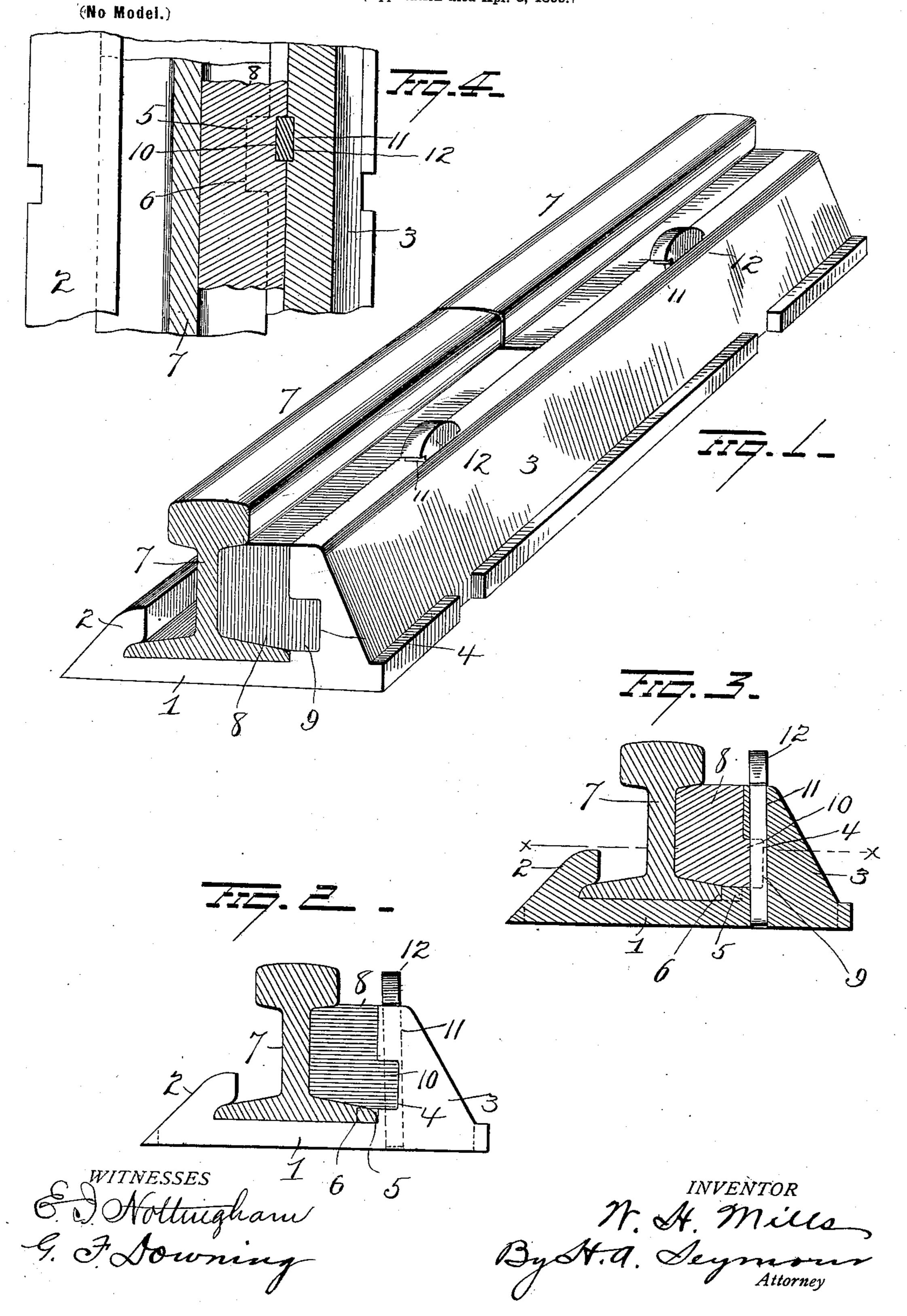
W. H. MILLS. RAIL JOINT.

(Application filed Apr. 8, 1899.)



United States Patent Office.

WILLIAM II. MILLS, OF WESTFIELD, NEW YORK, ASSIGNOR OF ONE-HALF TO J. L. APPLE, A. E. PEIRCE, AND EDGAR ROOD, OF SAME PLACE.

RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 633,288, dated September 19, 1899.

Application filed April 8, 1899. Serial No. 712,303. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. MILLS, a resident of Westfield, in the county of Chautauqua and State of New York, have invented certain new and useful Improvements in Rail-Joints; 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 improvement in rail-joints, the object of the invention being to provide a rail-joint which will operate to effectually secure the ends of two abutting rail-sections in position without in any wise weakening the rails.

A further object is to provide a joint which can be readily removed if it should be desired to repair or replace the rails.

A further object is to provide a rail-joint which will be simple in construction, comparatively cheap to manufacture, and most effectual when in use.

With these objects in view 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 perspective view illustrating my improvements. Fig. 2 is an end view, and Figs. 3 and 4 are views in section.

My improved rail-joint comprises a chair 1, provided on one side with an inwardly and 35 upwardly projecting flange 2 and on the opposite side with an upwardly-projecting back portion 3, recessed, as shown at 4, for a purpose more fully hereinafter described. The chair 1 is provided on its seat portion with lugs 40 or projections 5, normally disposed in notches or recesses 6 in one flange of the rail-sections 7 to prevent any longitudinal movement of said rail-sections in the chair or joint, and hence compelling all expansion and contraction of the rails to take place in the chair or joint. Blocks or wedges 8 are adapted to be slid between the upright portion 3 and the rail-sections 7, and each block or wedge is provided with a flange 9 along one side to fit 50 in the recess 4, and each flange 9 is provided with a vertical recess 10 in alinement with an opening 11 in the upright portion 3 to receive a suitable pin 12 to securely hold the wedges

or blocks 8 against longitudinal movement, and hence maintain the rails securely locked 55 in place without the use of bolts passing through said rails.

Instead of employing two blocks 8 I also maintain the right to employ a single block or wedge extending throughout the entire 60 length of the chair, and various other changes and improvements might be resorted to in the general form and arrangement of the several parts described without departing from the spirit and scope of my invention, and 65 hence I would have it understood that I do not wish to limit 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 70 invention.

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

1. In a rail-joint, the combination of a chair 75 provided with an upright having a groove in its inner face and having a vertical hole intersecting said groove, rail-sections each having a notch in one flange, lugs on said chair adjacent to the upright and entering the 80 notches in the flanges of the rails and a wedge or block mounted upon the chair and flange of the rail and disposed between upright and web of the rail, a flange on said wedge or block entering the groove in the upright and a key 85 passing through the vertical hole in the upright and through said flange.

2. In a rail-joint, the combination with a chair, of a flange on one side of said chair, an upright portion on the other side of said chair 90 having a recess therein, blocks or wedges adapted to be inserted in said chair between the rail and upright, a flange on each of said blocks or wedges disposed in said recess, means for locking said blocks or wedges in 95 place and a lug projecting from the chair adjacent to said upright portion and adapted to engage a rail.

In testimony whereof I have signed this specification in the presence of two subscrib- 100 ing witnesses.

WILLIAM H. MILLS.

Witnesses: CARRIE L. MILLER,

JENNIE LA DUE.