(No Model.)

C. R. SMITH.

RAIL JOINT.

No. 597,789. Patented Jan. 25, 1898.

FIG. 1.

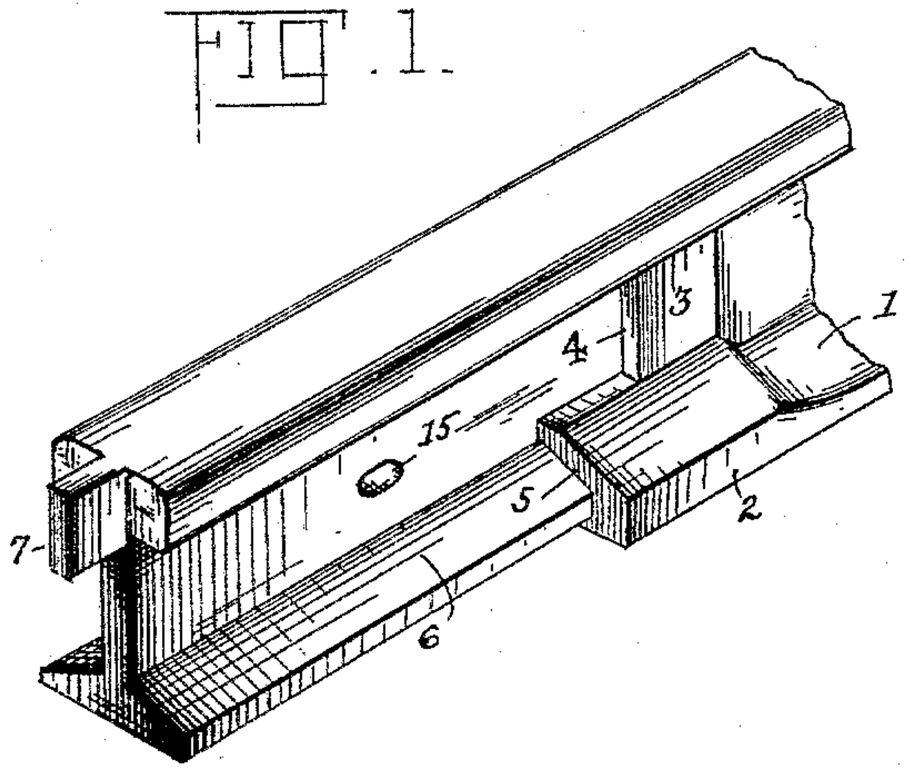


FIG. 2.

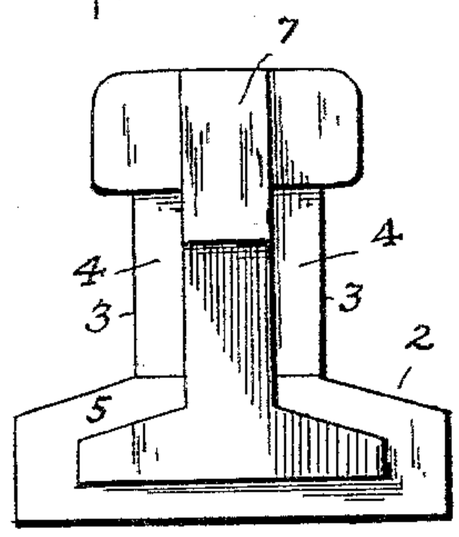


FIG. 3.

