

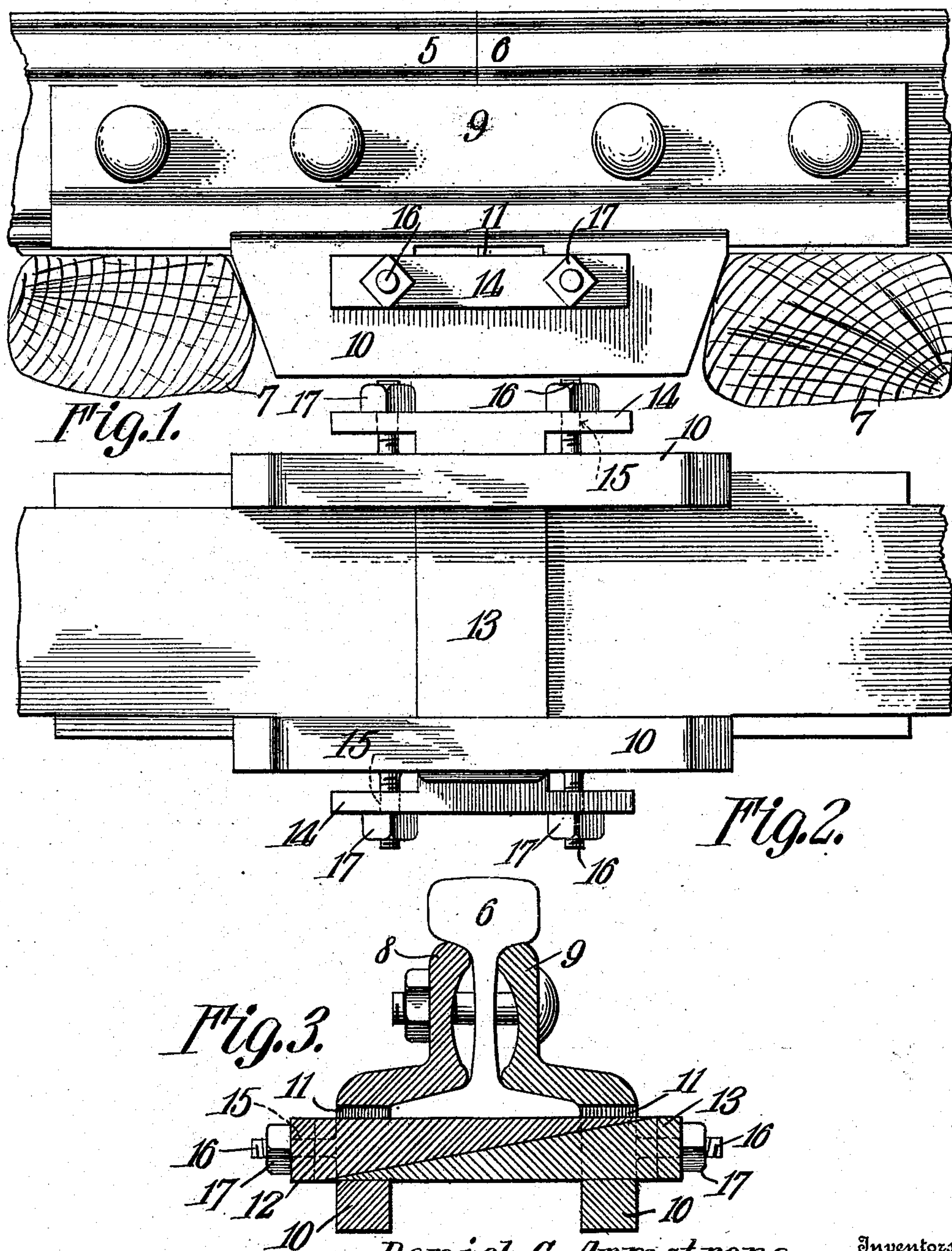
D. C. ARMSTRONG & W. P. FITZGERALD.

RAIL JOINT.

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899,647.

Patented Sept. 29, 1908.



Witnesses
E. J. Stewart
L. M. McKee

Daniel C. Armstrong and
William P. Fitzgerald.

