M. HOLLAND.

EMERGENCY RAIL JOINT.

APPLICATION FILED OCT. 20, 1906.

933,902. Patented Sept. 14, 1909

Fig. 2.

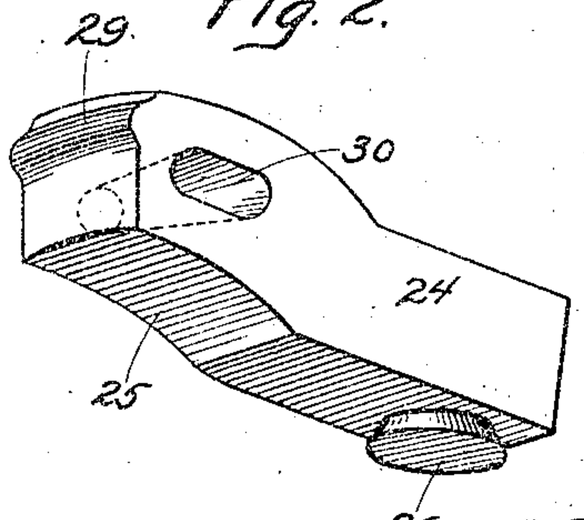



Fig. 1.

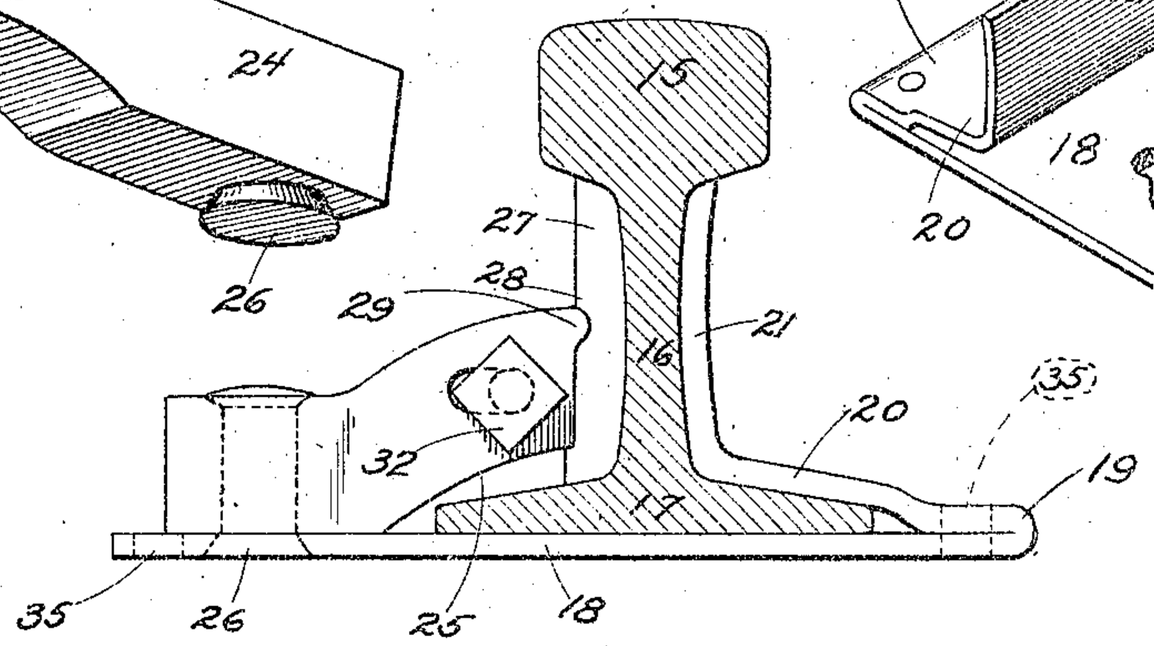



Fig. 3.