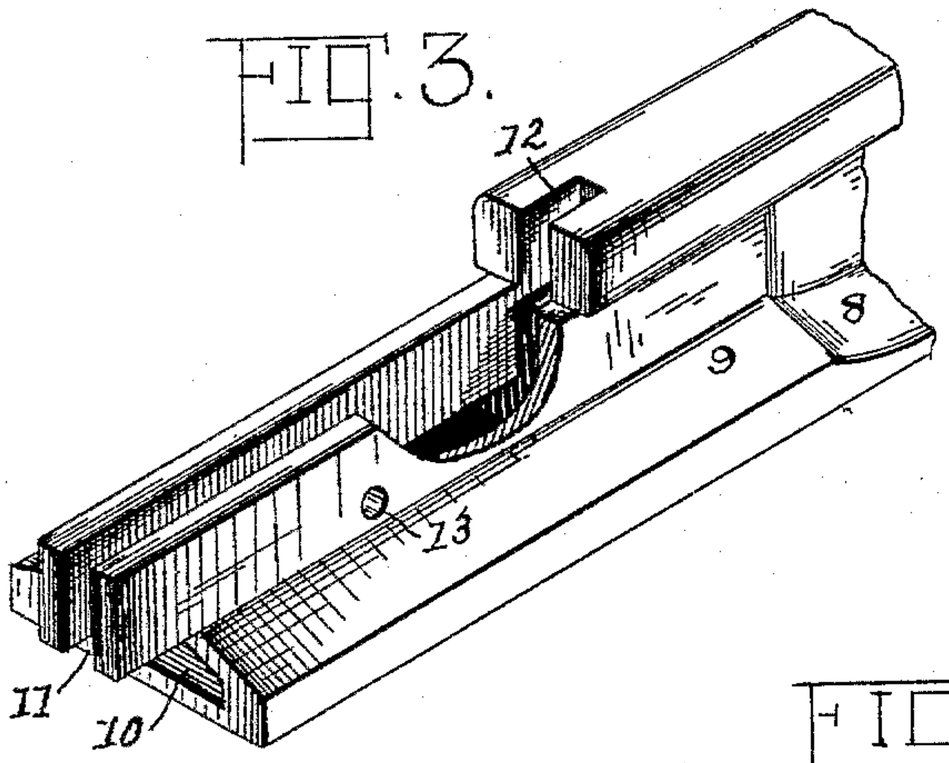


FIG. 4.

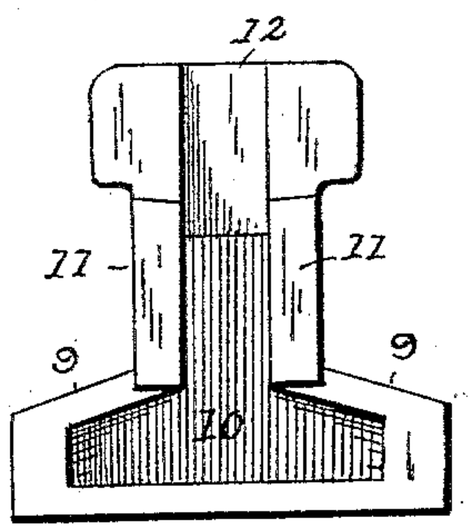
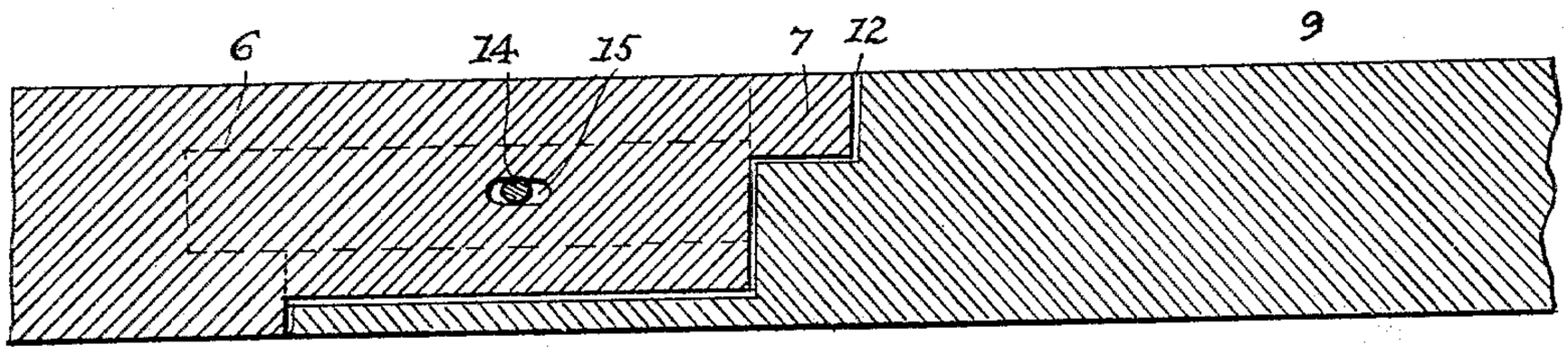


FIG. 5.



