

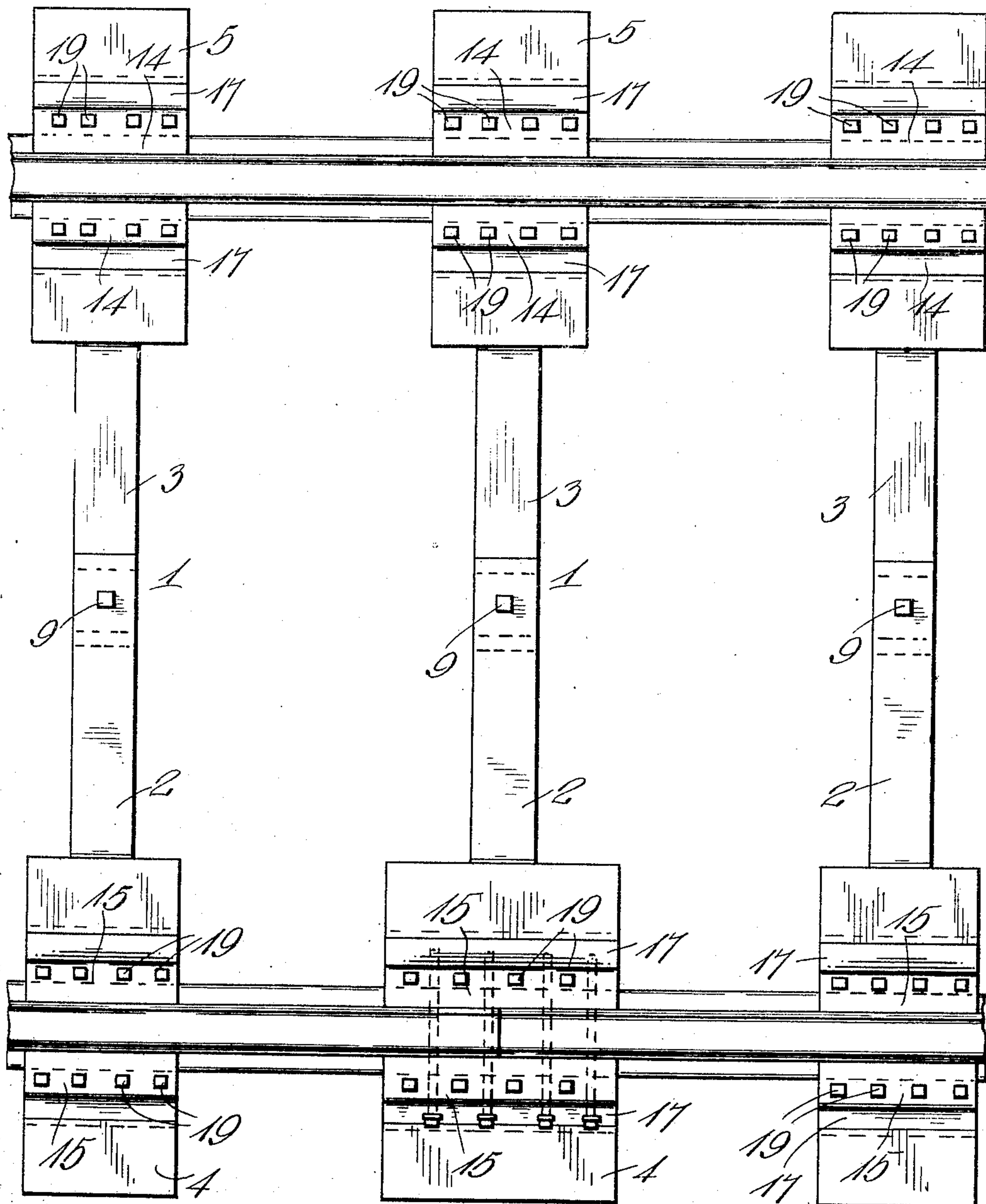
R. A. NEATHERLAND.  
RAILROAD JOINT SUPPORTER.  
APPLICATION FILED OCT. 3, 1910.

983,752.

Patented Feb. 7, 1911.

2 SHEETS—SHEET 1.

Fig. 1.



