

N^o 7828



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Complete Specification Left, 29th Sept., 1906—Accepted, 3rd Jan., 1907

PROVISIONAL SPECIFICATION.

“Improvements relating to Railway Rails and Method of Joining same.”

I, WILLIAM BRITAIN Junior, of “Wildwood”, Rowantree Road, Enfield, Middlesex, Engineer, do hereby declare the nature of this invention to be as follows:—

This invention relates to the method of joining together the rails of railways and more especially to rails in which the running surface is on an enlarged head supported by a vertical web as for example in the ordinary double headed chair supported rail of dumb-bell shape of section, or the flange footed rail of Vignolles type.

According to this invention the rail is bent at an obtuse angle at sufficient distances from each end in a plane perpendicular to its web, and on the outer side of the angles the head and the foot of and near the bent ends of the rail are removed for so much as projects beyond the plane of the surface of the web on said outer side of the bent ends.

At one end of the rail that part of the head and preferably also that part of the foot and web which projects on the inward side of the angle beyond the plane of the side surface of the head of the unbent part of the rail is also removed, and the top corner trimmed to make it uniform with the remainder of the rail. At the other end of the rail this part may or may not be removed. The rail is preferably provided with one elongated slot and one square hole made through the web near each end, and two square bolts and two washers which have their faces in planes at suitable angle to one another used for the connection.

The joint is preferably supported in a chair which may be modified in form to suit the obliquity of the meeting faces of the webs and to receive the double thickness of web. The spaces between the head and foot of rail where the webs overlap, may be filled with any suitable material to exclude dust from the sliding surfaces.

The invention is illustrated in the annexed drawing, in which Figure 1 is a plan and Figure 2 an elevation.

a represents the head, *b* the web, and *c* the foot of the rail. *d* is the chair and *e* the sleeper. *f* is the non-elongated hole and *g* the elongated hole in the web. *h* indicates the inclined faced washers, *j* the bolts and *k* the nuts, *l* packing to exclude dust.

The drawing illustrates the rails in the position of mean expansion.

Dated this 31st day of March 1906.

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Agents for Applicant.

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[Price 8d.]



Improvements relating to Railway Rails and Method of Joining same.

COMPLETE SPECIFICATION.

"Improvements relating to Railway Rails and Method of Joining same."

I, WILLIAM BRITAIN Junior, of "Wildwood", Rowantree Road, Enfield, Middlesex, Engineer, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to the method of joining together the rails of railways in which the rail is bent laterally at an obtuse angle at sufficient distances from each end so that the part of the web between said angle and the end will form a plane meeting face for the corresponding face on the next rail, the head and the foot of the bent ends of the rail being removed on the outer side of the angles for so much as projects beyond the plane of the surface of the web on said outer side of the bent ends, and at one end of the rail that part of the head and preferably also that part of the foot and web which project on the inward side of the angle beyond the plane of the side surface of the head of the unbent part of the rail being also removed, and the top corner trimmed to make it uniform with the remainder of the rail. The purpose of this invention is to produce such a rail which is capable of being usefully employed more especially one that can be inserted and removed from the chairs without undue difficulty. 5 10 15

For this purpose the angle to which the rail is bent is not so obtuse as has been heretofore proposed and is preferably such as is shown in the drawing filed with my Provisional Specification. The rail is provided at each end with one elongated slot and one square hole through the web near each end at the aforesaid meeting faces. The elongated slot is in the bent end of the web. The square hole is in the longitudinal part of the web near to the commencement of the bent end. Two square bolts and two washers which have their faces in planes at suitable angle to one another are used for the connection in the manner illustrated. 20 25

The joint is preferably supported in a chair which may be modified in form to suit the obliquity of the meeting faces of the webs and to receive the double thickness of the web and to allow space for the lateral movement of the rail in the act of inserting or withdrawing a rail. The spaces between the head and foot of rail where the webs overlap, may be filled with any suitable material to exclude dust from the sliding surfaces. 30

The invention is illustrated in the drawing filed with my Provisional Specification in which Figure 1 is a plan and Figure 2 an elevation.

a represents the head, *b* the web, and *c* the foot of the rail. *d* is the chair and *e* the sleeper. *f* is the non-elongated hole and *g* the elongated hole in the web. *h* indicates the inclined faced washers, *j* the bolts and *k* the nuts, and *l* the packing to exclude dust. 35

The drawing illustrates the rails in the position of mean expansion.