WITNESSES

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CHARLES R. SMITH, OF BARNETT, GEORGIA.

RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 597,789, dated January 25, 1898.

Application filed November 17, 1896. Serial No. 612,436. (No model.)

To all whom it may concern:

Be it known that I, CHARLES R. SMITH, a citizen of the United States, residing at Barnett, in the county of Warren and State of Georgia, have invented certain new and useful Improvements in Rail-Joints; and I do hereby declare the following to be a full, clear, and exact description of the invention, such will enable others skilled in the art to which it appertains to make and use the same.

This invention has reference to a novel construction in a rail-joint, the object being to provide a joint that effectually prevents the jolting at the meeting ends of rails, and, further, which allows the joints to be made quickly.

The invention consists in the features of construction hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a perspective view of the end of one rail. Fig. 2 is an end elevation of the same. Fig. 3 is a perspective view of the end portion of another rail with parts broken away. Fig. 4 is an end elevation of the same. Fig. 5 is a vertical section of two ends of the rails when joined.

Referring now to said drawings, 1 indicates the end portion of one of the rails. The end portions of the base 2 and web 3 are enlarged, as shown. The web 3 ends abruptly to provide the forwardly-facing shoulders at the sides of the main web portion beyond this extension 3. The enlarged portion 2 of the base also ends abruptly to provide a forwardly-facing shoulder 5, from which extends the extension 6 of the base. This shoulder 5 extends along the bottom and sides of the same. The end of the rail is provided with a central tongue 7, whose upper face is flush with the tread of the rail and forms a continuation thereof, while it extends downwardly about half-way to the lower end of the rail, but is the same width as the web thereof. The other rail 8 is provided with an enlarged end section 9, and from the ends of this section 9 extend the walls to form a recess 10 to receive the end of the other rail. The sides of the extension of that portion opposite the web are provided with longitudinal fingers 11 to abut against the shoulders 4 of the other rail and to rest upon the upper face of the base portion 2. The recess 10 is adapted to receive the extension 6 of the base of the other rail, while the web thereof stands between the upright walls of the recess in the end of the rail, and extending downwardly from the tread is a recess 12 to receive the tongue 7 and in which the said tongue rests. Through the side walls of the recess 10 are the openings 13 for the bolt 14, while in the extension of the web of the other rail is a slot 15, through which said bolt passes. This slot is made to allow the joint to expand and contract without binding, while the other interfitting portions of the rails permit a slight longitudinal movement thereof, which will be obvious.

It will be seen from the foregoing description that the ends of the rail overlap and interlock in such a manner as to effectually prevent the jarring or jolting thereof, and, furthermore, that the joint can be quickly made and by the employment of only one bolt.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a rail-joint, the combination with one member having a longitudinal recess and provided with fingers situated in alinement with the web portion thereof, and on opposite sides of said recess of another rail provided with a reduced end portion to enter said recess and with shoulders 4 to engage said fingers, said fingers adapted to enter between the lower face of the head of the rail and the upper face of the base.

2. The combination with a rail having a groove in the end thereof extending downwardly from the tread, and a continuous longitudinal recess in the end portion of the web and base, said longitudinal recess conforming in contour to the web and base of a rail, of another rail provided at its end with a tongue and with an extension of a web and base to enter said correspondingly-shaped groove and recess.

3. The combination with a rail having an enlarged end portion provided with a longitudinal recess in the end portion of the web and base thereof, said longitudinal recess conforming in contour to said web and base, of

another rail provided with an enlarged base and a web, and an extension of said base and web adapted to enter said correspondingly-shaped recess in the other web, and shoulders between said extension and the said base and web.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

CHARLES R. SMITH.

Witnesses:
JOHN O'KEEFFE,
WM. L. KENDRICK.