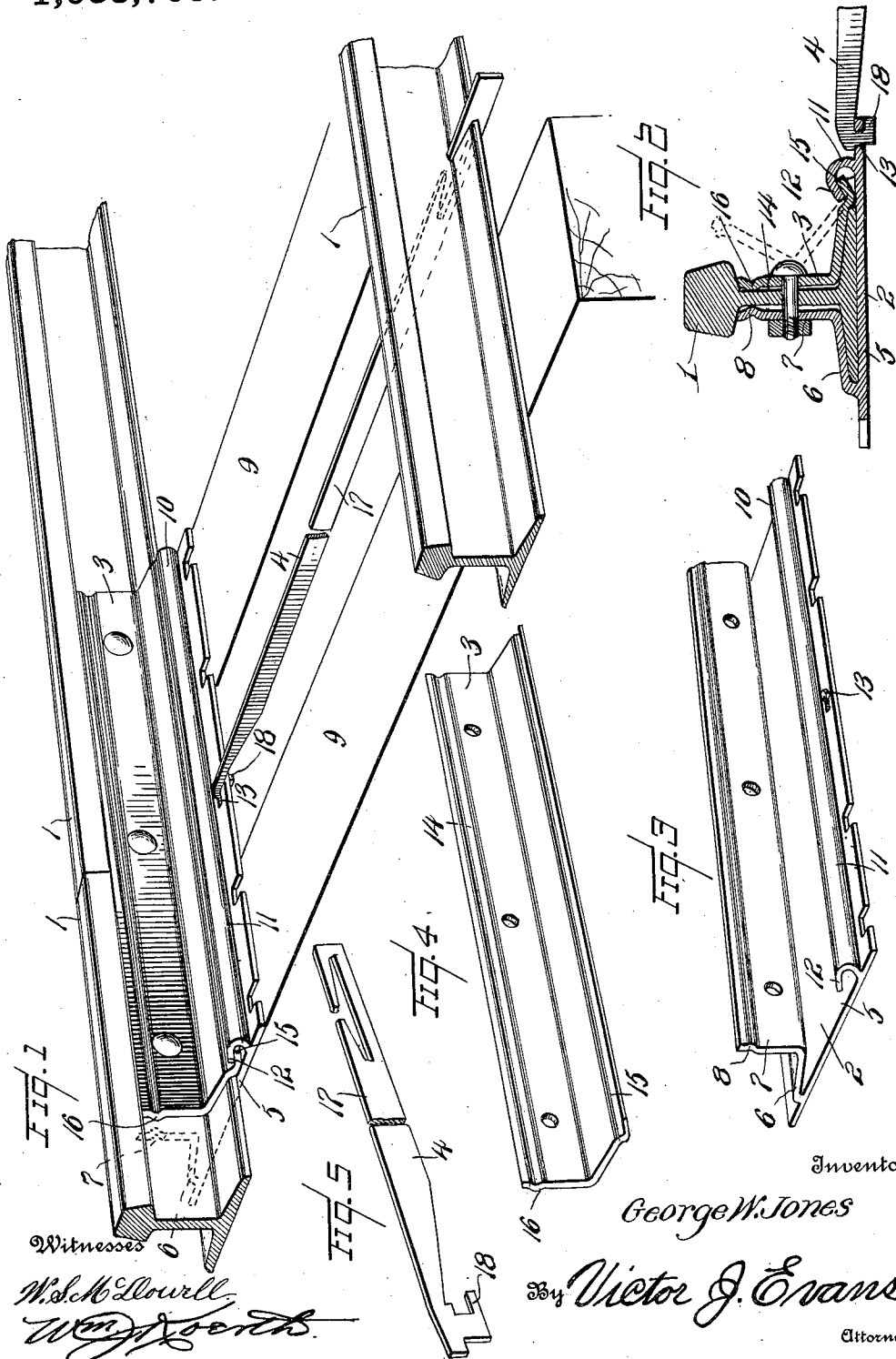


G. W. JONES.
 CONNECTION FOR RAILS.
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1,033,703.

Patented July 23, 1912.



Witnesses

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CONNECTION FOR RAILS.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, GEORGE W. JONES, a citizen of the United States, residing at Canandaigua, in the county of Ontario and State of New York, have invented new and useful Improvements in Connections for Rails, of which the following is a specification.

The present invention relates to certain and novel improvements in combined rail chairs and anti-spreading devices for rails.

In carrying out my invention it is my purpose to provide a rail chair having a removable self locking face plate secured thereto, the said chair and face plate being so constructed and arranged as to prevent the lateral movement of the rails secured thereby, as well as the sagging movement of the rails at their points of connection, thus materially adding to the life of the rails as well as to the comfort of the traveling public.

