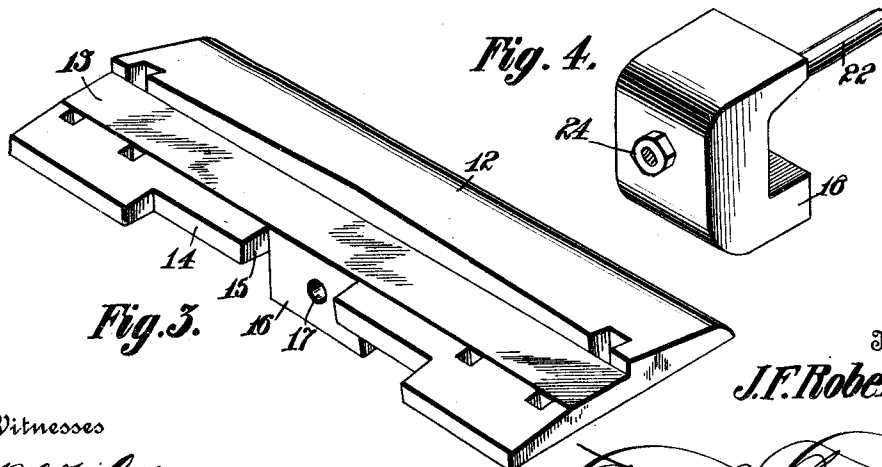
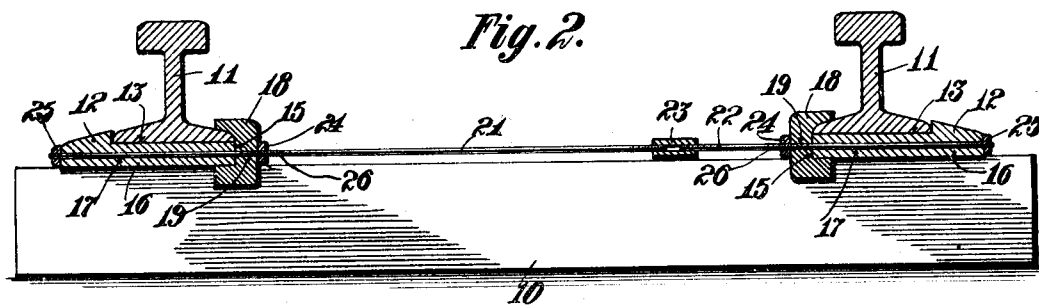
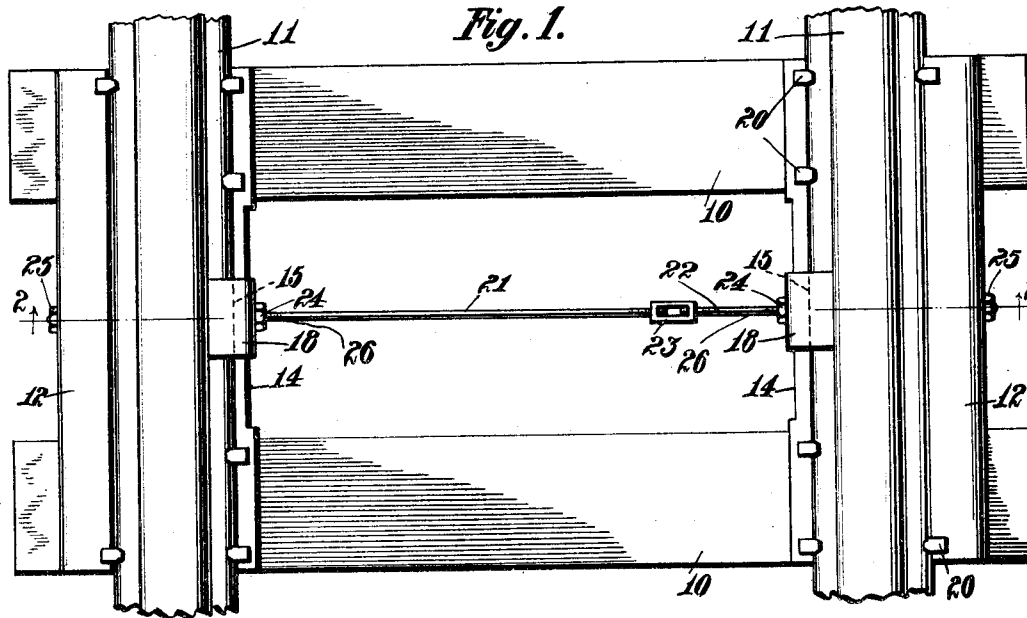


J. F. ROBERTSON.
RAIL CLAMP.
APPLICATION FILED APR. 17, 1912.

1,051,451.

Patented Jan. 28, 1913.



Witnesses
W. C. Shelding.
Wm. S. Fowler.

Inventor
J. F. Robertson,

Charles Chanale

Attorneys

UNITED STATES PATENT OFFICE.

JOHN F. ROBERTSON, OF COFFEYVILLE, KANSAS.