By *C. A. Snow & Co.*
Attorneys

UNITED STATES PATENT OFFICE.

DANIEL C. ARMSTRONG AND WILLIAM P. FITZGERALD, OF PRINCESS ANNE, MARYLAND.

RAIL-JOINT.

No. 899,647.

Specification of Letters Patent.

Patented Sept. 29, 1908.

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To all whom it may concern:

Be it known that we, DANIEL C. ARMSTRONG and WILLIAM P. FITZGERALD, citizens of the United States, residing at Princess Anne, in the county of Somerset, State of Maryland, have invented a new and useful Rail-Joint, of which the following is a specification.

This invention relates to rail-way joints and more particularly to means for alining the rails at said joints.

The object of the invention is to provide a rail way joint having co-acting wedge shaped keys disposed beneath the rails at the meeting ends thereof and so arranged as to elevate the rails should the latter sag or become depressed at the joint from excessive wear or other causes.

A further object of the invention is to provide a rail joint the fish plates of which are provided with depending extensions having transversely alined openings formed therein for the reception of the keys, there being threaded bolts secured to the extensions for adjusting the wedge shaped blocks to effect the elevating or alining of the rails.

A still further object of the invention is generally to improve this class of devices so as to increase their utility, durability and efficiency as well as to reduce the cost of manufacture.

Further objects and advantages will appear in the following description, it being understood that various changes in form, proportions and minor details of construction may be resorted to within the scope of the appended claims.

In the accompanying drawings forming a part of this specification: Figure 1 is a side elevation of a rail joint constructed in accordance with our invention. Fig. 2 is a transverse sectional view of the same. Fig. 3 is a longitudinal sectional view.

Similar numerals of reference indicate corresponding parts in all of the figures of the drawings.

The improved rail alining device forming the subject matter of the present invention is designed for attachment to the meeting ends of rail-way rails and by way of illustration is shown in connection with a rail way rail of the ordinary construction in which 5 and 6 designate the meeting ends of the rails

mounted on the cross ties 7, in the usual manner.

The device consists of fish plates 8 and 9 which bear against the base of the rail and are provided with depending enlargements 10 having transversely alined recesses 11 formed therein for the reception of co-acting actuating members 12 and 13. The members 12 and 13 are substantially wedge shaped and slidably mounted in the recesses 11 beneath the base of the rails at the meeting ends thereof so that by adjusting said members transversely of the rail the meeting ends thereof may be elevated so as to cause the same to be perfectly alined. Secured to the opposite or enlarged ends of the members 12 and 13 are longitudinal bars 14 having oppositely disposed openings 15 formed therein for the reception of bolts or similar fastening devices 16, the latter being secured to and extended outwardly from the enlargements 10 of the fish plates, as shown. The threaded ends of the bolts 16 extend through the openings 15 for engagement with suitable clamping nuts 17 so that by adjusting the nuts on the bolts the wedges may be adjusted to effect the alinement of the meeting ends of the rails. It will thus be seen that should the meeting ends of the rails sink or become otherwise depressed the same may be alined by manipulating the adjusting nuts 17, in the manner before stated, so as to present a smooth unobstructed tread surface and thus prevent jarring of the car wheels with a consequent danger of derailment of the car as the latter passes over the joint.

From the foregoing description it will be seen that there is provided an extremely simple, inexpensive and efficient device admirably adapted for the attainment of the ends in view.

Having thus described the invention what is claimed is:

In combination with meeting rails, a rail joint comprising opposed fish plates having perforated portions which depend below the bases of the rails, bolts located at the outer sides of the said depending portions at the opposite ends of the perforations therein, upper and lower wedges passing transversely through the perforations in the depending portions of said plates, the upper wedge bearing directly against the bases of the rails and

the lower wedge bearing directly against the lower sides of the perforations in the depending portions of the plates, each wedge having a perforated bar portion for engagement with
5 the bolts and nut screws threaded upon the said bolts.

In testimony that we claim the foregoing

as our own, we have hereto affixed our signatures in the presence of two witnesses.

DANIEL C. ARMSTRONG.

WILLIAM P. FITZGERALD.

Witnesses:

WM. J. NEALE,

C. E. DOYLE.