

A. McARTHUR.
 COMBINED RAILWAY TIE AND VIADUCT FOR WIRES.
 APPLICATION FILED JUNE 21, 1909.

943,700.

Patented Dec. 21, 1909.

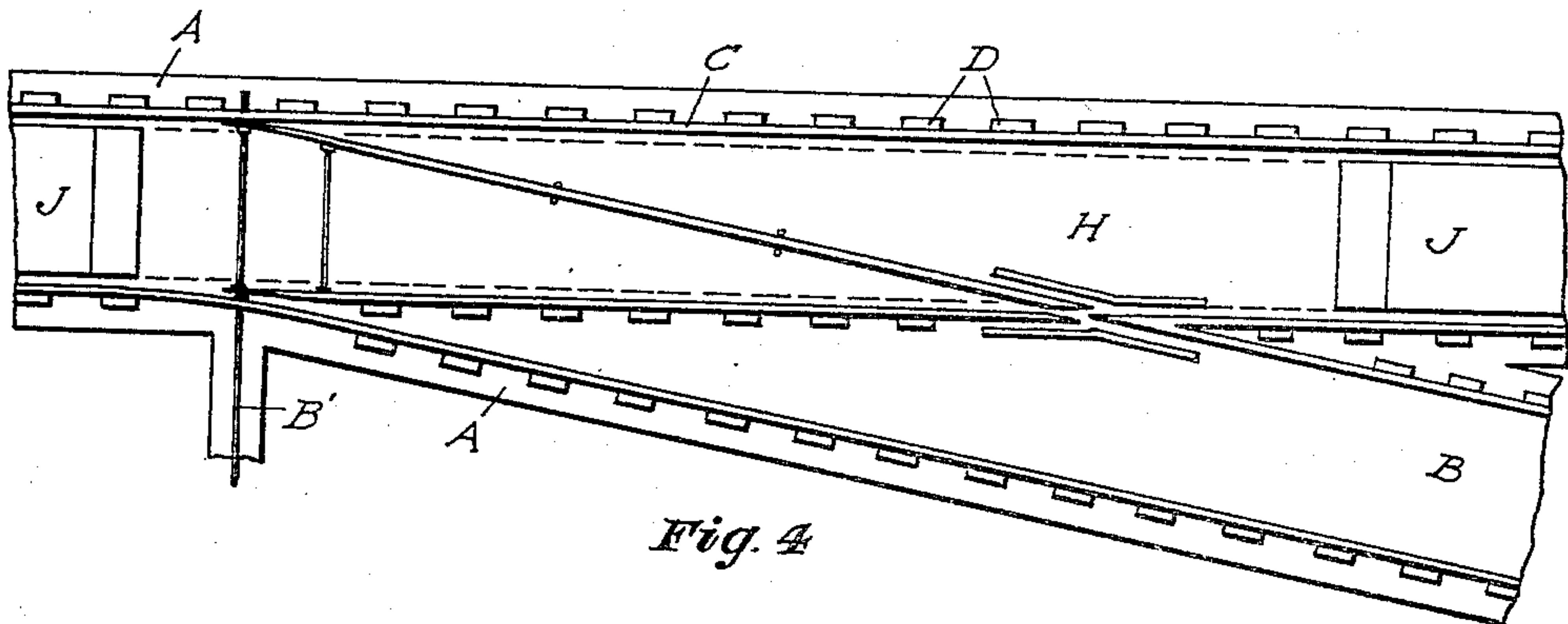