RAIL-CLAMP.

1,051,451.

Specification of Letters Patent.

Patented Jan. 28, 1913.

Application filed April 17, 1912. Serial No. 691,367.

To all whom it may concern:

Be it known that I, JOHN F. ROBERTSON, a citizen of the United States, residing at Coffeyville, in the county of Montgomery, State of Kansas, have invented certain new and useful Improvements in Rail-Clamps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to rail clamps and has for an object to provide clamps which are connected by a single tie bolt which may be adjusted to hold the track to gage.

A further object of the invention is to provide a two-piece clamp in the nature of a bed plate having a groove in the top face to receive the rail base flange and having a transverse rib on the bottom face, a U-shaped clamping head being provided to engage over the base flange of the rail, and engage underneath the transverse rib, the latter and the head being provided with aligning orifices to receive the tie bolt, the head being so disposed as to bear within a recess formed in the plate so as to be held against creeping longitudinally of the plate and being adapted to abut the end of the rib so that the base plate may be made comparatively thin while at the same time the rib forms a strong abutment for the head so that buckling of the plate when applied is positively prevented.

With the above objects in view the invention consists of certain novel details of construction and combination of parts herein-after fully described and claimed, it being understood that various modifications may be made in the minor details of construction within the scope of the appended claim.

In the accompanying drawings forming part of this specification:—Figure 1 is a plan view of a track equipped with my invention. Fig. 2 is a cross sectional view taken on the line 2—2 Fig. 1. Fig. 3 is a detail perspective view of the bed plate. Fig. 4 is a detail perspective view of the U-shaped head.

Referring now to the drawing in which like characters of reference designate similar parts, 10 designates spaced ties and 11 traffic rails thereon.

The rail clamps comprising the subject-matter of this invention each comprise a comparatively thin bed plate 12 having the

top face cut away as shown at 13 to receive the base flange of a traffic rail. Formed in the edge of the cut away portion is a recess 14 the purpose of which will presently appear. Formed centrally in the inner wall of this recess is a second recess 15. Integral with the bottom face of the bed plate and disposed transversely across the same is a substantially oblong rib 16, one end face of which forms a continuation of the inner wall of the recess 15. The rib is provided axially with an opening 17.

For clamping the rail on the bed plate a substantially U-shaped clamping head 18 is provided, the branches of the head engaging over the base flange of the rail and engaging underneath the bottom face of the oblong rib, so that vertical displacement of the rail is positively prevented. The head is of such size as to snugly fit within the recess 15 so that creeping of the head longitudinally of the bed plate is prevented. Furthermore the head is designed to abut against the end face of the rib 16, the latter forming a strong rigid abutment for the head while at the same time reinforcing the bed plate against buckling when applied. The head is provided with an orifice 19 which registers with the opening 17 of the rib.

For anchoring both of the bed plates to adjacent ties, securing spikes 20 are employed. For holding the clamping heads in operative position upon both bed plates, a single rod formed in two sections 21 and 22 is employed, the outer ends of the sections being engaged through the orifices of the bed plate ribs and heads, and the inner ends of the sections being threaded in opposite directions to receive a turn buckle 23. The outer ends of the sections are threaded and receive the nuts 25 which bear against the outer faces of the ribs 16. Upon tightening of the turn buckle, the bed plates will be drawn into snug engagement with the rail base flanges and serve to hold the latter clamped tightly to their respective bed plates. The clamping heads 18 are held tightly engaged against the respective ribs 16 and rail bases with which they are engaged, by means of the nuts 24 upon the threaded portions 26 of the rod sections 21 and 22, it being understood that the clamping heads are loosely engaged over said rod sections.

A rail clamp constructed as above de-

scribed will positively prevent spreading of the rails from gage, will furthermore prevent vertical displacement of the rails, while at the same time by virtue of the recesses 5 14 formed in the outer edges of the bed plates, the latter will be reduced in weight to a minimum extent. By virtue of the ribs of the base plates, the latter may be made comparatively thin, the ribs sufficing 10 to reinforce the bed plates against distortion when the pull of the tie rod sections comes upon the bed plates.

What is claimed, is:—

A device for holding traffic rails against 15 displacement including a clamp for each rail comprising a bed plate having the top face cut away to receive a rail base flange, and having a transversely disposed rib integral with the bottom face, the inner edge 20 of the cut away portion being formed with a recess, the end face of said rib forming

a continuation of the inner wall of said recess, a U-shaped clamping head adapted to engage over the inner side of and clamp the rail base flange to said bed plate, and to engage underneath said rib, said head being adapted to snugly fit in said recess and to abut the end face of said rib, and means for anchoring both clamps stationary comprising a tie rod having a turn buckle intermediate the ends and having the ends extending through the said clamping heads and transverse ribs of both clamps, nuts on said ends bearing upon said clamping heads, and nuts on the extremities of said ends bearing 35 upon the outer edges of said bed plates.

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

JOHN F. ROBERTSON.

Witnesses:

JAMES McCULLOUGH,
CHAS. A. ETCHEN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."