I also aim to provide, in a device of this character, simple and effective means, which may be removably connected with the base of the chair, for effectively sustaining the opposite rails in proper spaced relation with each other.

In the drawings, Figure 1 is a perspective view illustrating my improvement applied to the rails. Fig. 2 is a cross sectional view taken approximately in a plane with that portion of the spacing bar which is connected to the chair. Fig. 3 is a perspective view of the chair. Fig. 4 is a similar view of the removable fish plate. Fig. 5 is a view of the spacing bar.

Referring now to the drawings in detail, the numeral 1 designates the rail members, which are of the ordinary construction.

The numeral 2 designates my improved rail chair, 3 the fish plate for the chair, and 4 the spacing bar which is employed in connection with the chair.

The chair 2 comprises a flattened horizontally straight base portion 5, which is formed adjacent its outer edge with an angular flange 6, the same terminating in a vertically straight wall 7. The wall 7 may be, and preferably is provided with a longitudinally extending bead 8, and the angular flange as well as the vertical wall are adapted to snugly engage with the base flanges, webs and balls of two of the rail members 1, upon one face of the said members, when the rails are positioned upon the chair. It

is, of course, to be understood that the under face of the base flanges of the rails 1 snugly engage the horizontally straight base 5 of the chair 2. The outer longitudinal edge of the base 5, beyond the angular flange 6 is provided with a plurality of notches which are adapted for the reception of spikes whereby this side of the chair may be secured upon the ties 9. The base 5 adjacent its opposite longitudinal edge is integrally formed with what I term a way 10. This way comprises a vertical wall 11 which projects a suitable distance above the base 5 of the chair, and an inwardly extending downwardly projecting wall 12. The portion of the base beyond the said vertical wall of the way is provided with a plurality of notches upon its longitudinal edge, which are adapted to receive spikes or similar securing elements and whereby this side of the chair may be secured to the ties 9. The said projecting portion is further provided with a key hole slot 13, which is preferably arranged central of the extending portion of the base 5.

The numeral 14 designates the angular fish plate for the chair. This fish plate is of the ordinary construction excepting that its lower longitudinal edge is formed with an angularly arranged lip 15, the same being adapted to engage within the angular way 10 of the chair. If desired the lip 15 may be permitted a small amount of play when arranged within the way, so that the same may be brought toward the base flange as well as the web and under faces of the rail heads which are positioned upon the chair. Furthermore the chair may have its vertical wall constructed of some resilient material, so that upon screwing the nuts upon the retaining bolts, which pass through suitable openings in the vertical wall 7, the webs of the rails as well as the vertical wall of fish plate, the said fish plate yielding to a certain degree to permit of the same snugly engaging the rails. The vertical wall of the fish plate is preferably provided with a longitudinally extending bead 16, similar to the beads 8 of the wall 7, so that the main portion of the vertical wall of the face plate is sustained away from the rails.

The numeral 4 designates the spacing rod or bar which is employed in connection with my improved rail chair. This bar 4 preferably comprises a single strip of metal and is provided upon one of its ends with a de-

pending bit 18, the same adapted to be inserted within the key hole slot 13 of the base 5 of the chair, and when so positioned the bar is turned so that the offset portion of the bit underlies the base of the chair to prevent the accidental removal of the bar from the chair. The opposite end of the bar is provided with a slot which corresponds to the cross sectional form of the base flange of a rail, and when the bar is positioned upon the chair and upon the opposite rail 1 it will be noted that the said rails are sustained in proper spaced relation with each other.

From the above description, taken in connection with the accompanying drawings, the simplicity of the device, the cheapness of construction thereof, as well as its many advantages will, it is thought, commend themselves to those skilled in the art to which such inventions appertain without further detail description.

By reference to the dotted lines on Fig. 2 of the drawings, it will be noted that the rail may be positioned upon the chair before the fish plate has its bead 15 inserted within the way 11, and the connection between the fish plate and the chair forms a hinge, whereby the said fish plate may be swung either toward or away from the rail

as desired, and as a consequence the fish plate may be readily removed from the chair without interfering with the chair.

Having thus described the invention what I claim is:—

A rail connection comprising a chair having an angular and a vertical upset portion, said chair being further provided with a projecting longitudinally extending curved way, the chair being further provided with a key hole slot, an angular fish plate, said fish plate having its vertical wall formed of resilient material, means for connecting rail members between the fish plate and the upset portion of the chair, a spacing bar, said spacing bar having one of its ends provided with a key bit which is adapted to engage within the key hole slot of the chair, and the opposite portion of the bar having a slot to correspond with the cross sectional form of the rail opposite the chair and adapted to engage with the base flange of the said rail substantially as and for the purpose set forth.

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

GEORGE W. JONES.

Witnesses:

W. E. PALMER,
BENNETT S. JONES.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."