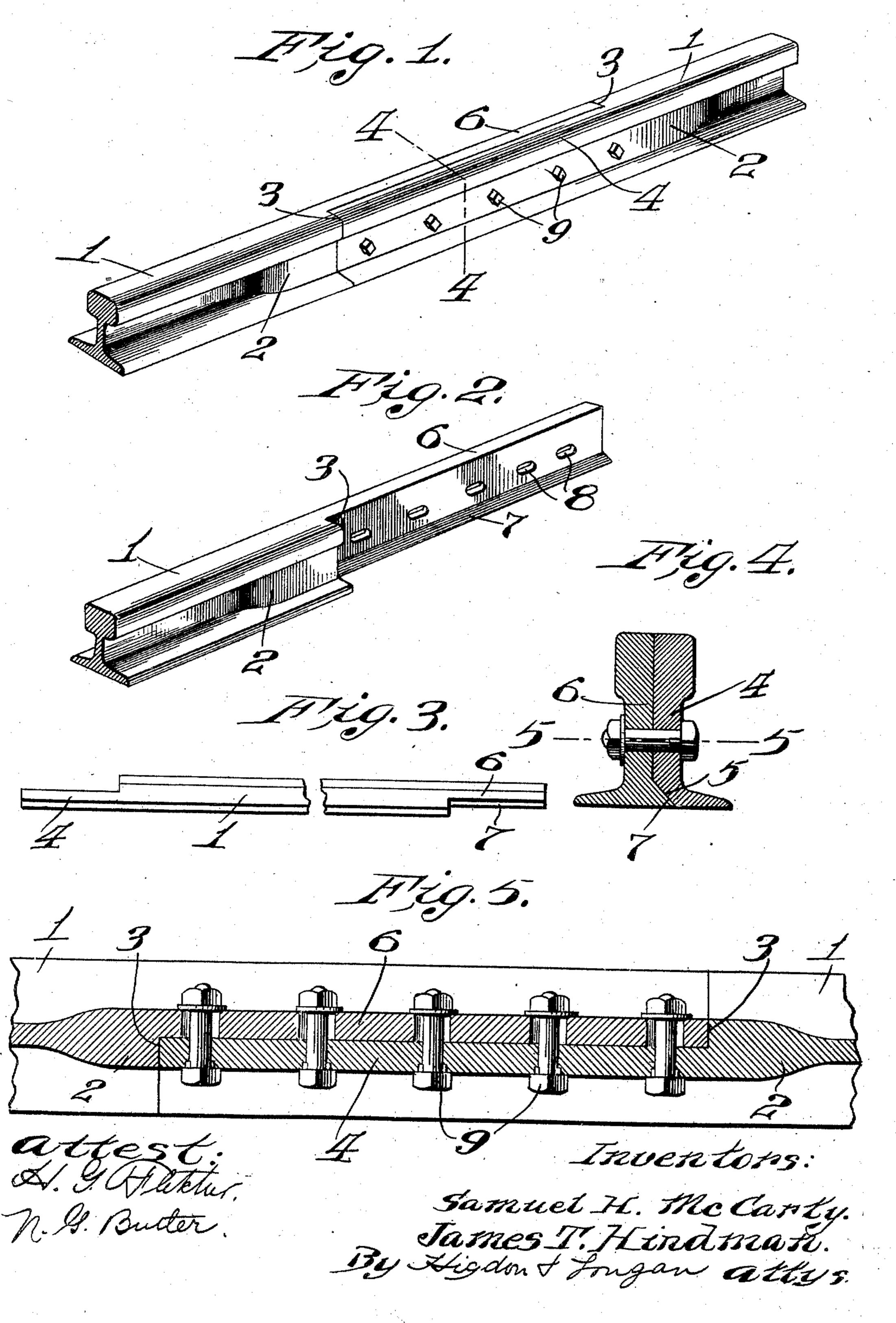
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RAILWAY RAIL.

APPLICATION FILED FEB. 11, 1910.

967,414.

Patented Aug. 16, 1910.



UNITED STATES PATENT OFFICE.

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RAILWAY-RAIL.

967,414.

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To all whom it may concern:

Be it known that we, Samuel H. McCarty and James T. Hindman, citizens of the United States, and residents of Grayville, 5 White county, Illinois, have invented certain new and useful Improvements in Railway-Rails, of which the following is a specification containing a full, clear, and exact description, reference being had to the accom-10 panying drawings, forming a part hereof.