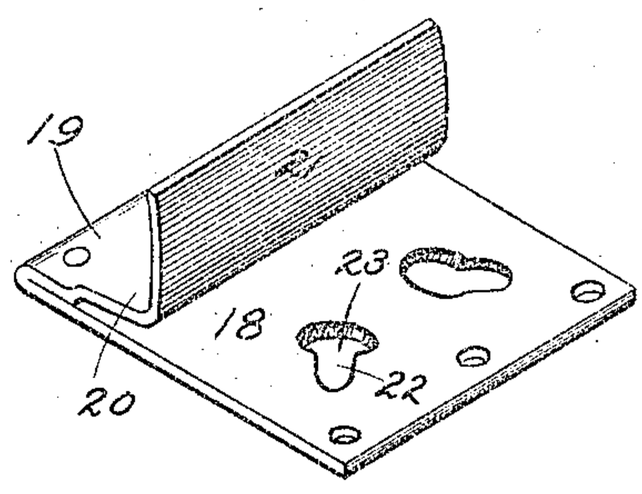
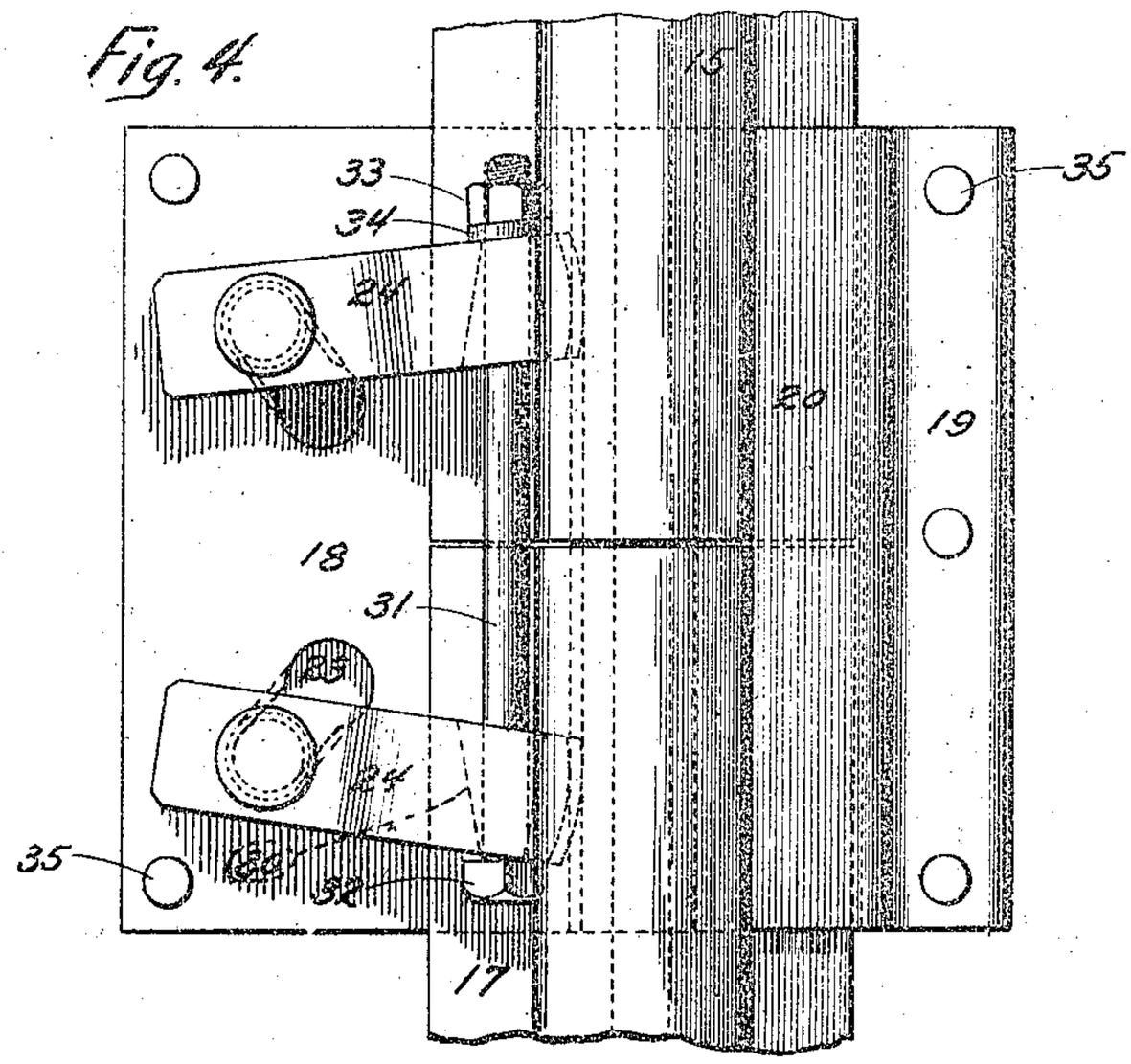



Fig. 4.

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# UNITED STATES PATENT OFFICE.

MARTIN HOLLAND, OF LAWN HILL, IOWA.

## EMERGENCY RAIL-JOINT.

933,902. Specification of Letters Patent. Patented Sept. 14, 1909.

Application filed October 20, 1908. Serial No. 458,634.

*To all whom it may concern:*

Be it known that I, MARTIN HOLLAND, a citizen of Norway, and resident of the United States since 1893, residing at Lawn Hill, in the county of Hardin and State of Iowa, have invented certain new and useful Improvements in Emergency Rail-Joints, of which the following is a specification.

The principal object of my invention is to provide a new and improved device for joining the adjacent ends of two consecutive rails in a railway track.

More particularly it is my object to provide such a device that shall be capable of speedy application or removal as may be desired.

