

No. 822,832.

PATENTED JUNE 5, 1906.

G. W. DUKE.
RAILWAY TIE PLATE.
APPLICATION FILED OCT. 24, 1905.

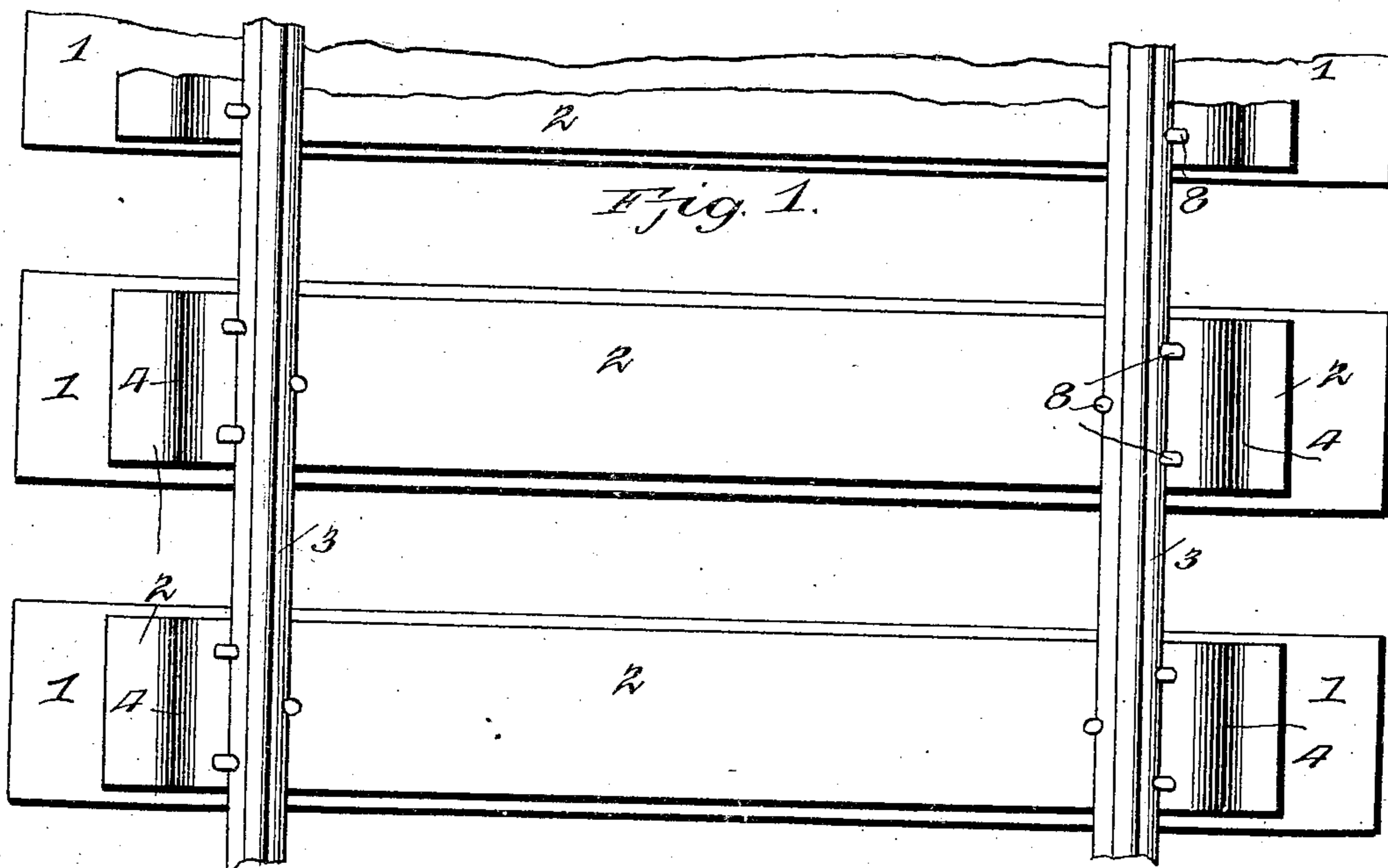


Fig. 1.