Our invention relates to improvements in railway rails, the object of our invention being to construct a rail which is reduced laterally for a short distance at each end except 15 the web portion which is enlarged immediately adjacent the reduced portion of the rail and, at the reduced portion occupies a position with its inside face parallel to the median line of the web section proper, the 20 inside face of the reduced portion at one end of the rail being chamfered, the face of the reduced portion at the opposite end of the rail being provided with an integral, laterally projecting rib having an inclined up-25 per face. Each of the reduced portions is provided with slots whereby ends of adjoining rails may be united, the rails being united in such manner as to produce a straight surface which will eliminate pound-30 ing caused by the wheels of rolling stock and to form a rail joint which will automatically hold the nuts on the securing-bolts against movement relative to the bolts during the times of passing trains.

For the above purposes our invention consists in certain features of construction and arrangement of parts as will be hereinafter more fully described, pointed out in the claims and illustrated by the accompanying

40 drawing, in which:

Figure 1 is a perspective illustrating the end sections of adjoining rails; Fig. 2 is a perspective illustrating one end portion of our improved rail; Fig. 3 is a plan illustrat-45 ing the rail with a part removed from the central portion thereof; Fig. 4 is a transverse, sectional elevation taken on the line 4—4 of Fig. 1; and Fig. 5 is a sectional plan taken on the line 5—5 of Fig. 4.

Referring by numerals to the accompanying drawing: 1 designates the rail proper which is of ordinary construction. The left hand end of the rail is reduced on the one face and the right hand end of the rail is

reduced on the other face of the rail as 55 shown in Fig. 3. The web adjacent each reduced portion is enlarged at 2, the enlargement terminating in a shoulder 3. From the shoulder 3 to the adjacent end of the rail the web is offset so that its inside 60 face parallels the median line of the web proper, it being understood that the rail is vertically divided from the shoulder 3 to the adjacent end of the rail, that is one half of the tread section and one half of the 65 base flange is removed. The web section 4, at the left hand end of the rail, is chamfered at 5 and the web section 6 is provided with a rib 7 the face of which is beveled corresponding in angle with the chamfered face 70 5 of the web 4. The webs 4 and 6 are provided with openings 8, through which the bolts 9 are extended for the securing of the rail ends together.

As shown in Fig. 5 of the drawing the web 75 sections of adjoining rails are of a size approximately double the thickness of the web proper for the purpose of lending greater

strength to the rail at the joint.

By reason of the chamfered face 5 and 80 rib 7, located respectively on the webs 4 and 6 of the rails at a joint, the weight of passing cars or trains will be supported by each of the webs.

By reason of the tendency of the web 4 85 of the joint to move downwardly and outwardly relative to the web 6 it is obvious that the nuts on the bolts 9 will be held against rotation relative to the bolts due to the fact that any lateral movement of the 90 joint sections relative to each other will vary the distance between the head of the bolt and the nut and thus prevent the turning of the nut by reason of the increased friction between the nut and the adjoining rail section. 95

We claim:

1. A railway rail, reduced at each end portion on oppositely facing sides of the rail, a web section enlarged adjacent each reduced portion of the rail, the enlarged portion of 100 the web section terminating in a shoulder and the web from the shoulder to the adjoining end of the rail being approximately the same size as the web proper and located to one side of the median line of the web 105 proper, each reduced end portion being provided with bolt openings, a bevel-faced rib extending the full length of the reduced por-

tion at one end of the rail and the opposite end of the rail being chamfered to receive the rib of an adjoining rail.

2. In a rail, vertically divided for a short 5 distance at each of its ends, an enlarged web section adjacent each divided end, the web section of the divided end of the rail being to one side of the median line of the web proper and of approximately the same 10 size as the web proper, a rib having an inclined face projecting laterally from the inside face of the divided end portion, the base of which rib is formed flush with the base

of the flange, the flange and inside face of the opposite end of the rail being chamfered 15 to fit over the rib of an adjoining rail, there being bolt holes through each end portion of the rail.

In testimony whereof, we have signed our names to this specification, in presence of 20 two subscribing witnesses.

SAMUEL H. McCARTY. JAMES T. HINDMAN.

Witnesses:

P. O. Walters, G. D. NEGLEY.