

(No Model.)

E. D. & W. H. GARNER.

STEEL SAFETY PLATE ON RAILWAY TIES.

No. 540,243.

Patented June 4, 1895

Fig. 1.

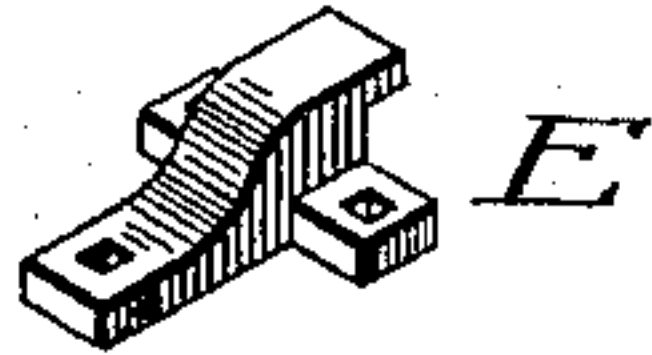


Fig. 2.

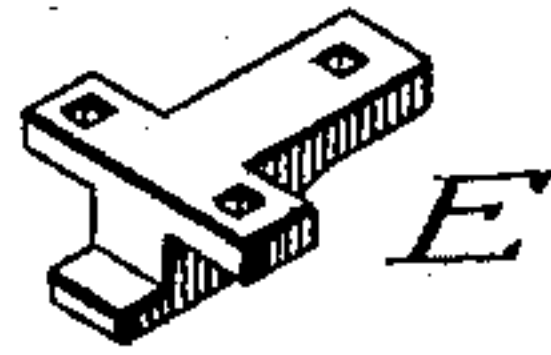


Fig. 3.

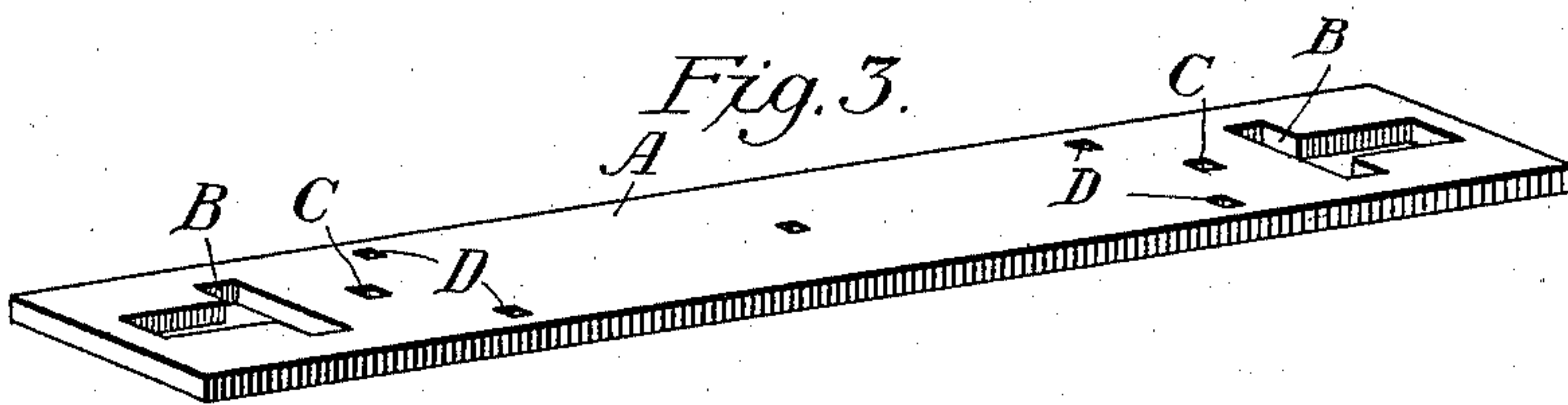


Fig. 4.