Fig. 4

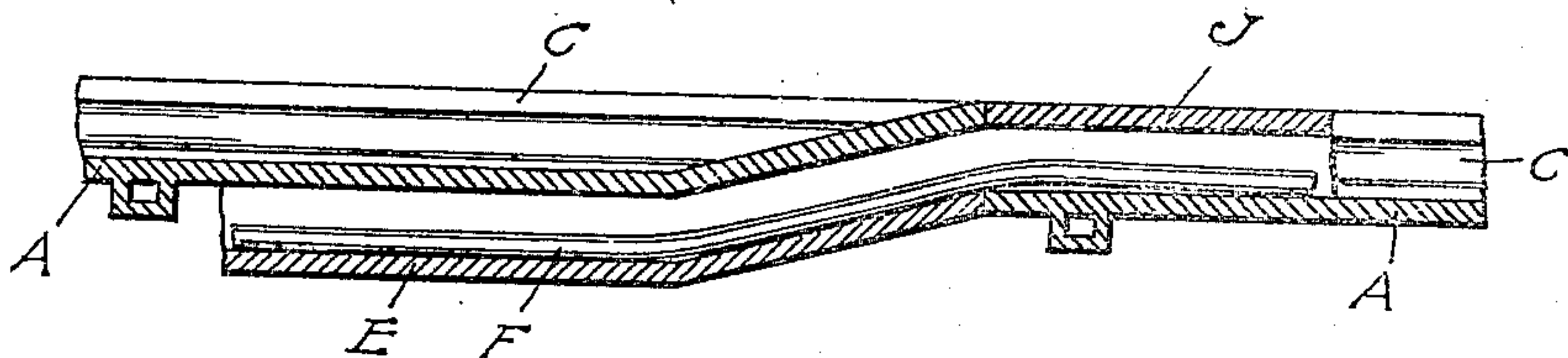


Fig. 3.

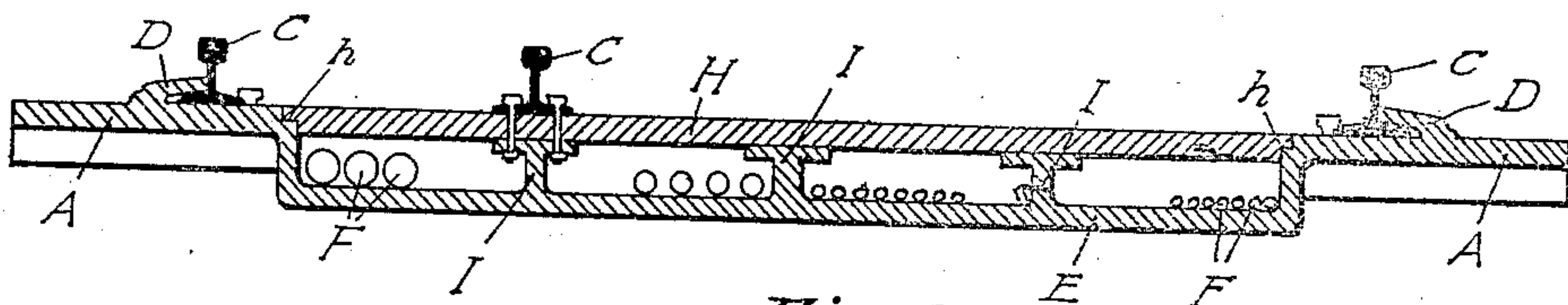


Fig. 2.

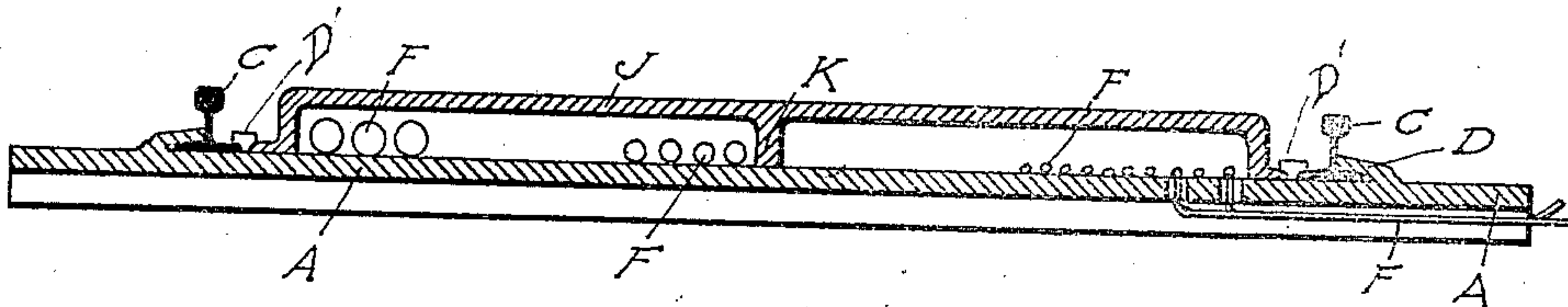


Fig. 1.

