

(No Model.)

M. SELLERS.
TIE PLATE.

No. 573,543.

Patented Dec. 22, 1896.

Fig. 1

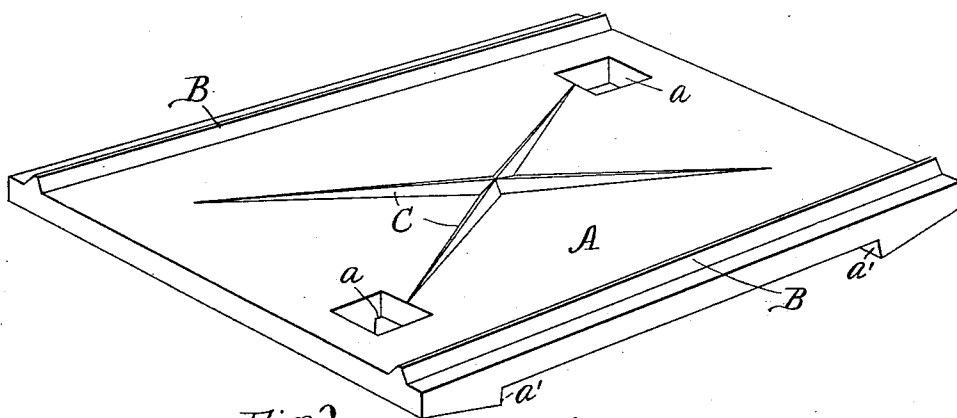


Fig. 2

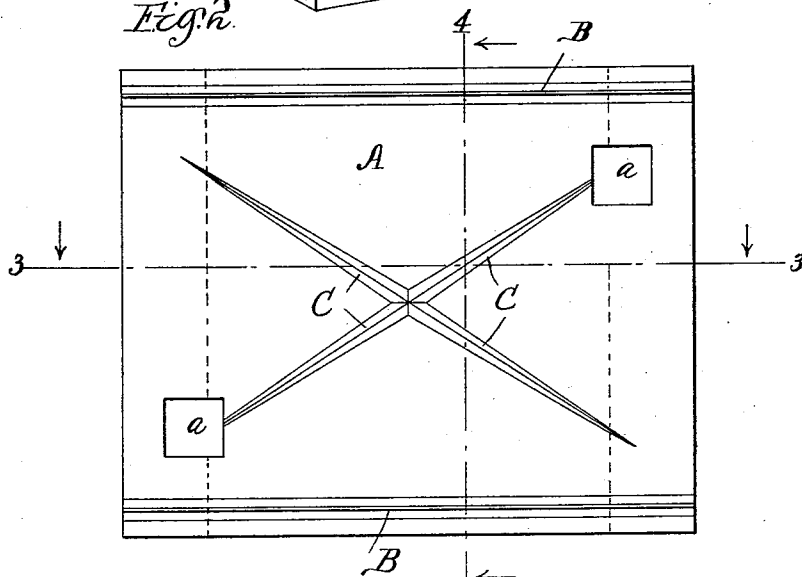


Fig. 3

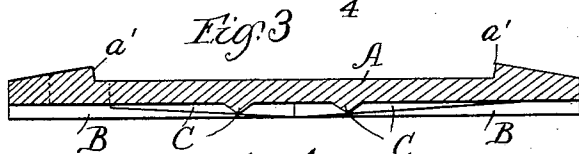
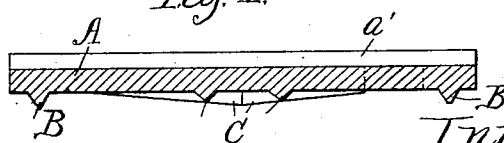


Fig. 4



Witnesses.

Wm. M. Rheum

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UNITED STATES PATENT OFFICE.

MORRIS SELLERS, OF CHICAGO, ILLINOIS.

TIE-PLATE.

SPECIFICATION forming part of Letters Patent No. 573,543, dated December 22, 1896.