Although I have described the rail as being bent and otherwise formed according to the method described, I desire it to be understood that my invention includes a rail or rail joint of the same resultant shape whatever be the methods by which that shape is produced. 40

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:— 45

1. The method of joining railway rails in which the webs of the rail ends lie laterally at an obtuse angle to form meeting faces, certain parts of the rails on the outer sides of the angles being removed or absent to form a close joint between the rail ends and the parts of one or both rails which project beyond the normal

Improvements relating to Railway Rails and Method of Joining same.

plane of the connected rails on the inner side of the angle being also removed or absent, the said method consisting in the bolt holes being formed of two non-elongated slots in the longitudinal part of the web near the bent ends and two elongated slots in the bent ends themselves, and the provision of washers having
5 their faces in planes at an angle to each other corresponding to that of the bend, substantially as set forth.

2. A rail for use in a joint as described in Claim 1 having its end or each of its ends bent or formed in a plane at an obtuse angle to the body of the rail, with the superfluous parts of the head and foot removed or omitted as described,
10 and with a non-elongated slot in the web of the longitudinal part of the rail and an elongated slot in the web of the oblique end.

Dated this 29th day of September 1906.

HERBERT HADDAN & Co.,
Agents for Applicant.

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Fig. 1.

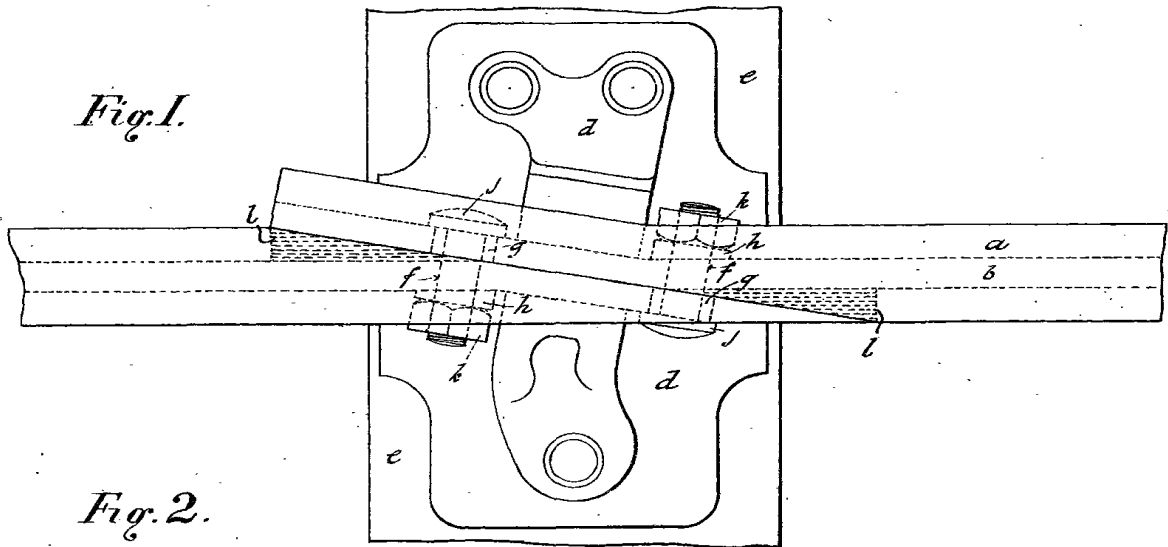
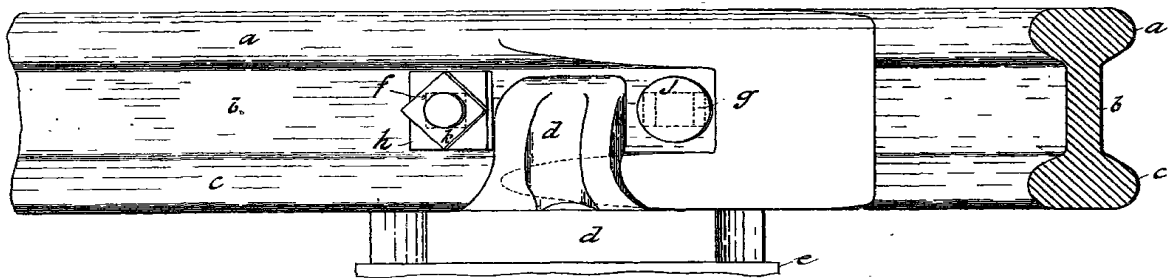


Fig. 2.