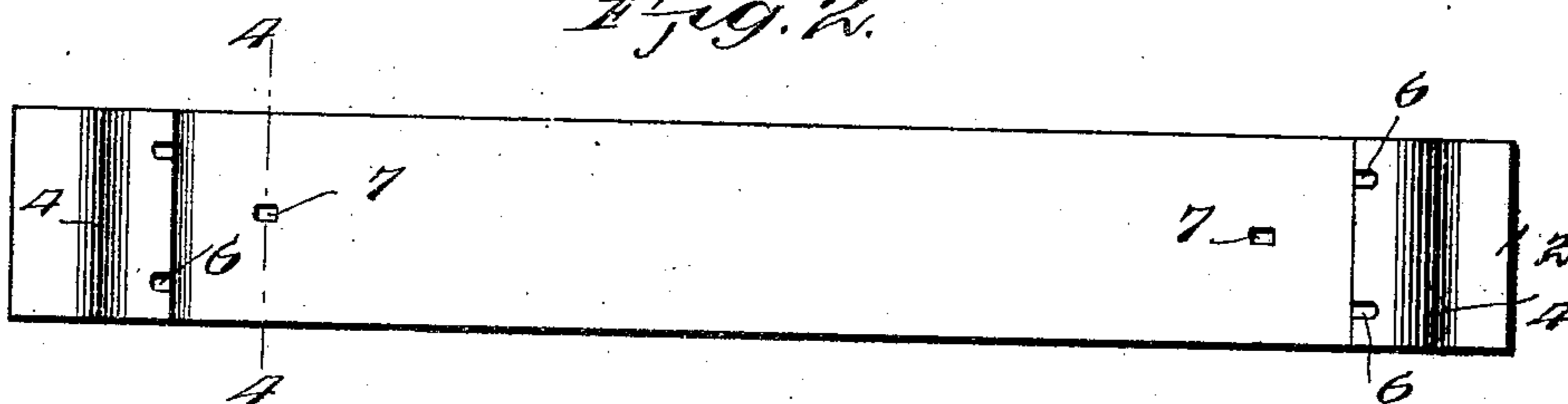


Fig. 2.

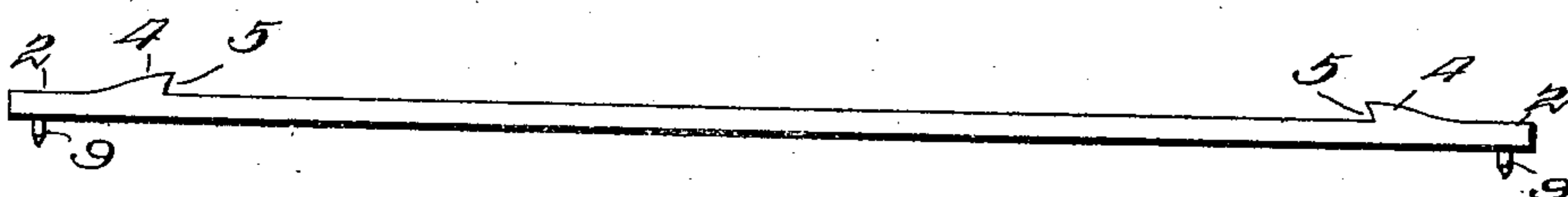


Fig. 3.

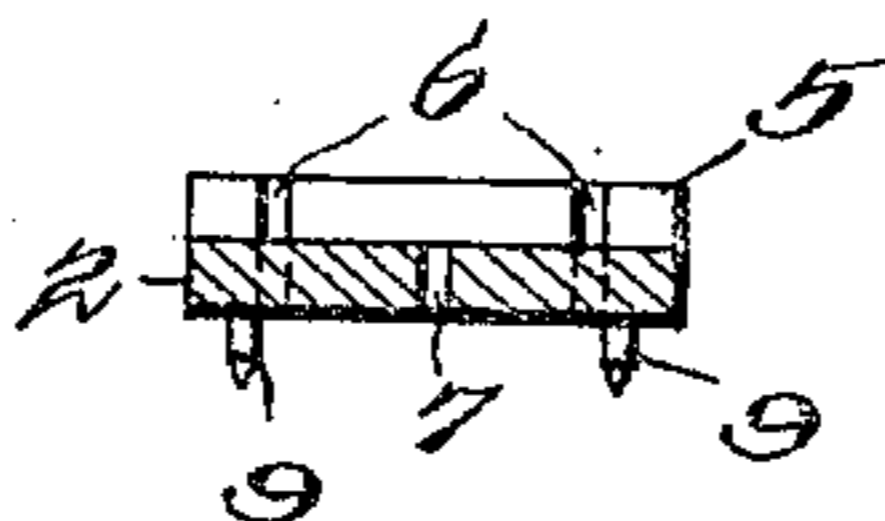


Fig. 4.

