

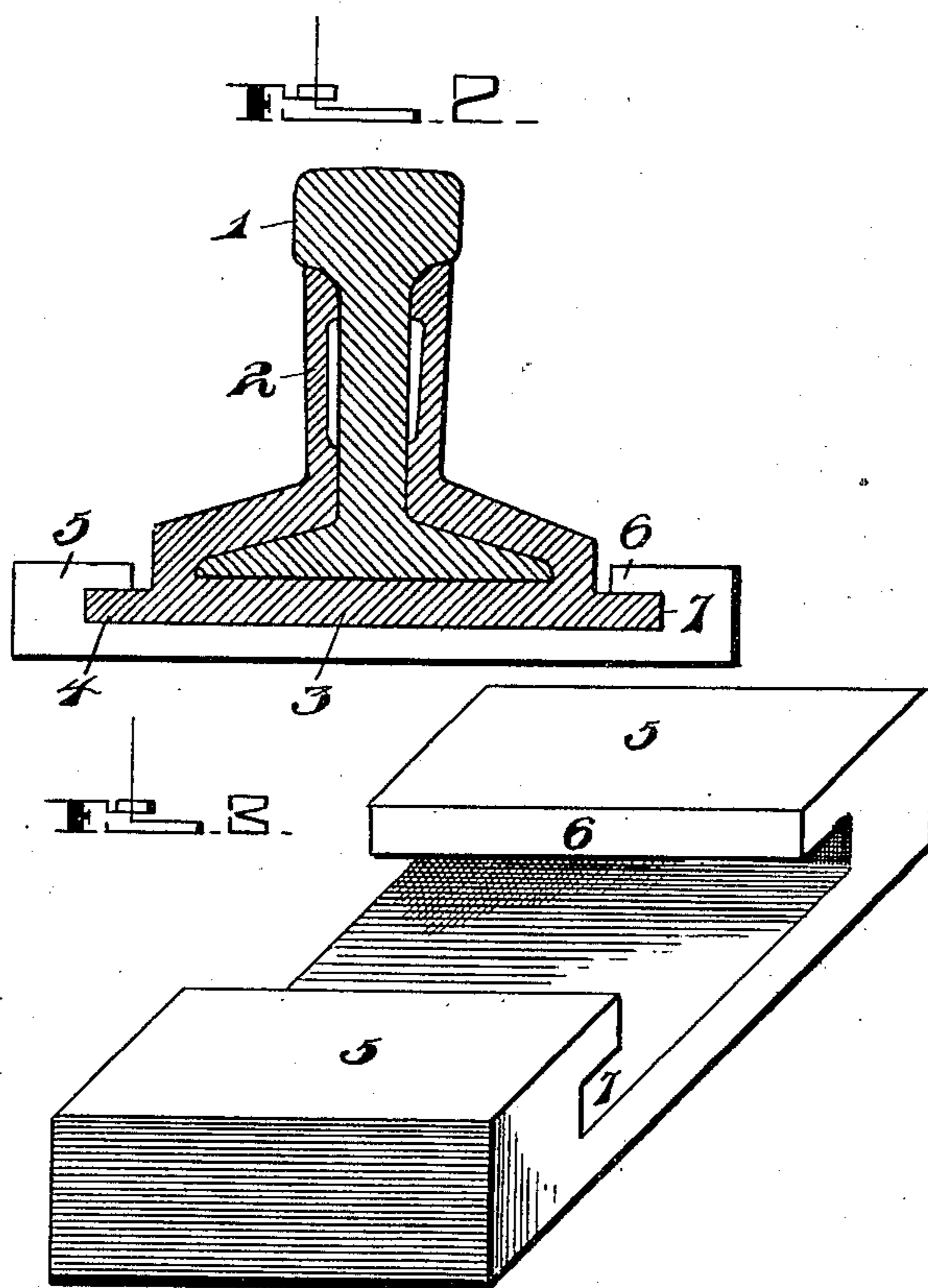
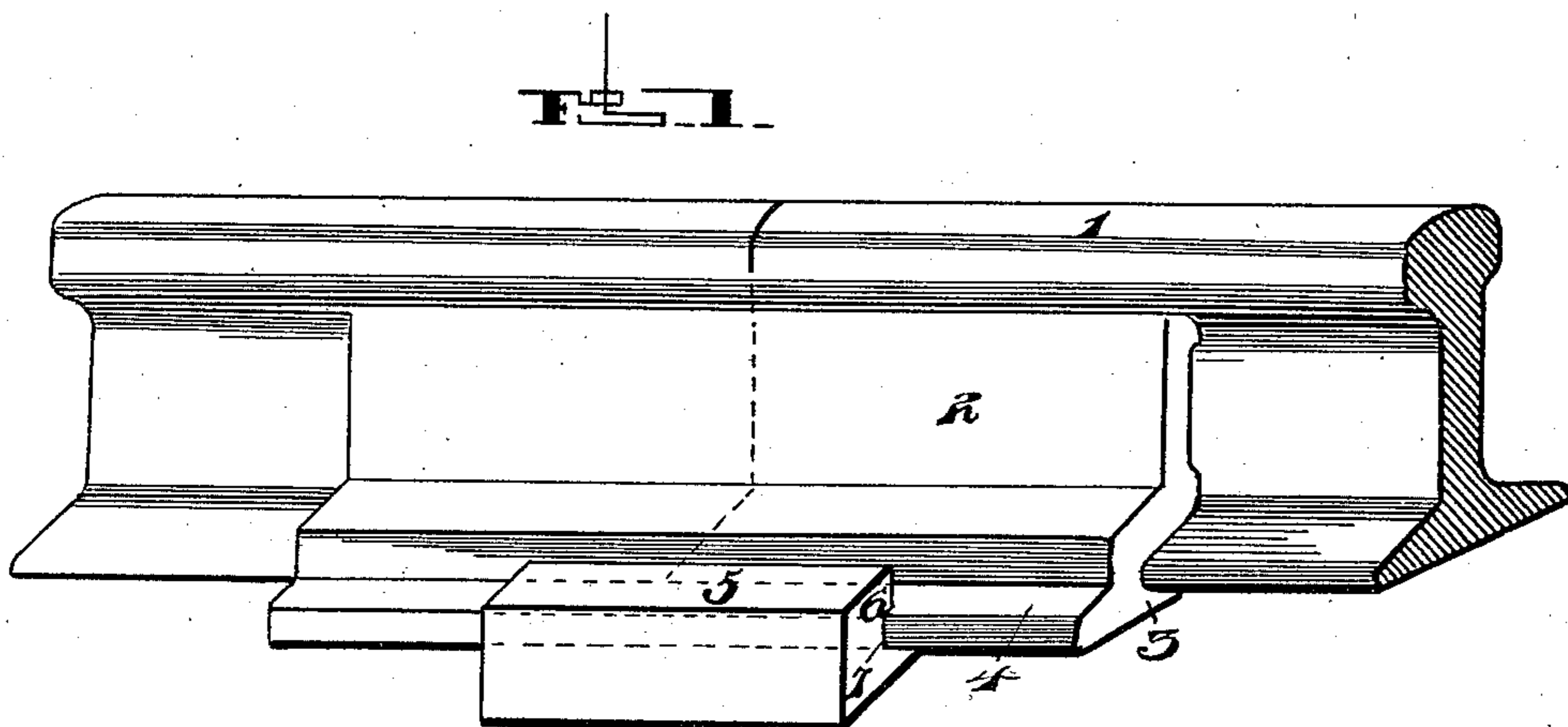
No. 685,519.