[This Drawing is a reproduction of the Original on a reduced scale.]

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Fig. 1.

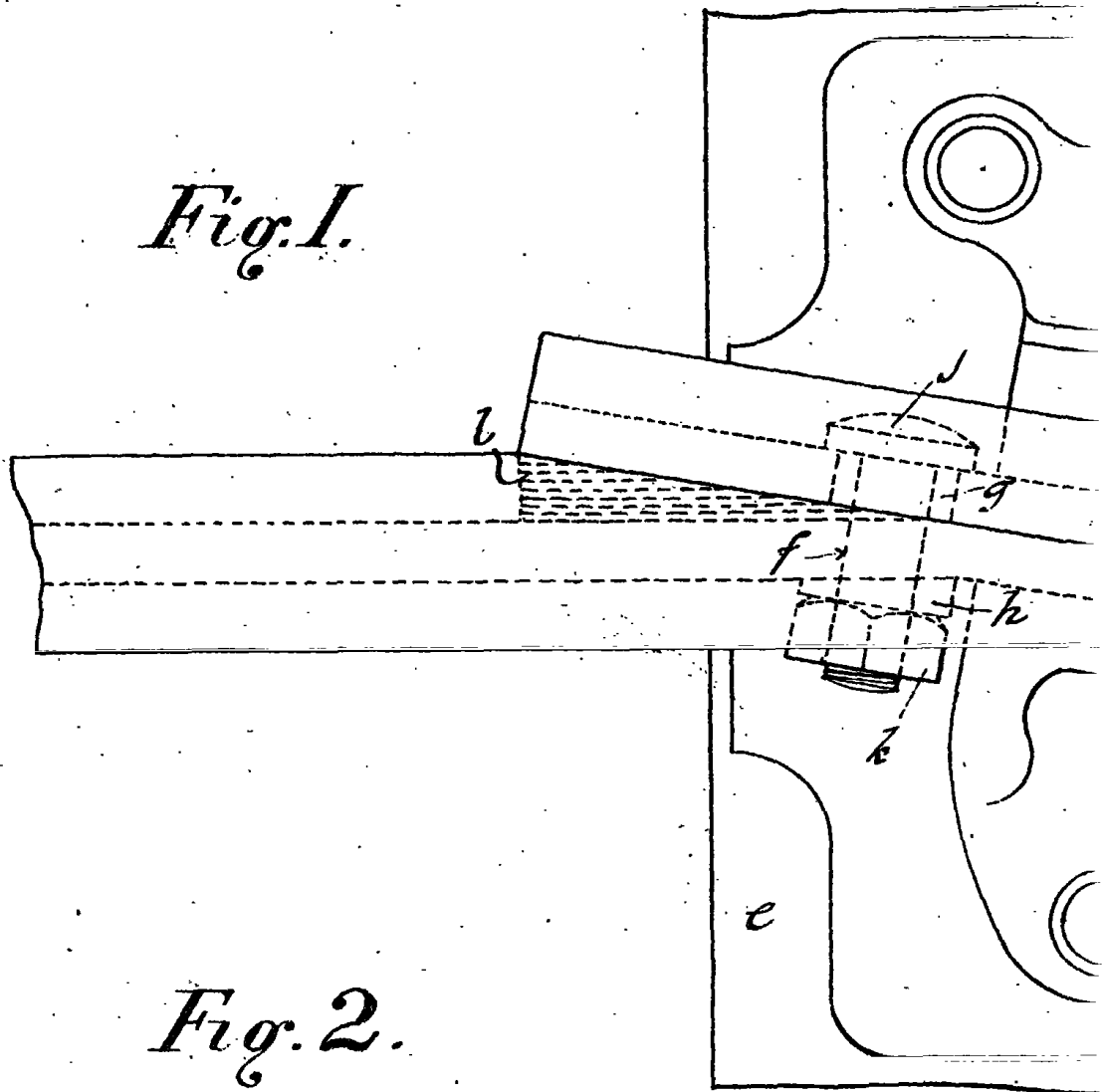
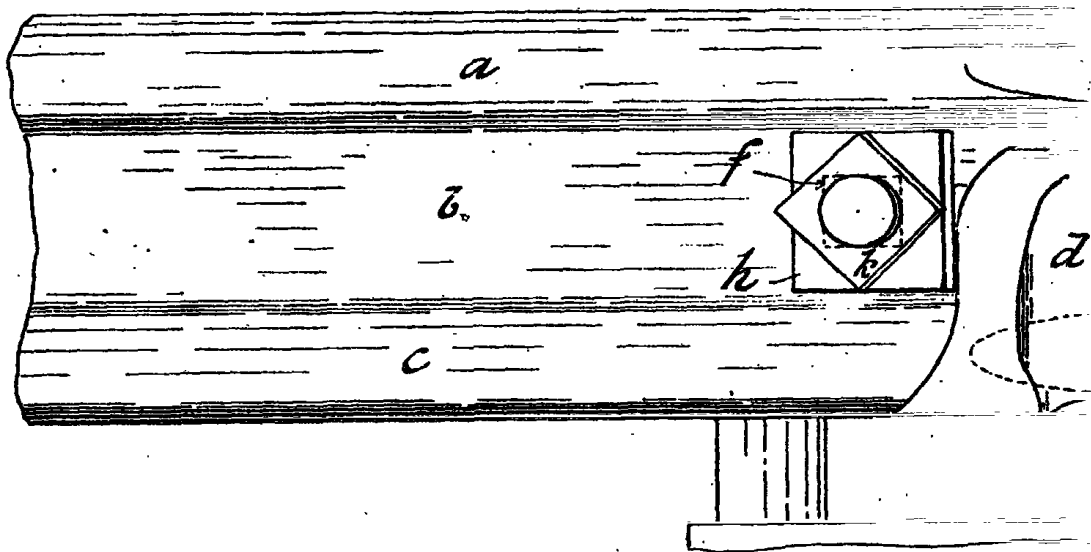
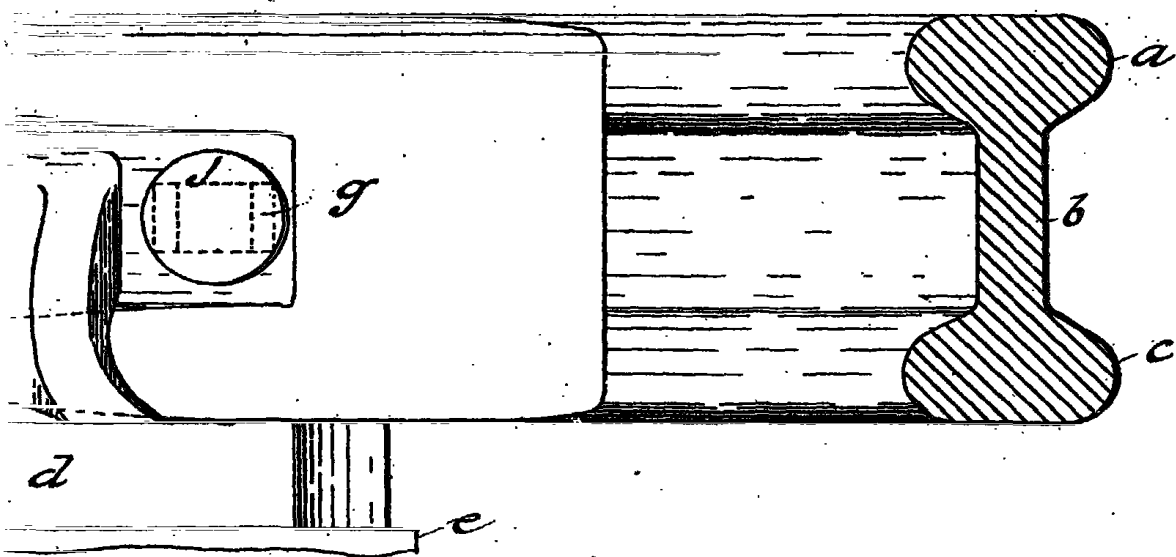
