

J. HIPSLEY, Sr., & J. R. HIPSLEY.  
Rail-Joint.

No. 197,852.

Patented Dec. 4, 1877.

Fig. 1.

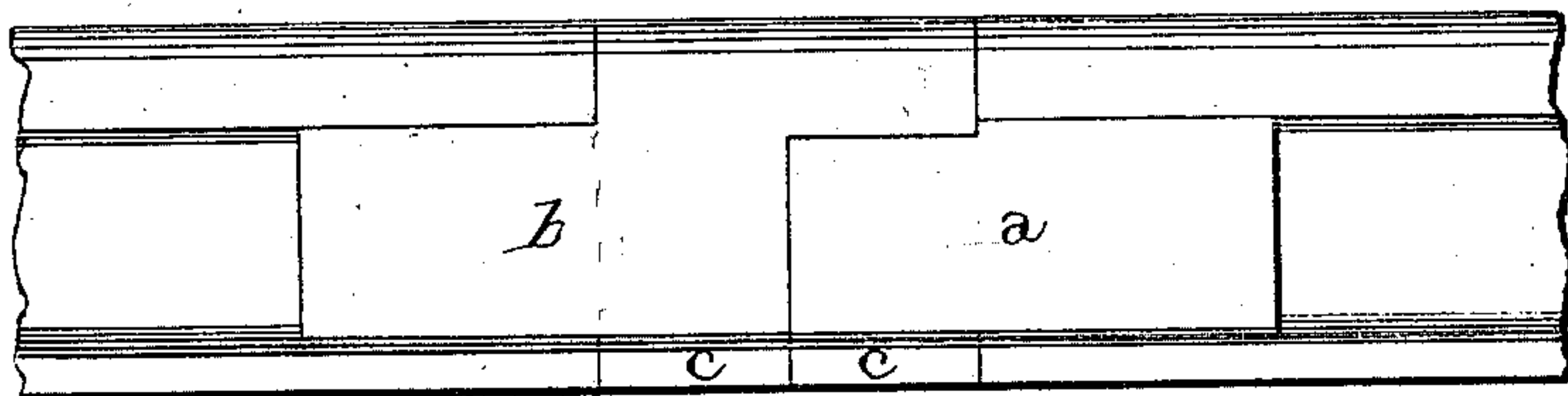


Fig. 2.

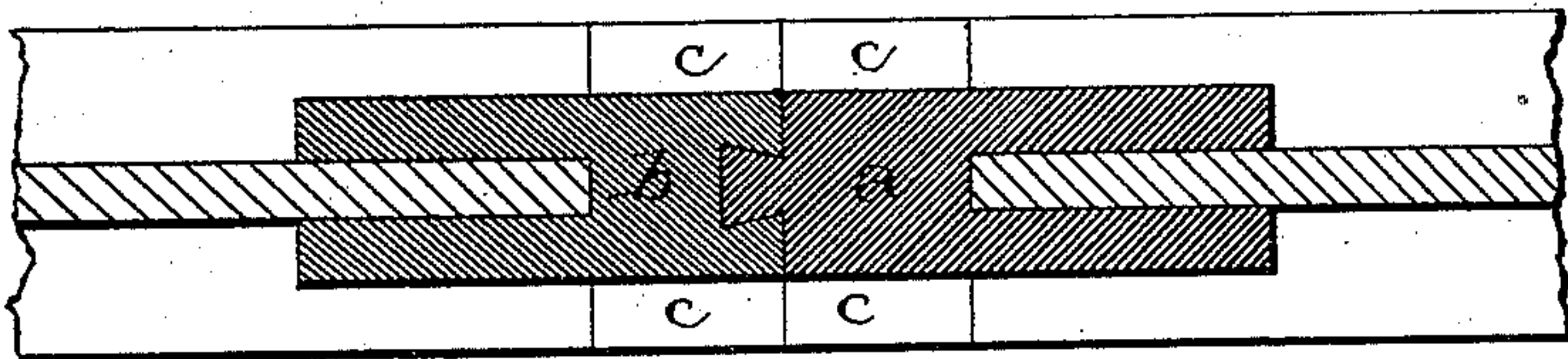
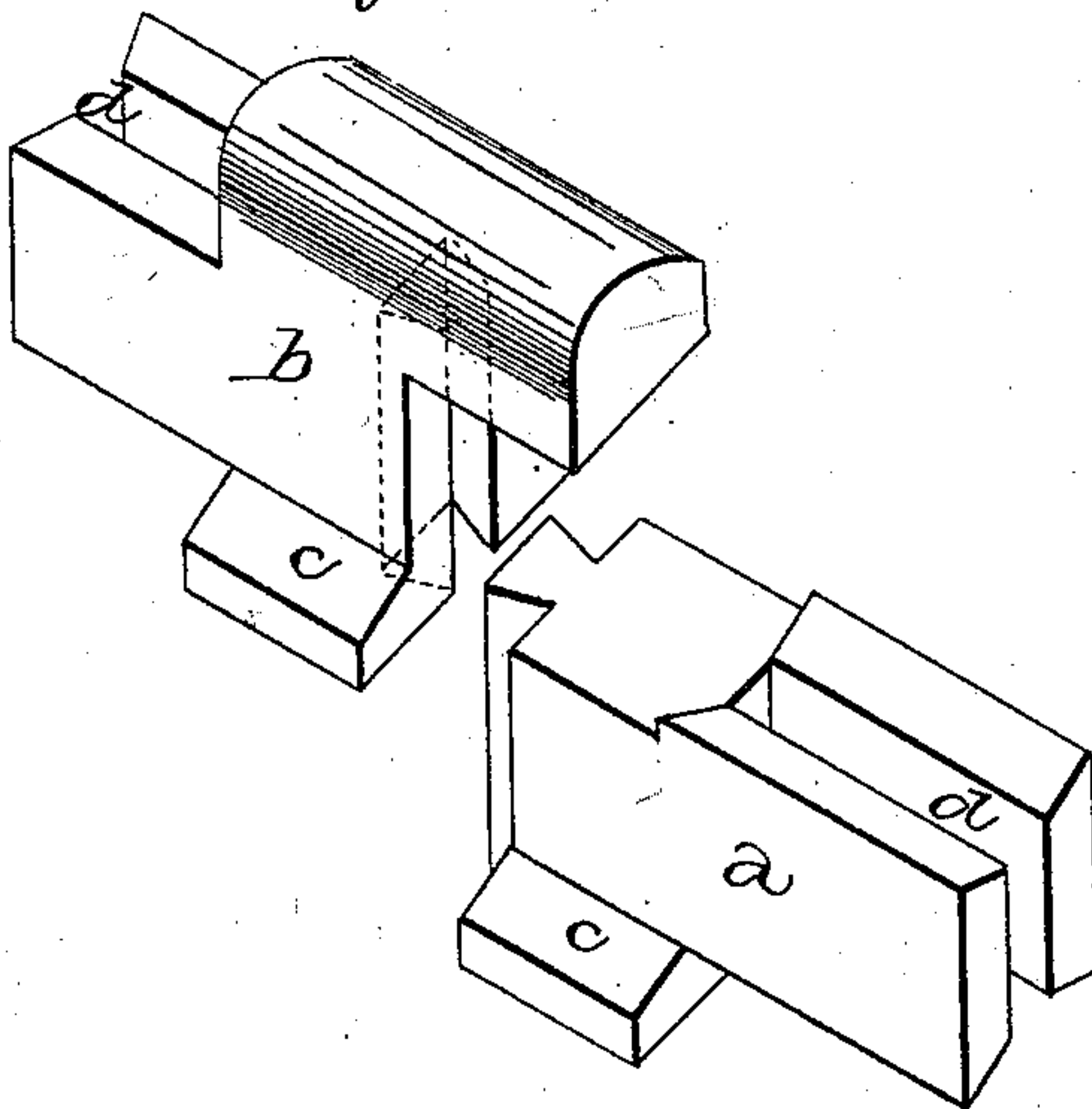


