

No. 873,918.

PATENTED DEC. 17, 1907.

E. E. ANDERSON.  
SPlice BAR.

APPLICATION FILED JAN. 26, 1907.

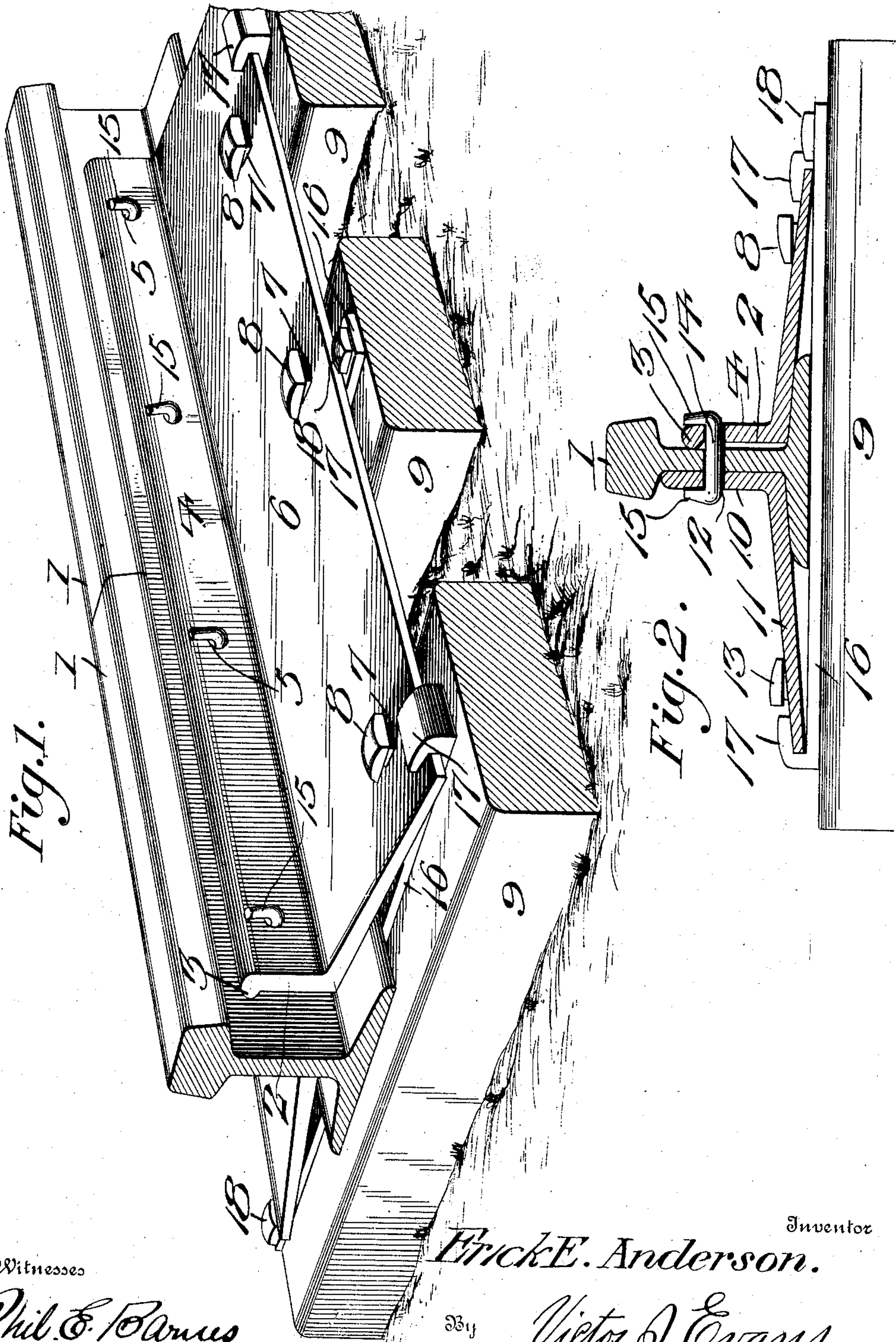


Fig. 1.

Fig. 2.

Witnesses

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# UNITED STATES PATENT OFFICE.

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## SPLICE-BAR.

No. 873,918.

Specification of Letters Patent.

Patented Dec. 17, 1907.

