

No. 774,845.

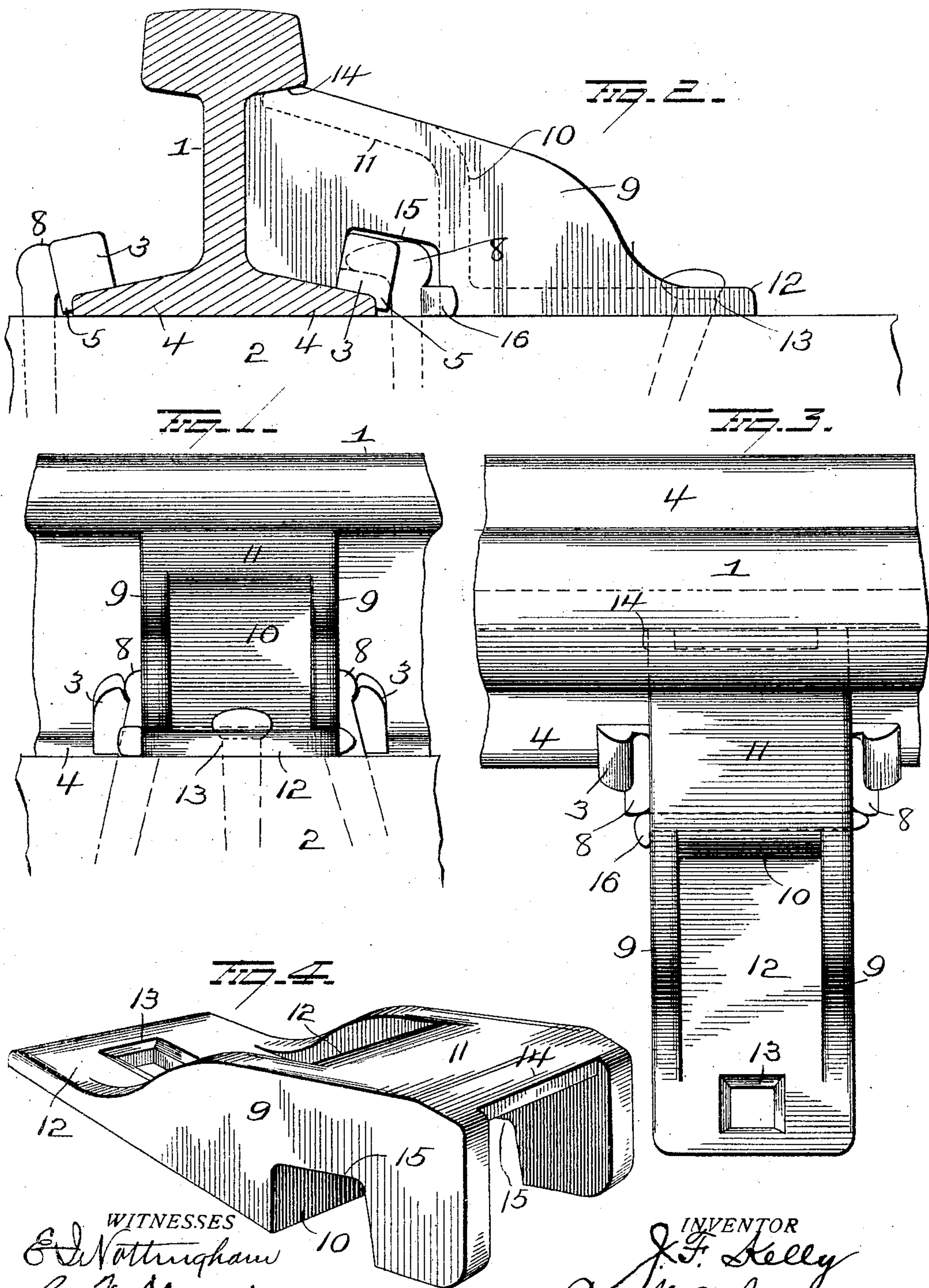
PATENTED NOV. 15, 1904.

J. F. KELLY.

RAIL BRACE.

APPLICATION FILED JULY 16, 1904.

NO MODEL.



WITNESSES
E. J. Nottingham
G. F. Downing

INVENTOR
J. F. Kelly
By H. A. Seymour
Attorney

UNITED STATES PATENT OFFICE.