Application filed February 3, 1896. Serial No. 577,911. (No model.)

To all whom it may concern:

Be it known that I, MORRIS SELLERS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Tie-Plates, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to certain new and useful improvements in tie-plates adapted to be secured to the cross-ties of railroads to receive the rails and hold the latter in place on the ties.

The object of the invention is primarily to provide a tie-plate of simple construction which may be rolled into shape and firmly seated on the tie.

Another object of the invention is to provide a tie-plate which will not abrade or otherwise wear the tie when subjected to the usual strain and weight of the rolling-stock passing over the rails; and a further object is to construct the tie-plate in such a manner that it will take a firm hold of the tie, thereby preventing movement of the tie-plate without splitting or opening the tie and thus subjecting the interior thereof to the disastrous action of the elements; and a still further object of the invention is to provide a tie-plate with ribs which will engage the fibers of the tie in every direction.

With these and other ends in view I have fully described my invention hereinafter in connection with the accompanying drawings, referring to which—

Figure 1 is a perspective view of my improved tie-plate, showing the bottom thereof. Fig. 2 is a bottom plan view. Fig. 3 is a sectional view on the line 3 3 of Fig. 2, and Fig. 4 is a sectional view on the line 4 4 of Fig. 2.

The tie-plates are rolled in long strips and then cut into plates A of the proper length, each plate being provided with one or more holes *a* to receive the spikes by which the plate is secured to the tie. Side flanges *a'* are provided on the top of the plate to receive the rail (not shown) and hold the same securely in place on the tie-plate and tie.

On the bottom of the plate I provide a longitudinal rib B, adjacent to each side thereof,

which is adapted to enter the surface of the tie and prevent, to a large extent, any lateral movement of the plate on the tie, as well as to protect that portion of the tie beneath the plate from water and other foreign matter which might otherwise work in beneath the sides of the plate. I also provide angularly-disposed ribs C between the longitudinal ribs B, which are adapted to engage the fibers of the tie in every direction, and for this purpose I have found that ribs crossed substantially in the manner shown in my drawings will operate to advantage, although I would have it distinctly understood that I do not hereby limit myself to this particular arrangement of the ribs, as it is only essential that they be angularly disposed with reference to the length of the plate, and any number of them may be employed. These ribs may be of any size and length, and they are tapered gradually from the middle to the ends, so that they will engage the fibers of the wood without splitting the same or forming deep depressions therein.

Besides operating to hold the plate securely in place upon the tie the ribs C, as well as the ribs B, also constitute braces for the plate and assist in maintaining the plate in its proper form and position.

By means of this improved construction of tie-plate I am enabled to manufacture them in great quantities by rolling at comparatively little expense, and they will remain firmly seated on the tie, notwithstanding the great strain to which they are subjected by reason of the peculiar construction and arrangement of the ribs on the bottom of the plate without splitting or otherwise opening the tie.

I am aware that changes in the form and proportion of parts and details of construction of my invention may be made without departing from the spirit and without sacrificing the advantages thereof, and I would therefore have it understood that I reserve the right to make all such changes as fairly fall within the scope and spirit of my invention.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. As a new article of manufacture, a tie-plate having on the bottom thereof ribs crossing each other and tapering from their meet-

ing point to their ends, substantially as described.

2. As a new article of manufacture, a tie-plate having on the bottom thereof two ribs
5 crossing each other at or about the center of the plate, said ribs being tapered from their point of juncture to their ends and adapted to be impressed into a railway-tie and engage
10 the fibers thereof in all directions without cutting or splitting the tie, substantially as described.

3. As a new article of manufacture, a tie-plate adapted to be secured to a tie and having on the bottom thereof longitudinal ribs adjacent to each side and other ribs between
15 said longitudinal ribs, crossing each other at or about their middle and tapering toward the ends, substantially as described.

MORRIS SELLERS.

Witnesses:

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F. H. DRURY.