Fig. 3.



WITNESSES.

Wm. Garner.  
Will. H. Kern.

INVENTORS.

J. Hipsley, Sr.,  
J. R. Hipsley,  
per  
J. A. Lehmann atty.

# UNITED STATES PATENT OFFICE.

JOSEPHUS HIPSLEY, SR., OF ALLEGHENY, AND JOHN R. HIPSLEY, OF  
PITTSBURG, PENNSYLVANIA.

## IMPROVEMENT IN RAIL-JOINTS.

Specification forming part of Letters Patent No. **197,852**, dated December 4, 1877; application filed  
October 4, 1877.

*To all whom it may concern:*

Be it known that we, JOSEPHUS HIPSLEY, Sr., and JOHN R. HIPSLEY, of Allegheny city and Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Fastening and Connecting Rails for Railroads; and we do hereby 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

Our invention relates to an improvement in devices for fastening and connecting rails for railroads; and it consists in introducing between the ends of each two rails two dovetailed blocks with recesses, in which the ends of the rails are to be housed, and then spiked down in the usual manner, as will be more fully described hereinafter.

The accompanying drawings represent our invention.

*a* and *b* represent two dovetailed blocks, with short bottom flanges *c c*, which flanges form a continuous line with the foot of the rail when put in place. Both blocks *a* and *b* are of a thickness with the heads of the rails, and their sides present a straight surface down to the flanges *c c*. In the outer ends of the blocks recesses *d d* are formed, which recesses are sufficiently extended to firmly hold and support the rails when placed within them.

The block *a* equals in height that of the rail up to its head, and fills up the space between the head and foot when the rail is placed in the recess *d*. The block *b* is similar to the former, but higher, equal with the top of the rails, and extends over the block *a*, forming a cap or covering over the dovetail, and also a continuation of the rails. The short flanges *c c*

are to be spiked to the ties in the usual manner, regard being had to the expansion and contraction of the metal, and if properly done the rails will be thoroughly secured.

The object of our invention is to offer a substitute for the fish-bars now commonly used. It is well known that something more reliable is called for to take the place of that device, and many attempts have been made toward supplying the demand.

By rejecting all bolts, and doing away with the boring of holes through the rails, by which they are weakened, and by offering greater security against accidents occurring from overlooked defects in taps and bolts that hold the rails in place, we hope to have met the demand in our invention.

We believe that with ordinary care in placing the rails and the use of our improvement, no fear of accidents from a displaced rail need be entertained, and the facility with which rails can be laid, exchanged, or replaced, recommends itself, for by connecting or separating the dovetailed blocks this may be readily accomplished.

Having thus described our invention, we claim—

The combination of the rails with the two blocks *a b*, the blocks having slots in their outer ends to catch over the rails, and suitable fastenings on their inner ends to lock them together, substantially as shown and described.

In testimony that we claim the foregoing we have hereunto set our hands this 29th day of September, 1877.

JOSEPHUS HIPSLEY, Sr.  
JOHN R. HIPSLEY.

Witnesses:

T. F. LEHMANN,  
SAML. DIESCHER.