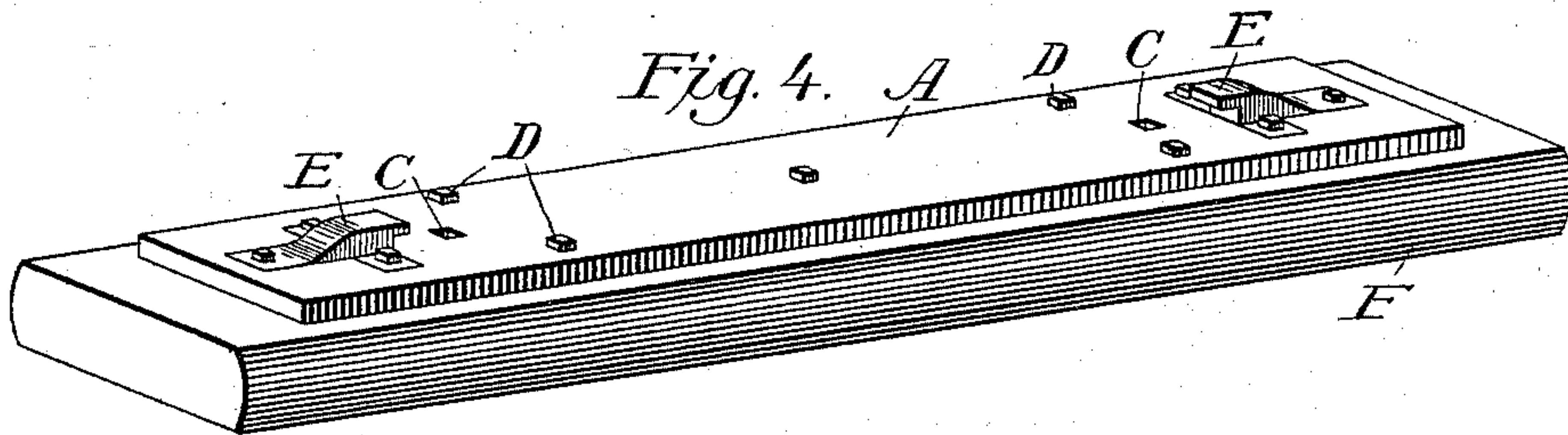
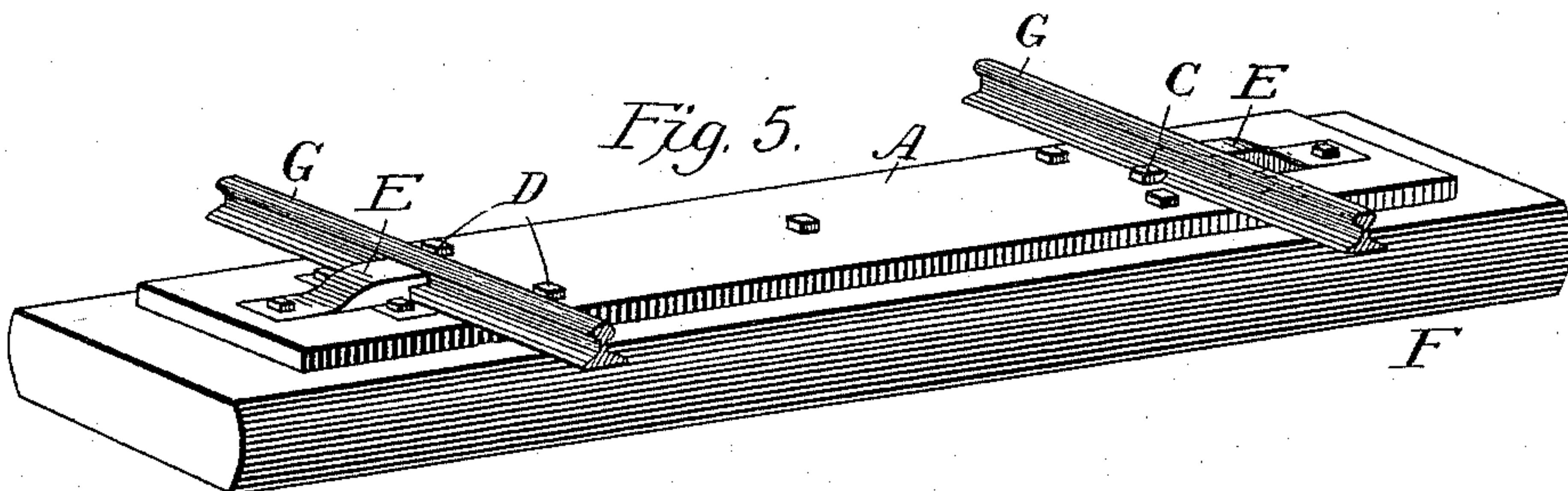


Fig. 5.



Witnesses.

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UNITED STATES PATENT OFFICE.

ELMER DANIEL GARNER AND WILLIAM HENRY GARNER, OF AMERICA CITY, KANSAS.

STEEL SAFETY-PLATE ON RAILWAY-TIES.

SPECIFICATION forming part of Letters Patent No. 540,243, dated June 4, 1895.

Application filed February 25, 1895. Serial No. 539,671. (No model.)

To all whom it may concern:

Be it known that we, ELMER DANIEL GARNER and WILLIAM HENRY GARNER, citizens of the United States, residing at America City, in the county of Nemaha and State of Kansas, have invented a Steel Safety-Plate on Railway-Ties, of which the following is a specification.

Our invention is a great improvement on railways; and the object of our invention is to have a steel plate and clasp on wooden ties which will prevent the rails from spreading and cutting in the ties. We attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 shows a top view of clasp. Fig. 2 shows the under view of clasp; Fig. 3, the steel plate; Fig. 4, the steel plate and steel clasp fastened on a wooden tie; Fig. 5, the rails fastened on tie with steel clasp and plate.

Similar letters refer to similar parts throughout the several views.

The plate A is a steel plate with an opening of T shape for clasp E to fit in.

C is a hole for large spike for the inside of the rail.

D are openings for spikes or screws.

E is a steel clasp; F, wooden tie; G, rail.

The plate A should be made of steel. The dimensions of the plate are as follows: the length, six and a half feet; width eight inches; thickness, about three-fourths of an inch. Five holes are provided for spikes or screws,

and two holes for large spikes, to fasten rails on the inside. The socket for the clasps to fit in is open entirely through the plate. The steel clasps E, E, are to be inserted in the openings in the tie plate. They are to be made of steel in a cross shape. The length of brace is seven inches; length of cross arm, six inches; width of brace, three inches; width of cross arm, three inches. There are three spike holes in the brace which gradually slopes upward from the rear spike hole with a thickness of about one inch, and two inches width, clasp ing down on the foot of the rail; also there should be about one-fourth of an inch rim extending over the plate from brace back from the cross arm as in Fig. 2.

Fig. 5 shows our invention on the old or wooden ties with the rail fastened on and all complete.

What we do claim as our invention, and desire to secure by Letters Patent, is—

The combination of a wooden tie, with the metal plate A, mounted thereon, said metal plate being provided at each end with T-shaped openings to receive T-shaped clips fitting therein and secured to the wooden tie by spikes substantially as shown and described.

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