Application filed January 26, 1907. Serial No. 354,333.

*To all whom it may concern:*

Be it known that I, ERICK E. ANDERSON, a citizen of the United States of America, residing at St. Louis city, in the State of Missouri, have invented new and useful Improvements in Splice-Bars, of which the following is a specification.

This invention relates to splice bars for the meeting ends of railway rails, and one of the principal objects of the same is to provide a device of this character which will not require the use of bolts and nuts.

Another object of my invention is to provide a splice bar for the meeting ends of railway rails which can be quickly secured in place and which will firmly and reliably hold the meeting ends of the rails.

Still another object of my invention is to provide a splice bar with a comparatively wide flange and a rib to bear against the side of the web of the rail to provide a locking leverage to compensate for the movement of the rail joint when heavy trains pass over the rails.

Still another object is to provide a splice bar with spike holes through which spikes are to be driven for securing the bar to the ties and also providing bars, each having a hook at one end to engage the outer edge of the base flange of the splice bar to secure the same in place.

These and other objects are attained by means of the construction shown in the accompanying drawing, in which:—

Figure 1 is a perspective view of the meeting ends of two rails secured together by means of a splice bar arranged in accordance with my invention. Fig. 2 is a vertical sectional view of the same.

Referring to the drawing for a more particular description of my invention, the numeral 1 designates the meeting ends of two railway rails of the usual construction, and 2 is a splice bar provided with a rib or bead 3 extending inward at its upper edge. Formed in the vertical flange 4 of the splice bar is a series of plain unthreaded apertures 5. The base flange 6 of the splice bar is comparatively wide and inclines outwardly from the vertical flange 4. Formed in the base flange 6 are the spike holes 7 through which the spikes 8 are to be driven for holding the splice bar in place upon the ties 9. Upon the opposite side of the rail joint is a fish plate 10 which is provided with a wide inclined flange 11 similar in inclination and

extent to the flange 6 of the splice bar. In the vertical flange of the fish plate apertures 12 are formed, and spikes 13 are driven through apertures in the fish plate similar to those in the splice bar. Hooks 14 provided with angularly bent ends 15 are passed through the apertures 5 in the splice bar, through openings in the web of the rail, and through the apertures 12 in the fish plate. A hook bar 16 provided with a hook 17 at one end adapted to engage the outer edge of the splice bar is placed upon the tie, and the end opposite the hook is secured to the tie by means of a spike 18. These hook bars are oppositely disposed alternately, as shown in Fig. 1, every other hook bar being secured by its hook to the fish plate and its opposite end spiked to the tie.

From the foregoing it will be noted that owing to the space *a* between the vertical flange 4 of the splice bar and the web of the rail and the formation of the rib 3 on the upper edge of said flange, a slight rocking action is imparted to the splice bar when heavy trains pass over the rails, and thus the rails are held firmly in place. The spikes 8 extend through the flange of the splice bar, and similar spikes passed through the flange of the fish plate insure a secure fastening for the splice bar and fish plate, when taken in connection with the hook bars. In devices of this character where spikes are driven into the ties at the outer edge of the fish plate or splice bar the slight inward and outward vibrations of these parts have a tendency to cut a groove under the head of the spike which leads to considerable lost motion. By driving the spikes through the plates this objection is overcome.

To assemble the parts the hooks 14 are passed through the openings in the webs of the rail and the apertures 12 in the fish plate are engaged with the hook 15 by rocking the plate or flange 11 upward until it is engaged with said hook 15, after which the flange 11 is brought down to its proper place. The splice bar is engaged with the hooks 15 at the opposite end in a similar manner, and when the flange 6 is brought down to position, the bead 3 bears firmly against the web of the rail. The spikes are then driven.

Having thus described the invention, what is claimed as new, is:—

A splice bar having a vertical flange provided with a series of apertures, an inwardly extending rib, and an inclined base flange, a

fish plate having an inclined flange, double-  
ended hooks passing through the fish plate,  
the web of the rail and the splice bar, and  
hook bars, each having a hook at one end to  
5 engage said inclined flange, and the opposite  
ends of said hook bars being spiked to the  
ties, substantially as described.

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

ERICK E. ANDERSON.

Witnesses:

HENRY KROEGER,  
LUDWIG G. THOMA.