JAMES F. KELLY, OF GALENA, ILLINOIS.

RAIL-BRACE.

SPECIFICATION forming part of Letters Patent No. 774,845, dated November 15, 1904.

Application filed July 16, 1904. Serial No. 216,874. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. KELLY, a resident of Galena, in the county of Jo Daviess and State of Illinois, have invented certain new and useful Improvements in Rail-Braces; and I 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 appertains to make and use the same.

My invention relates to an improved rail-brace, the object of the invention being to provide an improved brace especially designed for use in connection with my improved rail-clamp disclosed in my allowed application, filed January 28, 1904, Serial No. 191,039, the object of the invention being to provide an improved brace designed to fit over said clamp and securely hold the clamp and rail in position; and the invention consists in certain novel features of construction and combinations and arrangements of parts, as will be more fully hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of a portion of a rail, showing the application of my improvements thereto. Fig. 2 is a view showing a rail in cross-section and my improvements in side elevation. Fig. 3 is a plan view. Fig. 4 is a perspective view of the brace.

1 represents a railroad-rail of ordinary construction supported on ties 2 and secured thereon by clamping-plates 3. These plates 3 each comprise a metal bar adapted to rest on the rail base-flange 4 and have depending flanges 5 at their outer edge to be located against the outer edge of the base-flange and seat the clamping-plate in proper position, it being understood that similar clamping-plates are located at opposite sides of the rail. The shape of the clamping plate or plates is clearly shown in my allowed application to receive spikes 8, driven into the ties in opposite directions at an angle of twenty degrees, more or less, to locate the heads of the spikes over the inclined faces of the plates.

9 represents my improved brace, which comprises a casting having parallel side webs connected by a vertical cross-web 10 near their center by a top plate 11 in advance of cross-

web 10 and by a bottom plate 12 in rear of cross-web 10, said bottom plate having an angular opening 13 to receive a securing-spike.

The inner end of the brace is beveled at its upper end, as shown at 14, to snugly fit under the tread of the rail and the inner end against the web of the rail with the lower edge of the brace resting on the base-flange of the rail, and the parallel side webs or plates 9, just in advance of cross-web 10, are made with aligned notches 15 to receive the clamping-plate 3 and spikes 8, the base-plate 12 resting on the tie and secured by a spike in opening 13. To further secure the parts rigid, a key 16 is driven between the spikes 8 and cross-web 10 of the brace, as clearly shown. This key prevents possibility of the release of spikes 8 and makes absolutely rigid the connection of the clamping-plate with the rail and the brace with the clamping-plate and rail.

It will be observed that with my improved brace but a single spike is necessary to secure the same in position, as lateral movement of the brace is rendered impossible by its connection with the clamping-plate.

A great many slight changes might be made in the general form and arrangement of the parts described without departing from my invention, and hence I do not restrict myself to the precise details set forth, but consider myself at liberty to make such slight changes and alterations as fairly fall within the spirit and scope of my invention.

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

1. A rail-brace constructed with a transverse notch in its bottom between its ends to receive a rail-clamping plate disposed parallel with the rail.

2. A rail-brace having a head portion to bear against the head, tread and flange of a rail and a base portion to rest upon a tie, said brace having a notch in its bottom between said head and base portions to receive a rail-clamping plate.

3. A rail-brace notched to receive a rail-clamping plate, and a key to be inserted in said notch between the clamping-plate and brace.

4. A rail-brace, comprising a casting having parallel side webs made with alined notches, a vertical cross-web connecting the side webs between their ends, a top web in
5 advance of the cross-web, and a bottom plate or web in rear of the cross-web having a spike-opening.

5. The combination with a rail, a clamping-plate on the base-flange thereof, and spikes
10 securing the clamping-plate in position, of a rail-brace having notches or recesses to receive the clamping-plate and spikes and shaped to fit the base, web, and tread of the rail, and
15 a spike located in an opening in the brace securing the same in position.

6. The combination with a rail, a clamping-plate on the base-flange thereof, and spikes securing the clamping-plate in position, of a rail-brace secured against movement and having notches or a recess to receive the clamp- 20 ing-plate and spikes, and a key inserted between said spikes and the wall of the recess or notches.

In testimony whereof I have signed this specification in the presence of two subscrib- 25 ing witnesses.

JAMES F. KELLY.

Witnesses:

JOSEPH M. NACK,
W. A. SMITH.