Still another object is to provide a device for the purpose stated which can be applied to join the adjacent ends of a broken rail as well as to join the ends of consecutive rails; that is, it is my object to provide a device that may be employed to join the ends of the rails whether or not they have holes drilled in their webs.

Another object of my invention is to provide a device of the class mentioned which can be spiked to the ties if so desired.

These objects and others will be made apparent in the following specification and claims when taken in connection with the accompanying drawings, in which—

Figure 1 is a cross section of a rail showing my improved device applied thereto. Figs. 2 and 3 are perspective views of certain detached elements of the combination, and Fig. 4 is a general plan view.

My invention is capable of being embodied in a wide variety of forms, but for the purpose of this disclosure I have chosen to illustrate in the drawings a single form which is one of those preferred by me at the present time. However, it will be seen from the appended claims that my invention is not limited to the details of construction here shown.

Referring particularly to the drawings, a broad plate 18 is provided upon which the base 17 of the rail is adapted to stand. On one side edge this plate 18 is doubled over, as indicated by the reference numeral 19. Adjacent to this folded part 19 the plate is continued in the part 20, which is adapted to fit over the base 17 of the rail and the part 21 which is adapted to lie against the web 16 of the rail. The flat basal part 18 of the plate has two obliquely directed slots 22, at the inner end of each of which is an enlarged hole 23 (see Fig. 3).

Two members 24 are provided, each having the general shape shown in Fig. 2, and having a part 25 cut away so that it can extend above the base 17 of the rail, as shown in Fig. 1. Each of these wedging or clamping members 24 has a stud at one end, the stud being tapered so that it will hook into the slot 22, although it can be introduced or removed through the hole 23. The side edges of the slot 22 are inclined to the plane of the plate 18, so as to correspond to the taper of the stud 26.

A plate 27 is provided adapted to fit against the web 16 of the rail on the side thereof opposite to the part 21 of the main plate 18—20—21. This plate 27 has a longitudinal groove 28, and the ends of the members 24 opposite the respective studs 26, have respective tongues 29 adapted to fit in the groove 28. Each member 24 has a transverse hole 30, these holes being tapered. Through both holes extends a bolt 31 with the head 32, the nut 33 and the washer 34. Holes 35 are provided at convenient intervals in the plate 18, and through these spikes may, if desired, be driven into an underlying tie.

Figs. 1 and 4 show the device applied to the rails. When it is desired to remove it, the single nut 33 can be unscrewed, the bolt 31 withdrawn, and then the clamping members 34 can be knocked aside with a hammer, and their studs 26 slipped along the slots 22 and out from the holes 23. Thereafter, the plate 27 and the main plate 18—20—21 can be instantly removed. On the other hand, when it is desired to apply the device to make a rail joint, it is obvious that the plate 18—20—21 can first be put in place, next the plate 27, and then the two wedging members 24. Thereafter, the bolt 31 can be applied and by means of the nut 33 the rail can be very tightly clamped between the opposed plates 21 and 27.

It will be observed that I have provided a rail joint that does not require having holes drilled in the ends of the rails. For this reason and for the reason that it can be very quickly applied or removed, it is especially well adapted to serve as an emergency rail joint.

I claim—

1. A device for joining the adjacent ends

of two rails, comprising a plate to underlie the rails, an abutment on one side of the plate and two opposite wedging members pivoted to the other side of the plate.

2. A device for joining the adjacent ends of two rails, comprising a plate adapted to underlie the rails, an abutment on one side of the plate, said plate having two holes on the opposite side thereof, two wedging members, and studs on said wedging members adapted to engage said holes.

3. A device for joining the adjacent ends of two rails, comprising a plate adapted to underlie the rails, an abutment on one side of the plate, said plate having a hole and an adjacent slot on the opposite side thereof, a wedging member, and a stud on one side of the wedging member adapted to pass through said hole and to lock in said slot.

4. A device for joining the adjacent ends of two rails, comprising a plate adapted to underlie the rails, an abutment on one side of said plate, another plate adapted to lie against the web of the rail opposite to said abutment, said last named plate having a longitudinal groove, and a wedging member having a tongue adapted to engage said groove and having a pivotal connection with the first named plate.

5. A device for joining the adjacent ends of two rails, comprising a plate adapted to underlie the rails, an abutment on one side of said plate, two opposite wedge members pivoted to the plate and adapted to act between the plate and the rail on the side opposite said abutment, and a bolt through both said wedge members.

6. A device for joining the adjacent ends of two rails, comprising a plate adapted to underlie the rails, an abutment on one side of said plate, two opposite wedge members, each having one end pivotally connected to the plate and having opposite tapering holes through their other ends, and a bolt through both said holes.

In testimony whereof, I have subscribed my name.

MARTIN HOLLAND.

Witnesses:
E. W. Foster,
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