Inventor

R. A. Neatherland

Witnesses

L. B. James  
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by

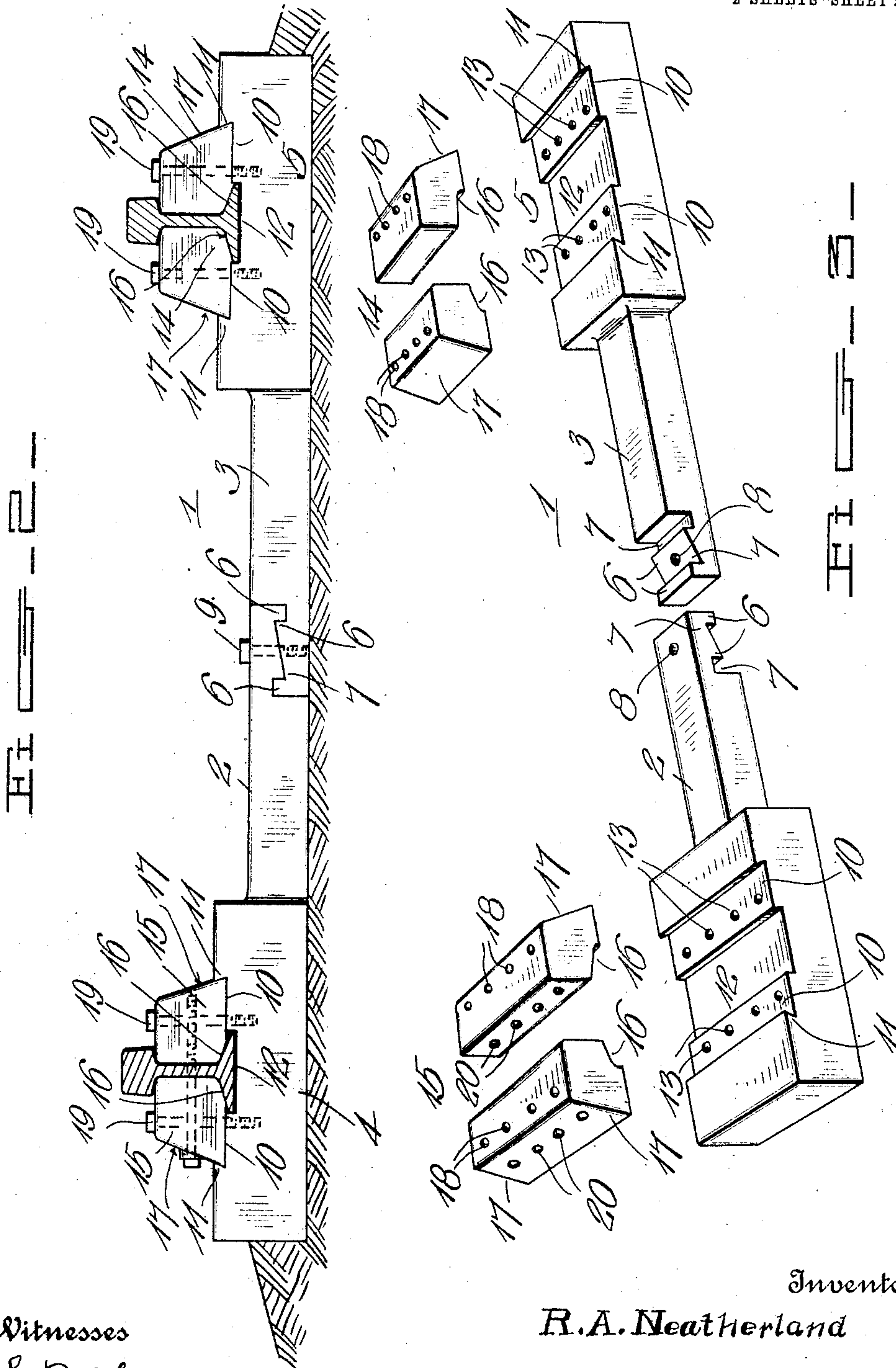
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# UNITED STATES PATENT OFFICE.

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RAILROAD-JOINT SUPPORTER.

983,752.

Specification of Letters Patent.

Patented Feb. 7, 1911.

Application filed October 3, 1910. Serial No. 585,085.

*To all whom it may concern:*

Be it known that I, RANKEN A. NEATHERLAND, a citizen of the United States, residing at Jonesboro, in the parish of Jackson and State of Louisiana, have invented certain new and useful Improvements in Railroad-Join. Supporters; and I do 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.

This invention relates to improvements in combined rail chairs and ties.

One object of the invention is to provide an improved rail chair and tie constructed and arranged in such manner as to effectively prevent the spreading of the rails and which provides an efficient joint or connection for the meeting ends of the rails.

Another object is to provide a combined chair and tie of this character which may be readily released to permit the removal of the rail.

In the accompanying drawings, Figure 1 is a plan view of a portion of two railway rails showing the application of the invention thereto. Fig. 2 is a side view of my invention illustrating the application of the invention to the rail, the latter being shown in section. Fig. 3 is a perspective view of one of the combined ties and rail supporting chairs showing the parts separated.

Referring more particularly to the drawings, 1 denotes my improved combination tie and rail chair which comprises a tie portion formed in two sections 2 and 3 on the outer ends of which are arranged integrally formed rail supporting chairs 4 and 5, the sections 2 and 3 of the tie portion of the invention having formed in their inner ends interlocking lugs and notches 6 and 7 whereby said ends of the sections have an interlocking connection. Through said notched and recessed ends of the sections are formed aligned bolt holes 8 with which is adapted to be engaged a fastening bolt or screw 9 whereby said ends of the sections are rigidly secured together.

