To all whom it may concern:

Be it known that we, JAMES N. MARTIN and WILLIAM HAMILTON HARRIS, citizens of the United States, residing at Newberry, in the county of Newberry and State of South Carolina, have invented certain new and useful Improvements in Chairs and Lock-Joints for Railroad-Rails; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to an improved chair and lock-joint for railroad-rails; and it has for its objects to securely fasten the rails at their junctures and form a rigid seat for the same, as more fully hereininafter specified, and specifically pointed out in the claims.

Referring to the accompanying drawings, forming part of this specification, Figure 1 represents a perspective view showing our invention complete with the parts connected. Fig. 2 represents a similar view showing the parts detached, and Fig. 3 represents a transverse vertical sectional view of our invention.

The letter A indicates that portion of the device constituting the chair for the rails, which is constructed, preferably, of cast metal, with seats B at opposite ends of the rails C. Midway between the ends of the chair is a space, D, in which the ends of the rails set and in which the locking devices are applied. The flanges of the rails at the portions corresponding to the seats B are cut away, as indicated by the letter E, leaving lugs F at the adjoining ends of the rail, which set under the recesses G, formed at one end of the locking-space, so as to securely fasten the rails with their abutting ends in contact. At one side of the locking-space is a web, H, having a perforation or opening I, through which the locking-bolt K passes. The said bolt also passes through a detachable locking-plate, L, which sets in the open side of the locking-space, as shown, being confined therein by means of a threaded nut, M, applied to the threaded end of the bolt. The bolt passes between the abutting ends of the rails through the semicircular recesses N, provided for the purpose.

As above constructed, it will be perceived that while the rails are firmly seated and fastened in the chair ample provision is made for their contraction and expansion in a longitudinal direction, relieving the joint of all strain, while at the same time the rails are securely locked therein.

Having thus fully described our invention, what we claim, and desire to secure by Letters Patent, is—

1. A chair for railroad-rails having seats with an intermediate locking-space recessed at one end, in which the abutting ends of the rails are secured, substantially as shown and described.

2. The combination, with the chair having seats for the rails and intermediate locking-space and recesses G, of the rails provided with lugs at their ends adapted to fit in the said locking-space, and recesses to hold the rails in the chair, substantially as specified.

3. The combination, with the chair having seats for the rails and an intermediate locking-space, and the perforated web at one side of said space, of the detachable locking-plate, the screw bolt and nut, and the rails having cut-away flange portions, whereby the rails are securely fastened, and at the same time the proper expansion and contraction of the rails are provided for, substantially as specified.

In testimony whereof we affix our signatures in presence of two witnesses.

JAMES N. MARTIN.
W. H. HARRIS.

Witnesses:
W. H. HUNT, JR.,
JAMES P. KINARD.