Patented Oct. 29, 1901.

C. B. MEAD.  
RAIL JOINT.

(Application filed Aug. 23, 1901.)

(No Model.)



WITNESSES.

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# UNITED STATES PATENT OFFICE.

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## RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 685,519, dated October 29, 1901.

Application filed August 23, 1901. Serial No. 73,094. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES BIRDELL MEAD, a citizen of the United States of America, residing at East Palestine, in the county of Columbiana and State of Ohio, have invented certain new and useful Improvements in Rail-Joints, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in rail-joints, and has for its object the provision of novel means whereby the use of nuts and bolts are entirely dispensed with.

The invention has for its further object the construction of a device that will allow for the expansion and contraction of the rails and will prevent the same from spreading or becoming disengaged.

The invention further contemplates to employ an integral fish-plate and chair in connection with the steel tie, means for retaining the rails within the integral fish-plates and chair, and means for securely fastening the base of said chair to the steel tie.

A still further object of my invention is to construct a rail-joint of this class that will be extremely simple in construction, strong, durable, comparatively inexpensive to manufacture, and highly efficient in its use.

With the above and other objects in view the invention consists of the novel combination and arrangement of parts to be hereinafter more fully described, and specifically pointed out in the claim.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like numerals of reference indicate corresponding parts throughout the several views, in which—

Figure 1 is a perspective view of two sections of rails joined together in accordance with my invention. Fig. 2 is a transverse vertical sectional view thereof. Fig. 3 is a perspective view of the tie.

In the drawings the reference-numeral 1 represents the rails, 2 the fish-plate, having formed integral therewith a chair 3, said chair having outwardly-extending flanges 4 at the base thereof. The reference-numeral 5 represents the tie, having inwardly-extending faces 6, forming recesses 7 to receive the flanges 4 of the base of the chair 3. It will be noted that other cross-ties may be used between the joint under the bases of the rails, if desired.

The manner of placing my improved rail-joint in position is as follows: The sections of the rails are applied to the integral fish-plate and chair endwise, and when in proper position the tie is secured to the flanges of the base of the chair in like manner, thereby producing a perfect joint that will allow both for the expansion and contraction, but will securely engage the rails and prevent any lateral movement thereof.

The many advantages obtained by the use of my improved device will be readily apparent from the foregoing description, taken in connection with the accompanying drawings, and it will be noted that various changes may be made in the details of construction without departing from the general spirit of my invention.

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

In a rail-joint, the combination of fish-plates carrying an integral chair, flanges extending outwardly from the base of said chair, cross-tie having inwardly-extending portions forming recesses to engage said flanges, all parts being arranged and operating substantially as shown and described.

In testimony whereof I affix my signature in the presence of two witnesses.

CHARLES BIRDELL MEAD.

Witnesses:

P. B. MOORE,

J. C. CHAMBERLIN.