

(No Model.)

W. GOLDIE.
BLANK BAR FOR TIE PLATES.

No. 465,260.

Patented Dec. 15, 1891.

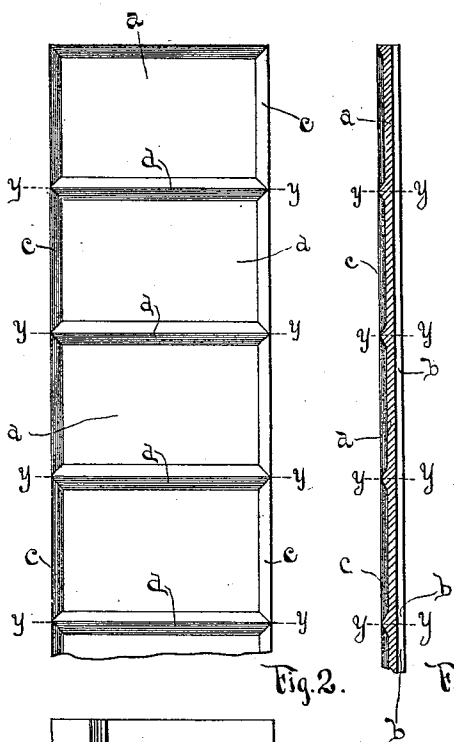


Fig. 1.

Fig. 2.

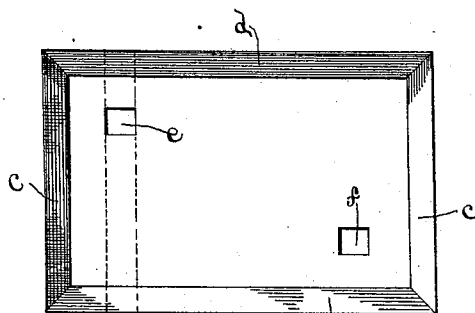


Fig. 3.

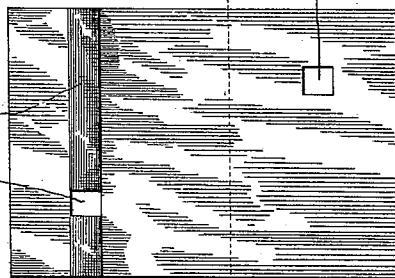


Fig. 4.

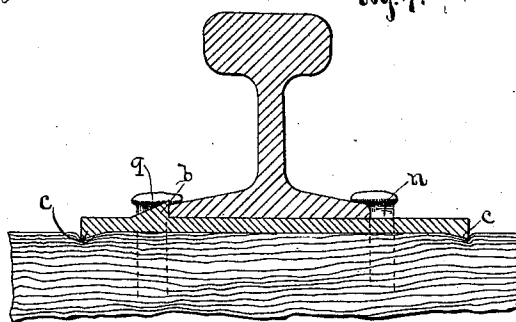


Fig. 5.

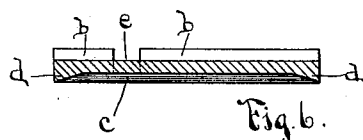


Fig. 6.

Attest:
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UNITED STATES PATENT OFFICE.

WILLIAM GOLDIE, OF BAY CITY, MICHIGAN.

BLANK BAR FOR TIE-PLATES.

SPECIFICATION forming part of Letters Patent No. 465,260, dated December 15, 1891.

Application filed June 10, 1891. Serial No. 395,792. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM GOLDIE, a citizen of the United States, residing at Bay City, in the county of Bay and State of Michigan, have invented certain new and useful Improvements in Blank Bars for Tie-Plates, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in manufacturing tie-plates, and pertains to the manufacture of the tie-plate or rail-chair described and claimed in Letters Patent issued to me April 29, 1890, No. 426,530; and my invention consists in the form and construction of a rolled metal blank or bar for forming the tie-plate by severing each separate plate from the end thereof.

