(No Model.)

J. B. WILSON.

RAILROAD CHAIR.

No. 428,988. Patented May 27, 1890.

Fig. 1.

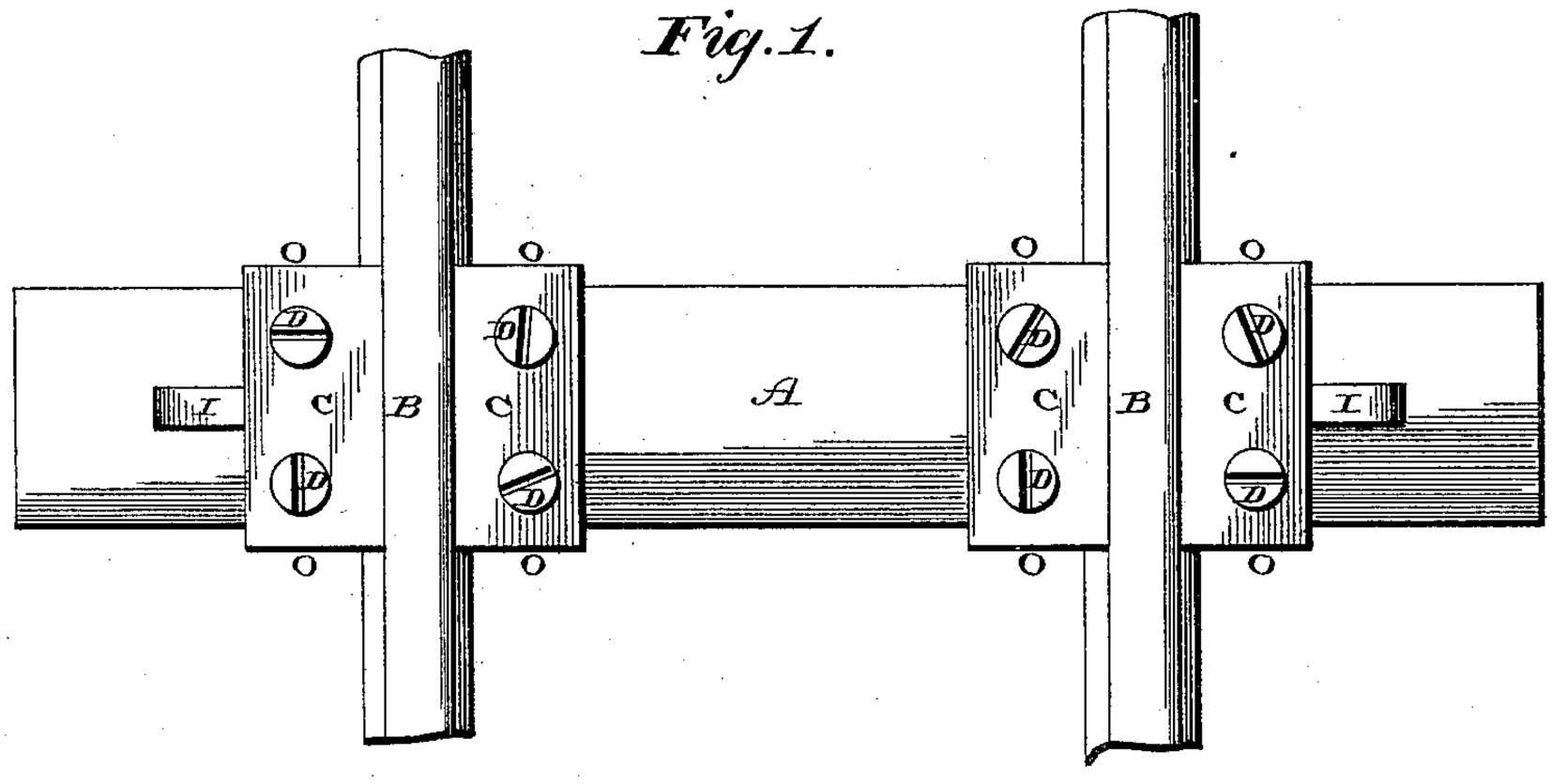


Fig. 2.