The chairs 4 and 5 on the outer ends of the tie sections 2 and 3 are of the same size and structure as the devices used between the joints or meeting ends of the rails but in the devices used at the joints or meeting ends of the rails the chair 4 upon which the joint rests, is preferably of greater width

than the chair 5 at the opposite end which supports the intermediate portion of the rail. This arrangement of devices is clearly illustrated in Fig. 1 of the drawing. Each of the chairs 4 and 5 comprises a rectangular block of suitable length and width and of greater thickness than the tie portions 2 and 3 and in the upper surface of the blocks 4 and 5 are formed transverse grooves or channels 10, the opposite edges of which are beveled or inclined thus forming overhanging or angular shoulders 11, the purpose of which will be hereinafter described. In the central portion of the grooves 10 are formed transverse depressions or channels 12 which provide seats in which the rails are engaged when placed on the chairs. In the grooves or channels 10 adjacent to and along the edges of the grooves 12 are formed a series of threaded sockets 13, the purpose of which will be described.

Adapted to be engaged with the grooves or channels 10 and engaged with the opposite sides of the rails are bracing blocks 14 and 15, said blocks having formed in their lower surfaces adjacent to their inner sides recesses 16 which are adapted to engage the upper surfaces of the base flanges of the rails when the blocks are arranged in operative position on the chairs. The blocks 14 are also provided with inclined outer walls 17 the lower portions of which are engaged by the angular shoulders 11 formed by the end walls of the grooves or channels 10 in the chairs, said shoulders thus forming locking devices for firmly holding the bracing blocks against lateral movement and thus preventing the spreading or upsetting of the rails. The blocks 14 and 15 are further provided with a series of vertically disposed bolt holes 18 which aline with the threaded sockets 13 in the chairs and are adapted to receive fastening bolts or screws 19 which are inserted therethrough and screwed into engagement with the threaded sockets thereby forming additional means for firmly securing the bracing blocks in position.

In the bracing blocks 16 which are used in connection with the chairs 4 at the joint of the rails, are formed transversely disposed bolt holes 20 which, when the blocks are in position, aline with the bolt holes in the ends of the rails and through said alining holes are adapted to be inserted clamp-



in bolts or screws whereby the blocks 15  
are drawn up and screwed into tight engage-  
ment with the ends of the rails thereby se-  
curely fastening said ends together and to  
5 the shoulders 4.

By constructing my improved rail chairs  
and ties as herein shown and described, it  
will be readily seen that the rails will be  
securely held in the road bed and will be  
10 prevented from spreading or creeping and  
that when it is desired to remove a section  
of the rails the bracing blocks securing the  
latter may be quickly and easily disengaged  
from the chairs and rails and the latter  
15 thus released without disturbing any of the  
other parts of the railway.

From the foregoing description taken in  
connection with the accompanying drawings,  
the construction and operation of the inven-  
20 tion will be readily understood without re-  
quiring a more extended explanation.

Various changes in the form, proportion  
and minor details of construction may be  
resorted to without departing from the  
25 spirit or sacrificing any of the advantages  
of the invention as defined in the appended  
claims.

What is claimed is:

1. In a combined railway tie and chairs,  
30 a tie portion formed in separable sections,  
means to form an interlocking connection  
between the inner ends of said sections, rail  
chairs formed integrally with the outer ends  
of said tie sections, said chairs comprising  
35 blocks having formed therein transversely  
disposed channels, said channels having an-  
gularly formed side edges which provide  
overhanging shoulders, said blocks also hav-  
ing formed therein a series of threaded sock-  
40 ets, rail engaging seats formed in the centers  
of said channels, rail bracing blocks adapted

to be engaged with said channels and with  
the webs and base flanges of the rails, and  
fastening bolts adapted to be inserted  
through said blocks and screwed into en- 45  
gagement with the threaded sockets in said  
chairs.

2. In a combined railway tie and chairs,  
a tie portion formed in separable sections,  
said sections having on their inner ends a 50  
series of grooves and recesses, a fastening bolt  
adapted to be engaged with the inter-locked  
inner ends of said tie sections, a rail chair  
formed on the outer end of one of said tie sec-  
tions, a rail joint chair formed on the outer 55  
end of the opposite tie sections, said chairs  
having formed therein transversely disposed  
grooves and a series of threaded sockets, angu-  
lar stop shoulders formed on the outer edges  
of said channels, rail engaging seats formed 60  
through the centers of said grooves, rail  
bracing blocks adapted to be engaged with  
the chair of one of said tie sections and the  
rail, bracing blocks adapted to be engaged  
with the groove or channel of said rail joint 65  
chair, said blocks having formed therein a  
series of vertically disposed bolt holes  
adapted to aline with the threaded sockets  
in said chairs, fastening bolts arranged in  
said holes and sockets, said joint chair blocks 70  
having formed therethrough a series of  
transversely disposed bolt holes adapted to  
aline with the bolt holes in the rails, a series  
of rail fastening bolts adapted to be inserted  
through said transverse holes in the blocks. 75

In testimony whereof I have hereunto set  
my hand in presence of two subscribing  
witnesses.

RANKEN AQUILLAS NEATHERLAND.

Witnesses:

HOPE WATTS,  
J. R. CARVER.