The object of the invention is to provide a cheap and expeditious means of manufacturing the tie-plate described and claimed in Letters Patent No. 426,530, hereinbefore mentioned.

My invention is illustrated in the accompanying drawings, in which similar letters of reference indicate like parts throughout the several views.

Figure 1 represents a plan view of the blank bar for forming the tie-plate. Fig. 2 is a view showing the bottom or under side of the blank bar. Fig. 3 is a longitudinal section of Fig. 1. Fig. 4 is a top or plan view of a plate after it is severed from the blank bar. Fig. 5 is a view showing the bottom or underside of the plate. Fig. 6 is a section of Fig. 4, taken at *x x*. Fig. 7 is a transverse section of the rail with the plate in position as supporting the rail.

a represents a thin plate of rolled metal of a width transversely to conform to the transverse dimension of the plate or chair to be made, and upon the upper side of this plate is arranged a longitudinal rib *b*, located upon one side of the transverse center of the plate, while upon the under or opposite side of the plate and at or near the edges thereof are provided longitudinal ribs *c*, preferably arranged with their outstanding edges brought to an angle or made sharp, and *d* is a series of transverse ribs, of a V form, raised outwardly from the under side of the plate *a* and be-

tween the ribs *c*, with which they are arranged to intersect. The distance between the V edges of the transverse ribs *d* is arranged to coincide with the longitudinal dimension of the chair to be made. This plate is formed by passing the metal between suitable rolls in the usual manner, the rolls having their peripheries arranged to form the longitudinal and transverse ribs, as described, and the tie-plates or chairs are then completed by severing with suitable shearing devices the plate *a* through the longitudinal center of each transverse V-rib *d*, as shown by the dotted lines *y y*, and then, by means of suitable punches, the plates or chairs are completed by forming openings *e* and *f* for the spikes, the opening *e* being cut through the longitudinal rib *b*, so that when the chair is in position for holding the rail, as shown in Fig. 7, the outer lateral edges of the base-flange of the rail will rest against the inner side of the rib *b*, while the head portion of the spike *g*, driven through the opening *e* and into the tie, will reach over the flange and retain the rail upon the chair, while the spike *n*, passed through the opening *f*, firmly retains the opposite edge of the rail-flange in position.

It will be noticed that by severing the sections from the bar, as before described, each section or chair will be provided on the edges of its under side with a downwardly-projecting continuous rim similar in form and construction to the rail-chair described in the aforesaid Letters Patent, and which when the chair is in position between the rail and tie will form a firm and solid bearing for the rail and provide against the entrance of dampness and water to the tie beneath the rail by the continuous rib being impressed or embedded into the surface of the tie, and at the same time provide a cheap and easy means of binding the inner spike to the outer spike, so as to more effectually resist a lateral or crowding strain upon the rail. It will also be seen that by rolling the bar or plate to the form described and then severing the several chair-sections therefrom provides a cheap and expeditious process for forming the chairs or tie-plate, as by rolling the plate in this manner the raised ribs are formed without extra cost or labor, except the formation of the

rolls, so that a superior form of rail-support is provided at a comparatively small cost and expense.

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

1. A blank bar for the manufacture of railroad chairs or tie-plates, consisting of a bar of rolled metal having on the transverse center of one side a raised longitudinal rib and provided on the edges of its opposite side with raised longitudinal ribs and with a series of raised transverse ribs at intervals intersecting the said longitudinal ribs, for the purpose set forth, substantially as described.

2. A rolled metal bar for the manufacture of tie-plates or rail-chairs, provided on one side of the transverse center of its upper side with a raised longitudinal rib and having on each edge of its under side an outstanding longitudinal rib with a series of outstanding transverse V-shaped ribs at intervals and intersecting the said longitudinal ribs, substantially as described.

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

WILLIAM GOLDIE.

Witnesses:

H. K. FREEMON,
WM. H. DE LACY.