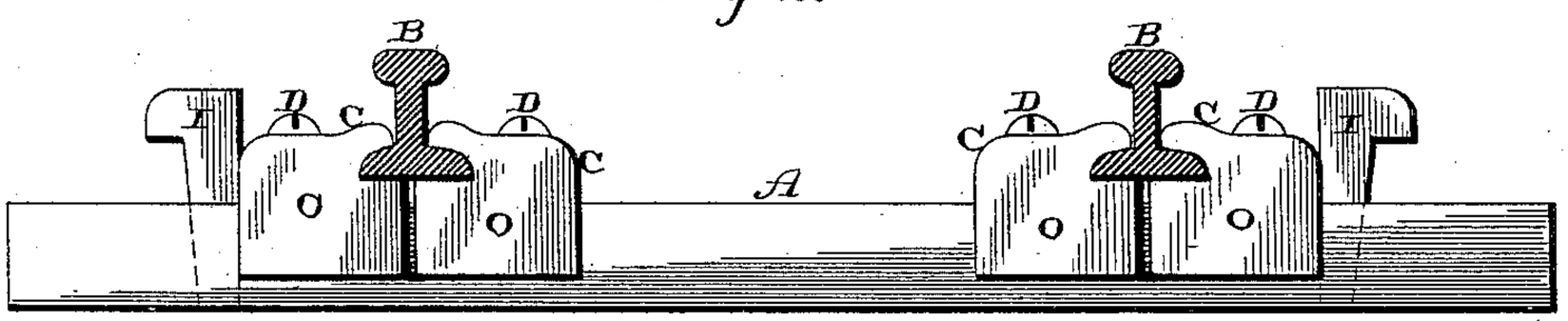
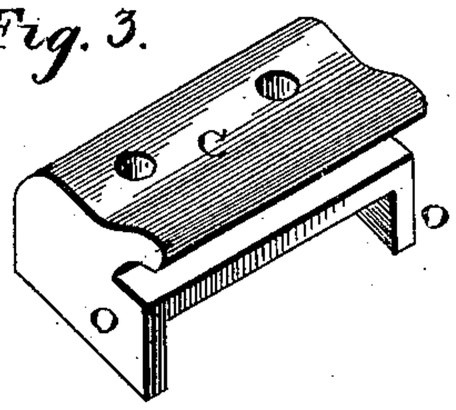


Fig. 3.



Witnesses:
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per
F. A. Lehmann, atty

UNITED STATES PATENT OFFICE.

JOSEPH B. WILSON, OF WOODBURY, NEW JERSEY, ASSIGNOR OF ONE-HALF TO CHAS. WALTON, OF SAME PLACE.

RAILROAD-CHAIR.

SPECIFICATION forming part of Letters Patent No. 428,988, dated May 27, 1890.

Application filed March 3, 1890. Serial No. 342,374. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH B. WILSON, of Woodbury, in the county of Gloucester and State of New Jersey, have invented certain new and useful Improvements in Railroad-Chairs; 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in railroad-chairs; and it consists in the arrangement of parts, to be fully described hereinafter, and pointed out in the claim.

The object of my invention is to provide a railroad-chair which will not only keep the rail out of contact with the tie, but prevent the tie from splitting or spreading, and thus greatly lengthen the life of the tie, which, owing to splitting and to the number of holes made in it by the spikes, decays at its ends and becomes worn by having the rails rest directly upon it.

Figure 1 is a plan view of a chair which embodies my invention. Fig. 2 is a side elevation of the same. Fig. 3 is a detail.

A represents an ordinary wooden tie; B, the rails, and C the chairs, which are formed of two parts and secured to the ties by means of large wooden screws D, or by any other suitable means that may be preferred. Each part of the chair is provided with flanges O at its ends, so as to extend down any desired distance upon opposite sides of the tie for the purpose of preventing it from splitting, spreading, or swelling. These chairs are made of uniform length, and where the ties are too wide to fit between these flanges the tie must be reduced in width at the point where the chair is applied to it. In case the ties are too narrow to fit between the flanges the chair affords the same bearing for the rail that it does upon the widest ties. Each one of these parts of the chair has the recess in its side to receive the flange upon the rail raised any suitable distance above the top of the tie, so as to prevent the rail coming in actual contact with the tie and wearing the tie at this point.

Where the rail is allowed to rest directly upon the tie the constant vibration and movement caused by passing trains cause the rail to work and cut into the top of the tie, and thus greatly injure it at this point. The passage of trains over the track causes the inner edges of the rails to wear away, and causes the rail to push the outer portion of the chair outward sufficiently far to allow the rail to spread. In order to realign these rails and to force them quickly and readily back into position against the inner portions of the chairs, either a conical spike I may be driven into the tie outside of the chair or there may be a slot cut through the tie at each end, and in this slot be placed a wedge or spike, which will serve to force the outer portions of the chairs and the rails back into position. When it is found that the rails have begun to spread at any point, it is only necessary to drive this wedge or spike deeper into the tie, and this movement will serve to force the parts back into position. By means of this construction a person can realign the track as rapidly as he can walk along. By fastening these portions of chairs in place by means of wooden screws or other suitable fastenings there will be no necessity of constantly withdrawing the spikes and redriving them, as is the case where no chair is used and the rails are held only by the spikes. The constant drawing and redriving of the spikes cause the tie to split and to be filled with holes, which become filled with water, rot, and cause the entire ends of the tie to be destroyed, while its central portion remains perfectly sound. By preventing the ends of the ties from being destroyed, instead of a tie lasting only three to five years, as is now the case, it will last from fifteen to twenty-five years.

Having thus described my invention, I claim—

The combination of the tie, the wedge or spikes which are driven into the tie outside of the chair, and the chair formed of two separate and distinct parts and provided with flanges at their ends to catch over opposite sides of the tie and the rail, substantially as specified.

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

JOSEPH B. WILSON.

Witnesses:
E. P. ELLIS,
F. A. LEHMANN.