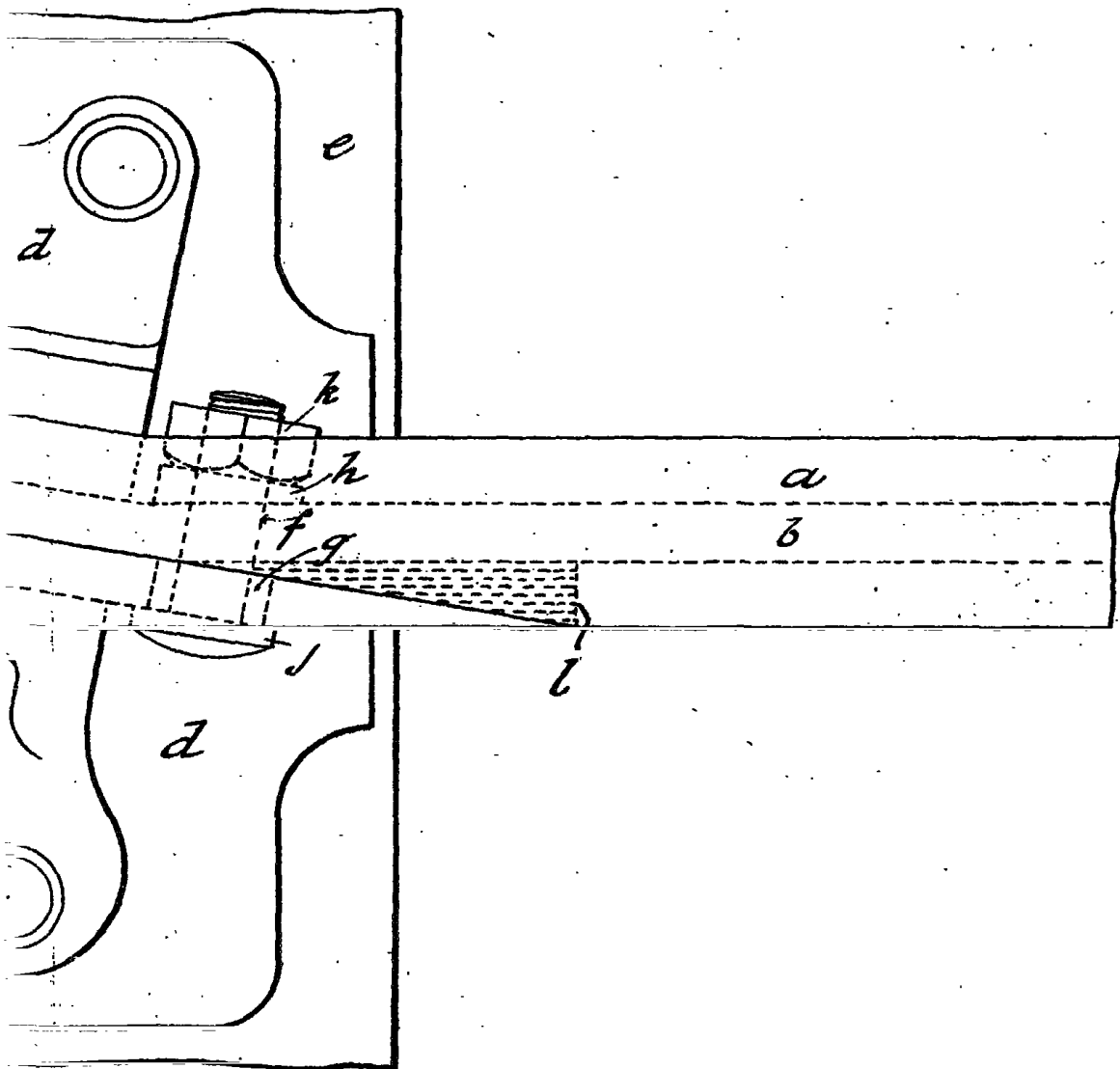


Fig. 2.



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