WITNESSES:

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ALEXANDER McARTHUR, OF FORBES, MISSOURI.

COMBINED RAILWAY-TIE AND VIADUCT FOR WIRES.

943,700.

Specification of Letters Patent.

Patented Dec. 21, 1909.

Application filed June 21, 1909. Serial No. 503,439.

To all whom it may concern:

Be it known that I, ALEXANDER McARTHUR, a citizen of the United States, residing at Forbes, in the county of Holt and State of Missouri, have invented certain new and useful Improvements in a Combined Railway-Tie and Viaduct for Wires, of which the following is a specification.

The object of my invention is to provide a means for carrying telegraph and telephone wires in proximity with the ground instead of overhead and at the same time thoroughly protecting them from injury.

The invention is especially designed to be used in connection with an improved continuous bearing railway tie for which I was granted a patent by the United States Patent Office Feb. 24, 1909, No. 934,561.

I accomplish my object by the mechanism illustrated in the accompanying drawings in which—

Figure 1 is a section of a tie plate with an elevated section shown bolted on the same; Fig. 2 is a cross section of said plate showing a depressed section as used below switches; Fig. 3 is a longitudinal section of both elevated and depressed section showing the manner of changing the elevation of the wires, and Fig. 4 is a plan view of the main line track and turn-out switch.

Similar letters refer to similar parts in the several views.

In the drawings the tie for which I have been granted a patent as hereinbefore stated is illustrated by letter A.

B is a switch track and B' is a switch.

C C are the railway rails.

D D are outside braces integral with plate A to receive the outer protecting bases of the rails and prevent the spreading of said rails.

D' D' are spikes serving the dual purpose of preventing the tie being shoved out of engagement with braces D D and fastening the bases of an elevated separate plate J on the tie plate. Said elevation forms a conduit between said tie plate and said sectional plate. This conduit is intended to receive and protect telegraph and telephone wires F F—or for any other use for which suitable.

E is a section of the tie plate depressed at

switches and H is a section provided with shoulders *h h* which engage with and are supported on the downwardly bent sides of depressed section E, thus forming a lower conduit for the passage of wires at the switches.

I I are supports for switch sectional plate H. K is a support for said elevated plate J. The plates are preferably corrugated. Elevated plate J is spaced about two inches at each side from the railway rails thus assisting in preventing an engine or car leaving the rails. The wires in said conduits may be connected at stations or elsewhere in any suitable way.

What I claim and desire to secure by Letters Patent is:—

1. A combination railway road bed comprising railway rails, a continuous support formed of tie-plates in juxtaposition provided with flanges to engage the outer flanges of the bases of the rails, an elevated separate plate on the top of said tie plate spaced from said rails and forming a conduit, spikes to engage the inner flanges of the rails and the flanges on said elevated plates to hold them rigidly on said tie plate, central supports for said elevated plates and the wires carried within the spaced chambers between the tie plates and elevated plates, and a tie-plate having a depressed section for switches, a switch plate having shoulders to engage with said tie plate at the points of depression forming a lower conduit for wires and a support for said switch plate, substantially as shown and described.

2. A combination railway road bed comprising a series of tie plates in juxtaposition serving as a carrier for wires, a plurality of elevated plates fastened rigidly on said tie plates, a depression in said series of railway tie plates at switches and a separate plate provided with shoulders adapted to engage at each end with said tie plates and span said depression, substantially as set forth and shown.

3. A combination railway road bed comprising a continuous support formed of a series of tie plates, a continuous elevated plate rigidly fastened at its downwardly turned edges to said tie plates forming a

carrier conduit for wires, substantially as shown and described.

4. A combination railway road bed comprising a continuous support formed of a series of tie-plates in juxtaposition, a depression thereof and a separate plate provided with shoulders and adapted to engage at each end with said tie plates and span said

depression forming a conduit at switches for wires, substantially as shown and set forth. 10

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

ALEXANDER McARTHUR.

Witnesses:

PEARL ST. CLAIR,
M. J. McARTHUR.