Inventor
Geo. W. Duke

Witnesses
Frank Hough
John F. Byrnes

By Victor J. Evans
Attorney

UNITED STATES PATENT OFFICE.

GEORGE W. DUKE, OF POWDER SPRINGS, GEORGIA, ASSIGNOR OF ONE-HALF TO JUNIE F. DUNTON, OF ATLANTA, GEORGIA.

RAILWAY-TIE PLATE.

No. 822,832.

Specification of Letters Patent.

Patented June 5, 1906.

Application filed October 24, 1905. Serial No. 284,210.

To all whom it may concern:

Be it known that I, GEORGE W. DUKE, a citizen of the United States, residing at Powder Springs, in the county of Cobb and State of Georgia, have invented new and useful Improvements in Railway - Tie Plates, of which the following is a specification.

My invention relates to railway-tie plates; and its primary object is to provide metallic plates designed to be positioned upon the upper surfaces of the ordinary wooden ties and to receive and prevent the spreading of the rails, the plates also serving to protect the wooden ties, and thereby add life thereto.

A further object of the invention is to provide the metallic tie-plates with engaging means which serve to retain the plates in applied position upon the wooden ties during the assembling of the rails.

With the above and other objects in view the invention consists in the construction, combination, and arrangement of parts hereinafter fully described, claimed, and illustrated in the accompanying drawings, wherein—

Figure 1 is a top plan view of the fragmentary portion of a railway-rail, illustrating the application of my improved metallic tie-plates to the ordinary wooden ties. Fig. 2 is a top plan view of one of the metallic tie-plates. Fig. 3 is a view in side elevation thereof, and Fig. 4 is a sectional view on the line 4 4 of Fig. 2.

Referring to the drawings by reference-numerals, 1 designates wooden ties of the usual form and construction, 2 my improved metallic tie-plates, and 3 railway-rails, also of the usual form and construction.

The tie-plates are made of any suitable material and are of a length and width equal to that of the ordinary wooden ties. The opposite ends of the tie-plates are increased in thickness, as at 4, to provide undercut shoulders 5, against which abut the outer edges of the bases of the rails, whereby the rails are prevented from spreading. The portions 4 are provided with recesses 6, which extend throughout the entire thickness thereof and terminate in openings passing through the

tie-plates. Other openings 7 are provided in the tie-plate at a point removed from the shoulders 5. Spikes 8 are used to secure the rails in applied position and are let through said openings to engage the wooden ties. The opposite ends of the tie-plates are provided with depending prongs 9, which engage the wooden ties to retain the plates in applied position during the assembling of the rails and the application of the spikes 8.

The ordinary wooden ties are first laid, and then my improved tie-plates are applied to the upper faces thereof, the prongs 9 preventing their displacement. The shoulders 5 are spaced apart a sufficient distance so that when the outer edges of the rails are brought thereagainst the rails are spaced apart their usual distance, thereby avoiding the necessity of the use of the gage used in properly assembling the rails. After the rails have been thus positioned the spikes 8 are driven, which not only secure the rails in applied position, but also serve to retain the tie-plates in proper relation with the ties.

The tie-plates not only provide an excellent bearing-surface for the rails, but also prevent the ties from decaying, as the upper surfaces thereof are fully protected from the elements by the plates.

Having fully described and illustrated my invention, what I claim is—

A tie-plate provided at each end with a thickened portion having an undercut shoulder to engage the outer edge of the base of the rail, an opening located inwardly from said shoulder for the passage of a spike to engage the inner edge of the base of the rail, spike-openings beneath the shoulder, recesses in the shoulder communicating with said spike-openings, and spurs projecting from the bottom of the plate at each end outwardly beyond said thickened portions, substantially as described.

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

GEORGE W. DUKE.

Witnesses:

J. T. BOOKOUT,
C. A. CAMP.