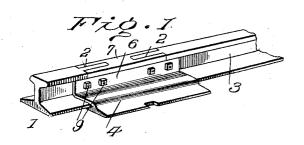
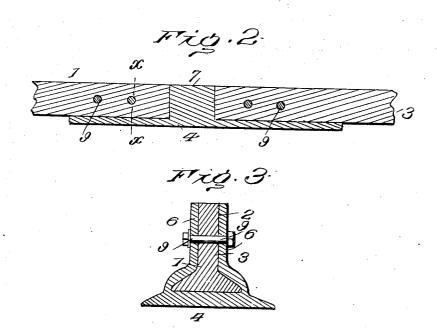
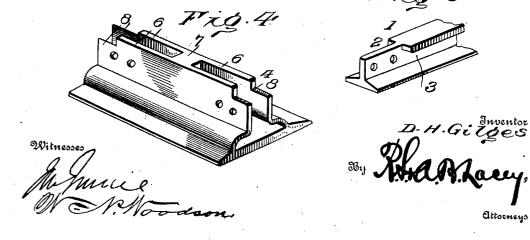
No. 838,101.

PATENTED DEC. 11, 1906.

D. H. GILGES.
RAIL JOINT.
APPLICATION FILED AUG. 3, 1906.







UNITED STATES PATENT OFFICE.

DUDLEY H. GILGES, OF BALDWIN, KANSAS.

RAIL-JOINT.

No. 838,101.

Specification of Letters Patent.

Patented Dec. 11, 1906.

Application filed August 3, 1906. Serial No. 329,123.

To all whom it may concern:

Be it known that I, DUDLEY H. GILGES, a citizen of the United States, residing at Baldwin, in the county of Douglas and State of Kansas, have invented certain new and useful Improvements in Rail-Joints, of which the following is a specification.

The object of this invention is to provide a simple construction of joint means for the neeting ends of rails or the like and one which is practically noiseless, as it does away with the rattle and vibration incident to the ordi-

nary type of rail-joints.

Furthermore, the invention provides a very 15 substantial connection between the meeting ends of the rails, affording a firm and continuous bearing for the wheels of the rollingstock at the point of jointure of said rails.

For a full understanding of the invention 20 and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings, in which-

Figure 1 is a perspective view of a rail-joint embodying the invention. Fig. 2 is a vertical longitudinal section. Fig. 3 is a transverse section on the line X X of Fig. 2. Fig. 4 is a detail perspective view of the rail-joint. 30 Fig. 5 is a perspective view of one of the rail ends, partially broken away.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same

35 reference characters.

In the drawings the numeral 1 designates the rail ends, which are in general form substantially of the type at present most commonly in use, save that the ball or head pormonly in use, save the pormonly in u 40 tion of each rail end is cut away longitudinally thereof and from opposite sides, as shown at Thus the ball or head of the rails at the extremities is made substantially the same width as the webs 3 thereof. The rail ends 45 when connected by means of the invention are seated in a chair 4, which comprises a base adapted to receive the basal portions of the rails thereon, spaced side wings 6 projecting upwardly from the base 5 aforesaid. 50 side wings 6 of the chair 4 are adapted to snugly fit against opposite ends of the web portions of the rails and also against the opposite sides of the ball or head portions at the points where these portions are cut away.
55 The extremities of the rails abut with a vertical web 7, which connects the side wings 6 of the | tremities of the rails received in the chair.

chair 4 intermediate of the ends of said wings, said web 7 virtually forming an abutment between the wings 6 in an evident manner. The opposite extremities of the wings 6 are cut 60 away, as indicated at 8, in order that the head or ball portions of the rail ends near the cutaway portions 2 may be seated firmly in the recesses or cut-away portions 8 of the wings, the lower sides of said recesses 8 forming bear- 65 ings beneath the head or ball portions of the rail ends and increasing the substantiality of the joint means in an evident manner.

To positively connect the rails with the chair 4, it is contemplated to provide trans- 70 verse bolts or fastenings 9, which pass through suitable registering openings in these parts. Furthermore, the chair 4 has the opposite longitudinal edge portions thereof provided with one or more notches, in which spikes or 75 like fastening members may engage in order to attach the chair to the rail-ties, upon which it will be disposed when in actual use.

Under actual conditions of service the rail ends are received in the opposite end portions 80 of the chair 4 between the side wings 6 thereof, the extremities of the rails abutting with the abutment or web 7, as above described. The base portions of the rails rest upon the base of the chair, and the base and head or ball 85 portions of the rail at the extremities have a scarf connection virtually with the chair, so that a continuous bearing is afforded for the wheels of the rolling-stock by reason of the fact that said wheels are always supported go either by the chair or the chair and rail ends together. The central web or abutment 7 of the chair affords a bearing for the wheels of the rolling-stock, which bearing is a continuation of the bearings afforded by the top edge 95 portions of the side wings 6 and the ball or head portions of the rails 1.

Having thus described the invention, what

is claimed as new is-

1. A rail-joint embodying in combination, 100 rail ends having the ball or head portions thereof cut away from opposite sides at the extremities, a rail-chair embodying a base and spaced side wings between which the end portions of the rails are received, the upper 105 portions of the side wings of the chair entering the cut-away side portions of the head or ball of each rail end, and the chair being formed with a vertical abutment intermediate of its ends and between the side wings, 110 said abutment abutting with the opposite ex2. A rail-joint embodying in combination, rail ends having the ball or head portions thereof cut away from opposite sides, a chair embodying a base and spaced side wings embodying a base and spaced side wings embodying the rail ends upon opposite sides, the upper edge portions of the side wings being flush with the top or ball portions of the rails and entering the cut-away portions of said ball or head portions as described, the upper opposite extremities of the side wings aforesaid being formed with recesses receiving por-

tions of the head or ball of each rail end and affording a bearing therefor, and fastenings passing through the spaced side wings of the chair and the rail ends and connecting these 15 parts together.

In testimony whereof I affix my signature

in presence of two witnesses.

DUDLEY H. GILGES. [L.s.]

Witnesses:

Louis Shore, J. C. Bare.