

(No Model.)

W. WHARTON, Jr.

COMBINED CHAIR AND FISH PLATE JOINT FOR RAILWAYS.

No. 468,162.

Patented Feb. 2, 1892.

FIG. 1.

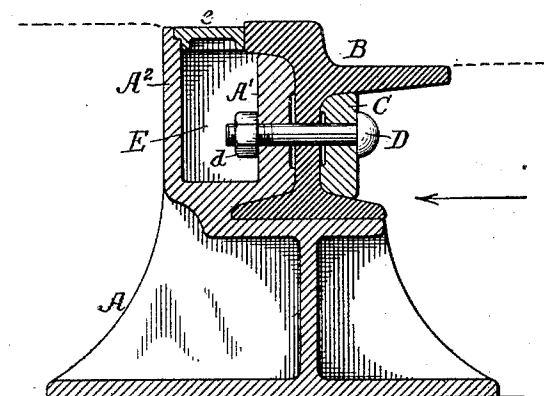


FIG. 2.

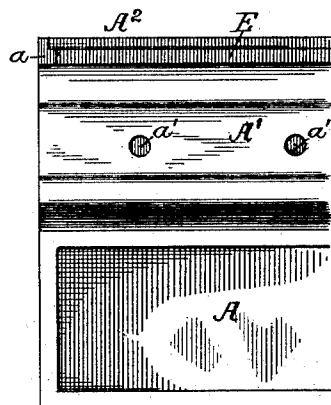


FIG. 4.

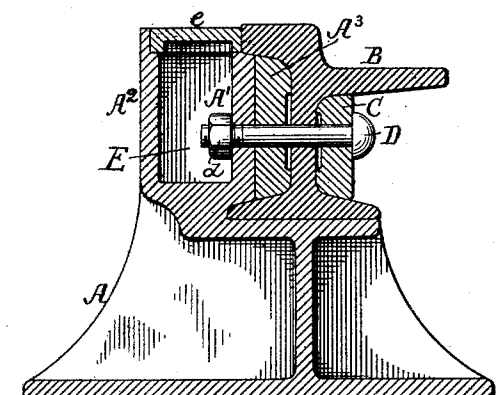


FIG. 5.

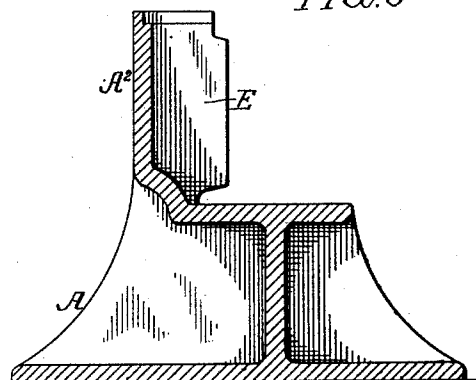
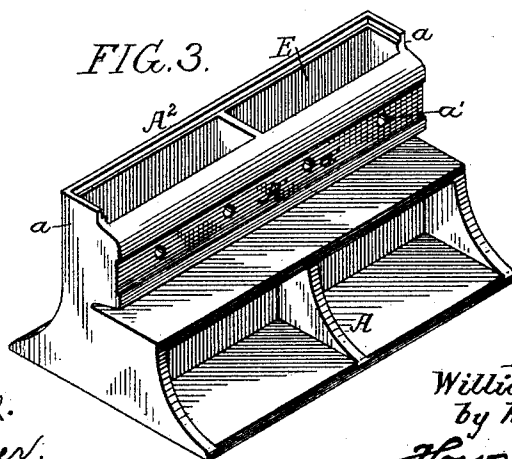


FIG. 3.



Witnesses:

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Inventor:
William Wharton, Jr.
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UNITED STATES PATENT OFFICE.

WILLIAM WHARTON, JR., OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR
TO THE WILLIAM WHARTON, JR., AND COMPANY, INCORPORATED,
OF SAME PLACE.

COMBINED CHAIR AND FISH-PLATE JOINT FOR RAILWAYS.

SPECIFICATION forming part of Letters Patent No. 468,162, dated February 2, 1892.

Application filed December 30, 1890. Serial No. 376,241. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM WHARTON, JR., a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented certain Improvements in a Combined Chair and Fish-Plate Joint for Railways, of which the following is a specification.

The object of my invention is to combine with a supporting-chair for railway-rails a box for inclosing the fastening devices which secure the rails and fish-plates together, and a further object of my invention is to combine said box and chair with a fish-plate.

In the accompanying drawings, Figure 1 is a transverse sectional view of the chair and rail, showing my improvement. Fig. 2 is a face view of a portion of the chair, looking in the direction of the arrow, Fig. 1, with the rail removed. Fig. 3 is a perspective view of the combined chair and box, and Figs. 4 and 5 are transverse sectional views illustrating modifications of my invention.

Referring to Figs. 1, 2, and 3, A is the chair, made in any suitable form, but preferably raised, as shown in the drawings, and on this chair is mounted the rail B, which is secured to an abutting rail by the fish-plates A' and C, (the fish-plate A' being a part of the chair,) which are attached to the rails by transverse bolts D, having in the present instance nuts *d*. The rail shown is what is termed a "girder-rail" and is used in the construction of street-railways in which the pavement is on a level with the top of the rail, as shown by dotted lines in Fig. 1.

The fish-plates and their securing-bolts are below the surface of the roadway, and a portion of said roadway has to be removed prior to the tightening of the nuts of the securing-bolts. These bolts and nuts have to be examined and from time to time tightened in

the same manner as the securing-bolts on the fish-joints of steam-railways; but in the case of steam-railways the bolts and nuts are exposed, being above the level of the roadway.

As shown in Fig. 3, a box E, having side walls A' A' and end walls *a a*, is supported by and forms part of the chair A. The side wall A' of the box E, as shown in Figs. 1, 2, and 3, is also the fish-plate for one side of the rail. The securing-bolts D pass through holes *a'* in said plate and the nuts *d* of said bolts are within the box. The box is provided with a lid *e*, on the raising or removal of which access can be had to the nuts or other securing devices, and sufficient room is provided for the manipulation of the tightening-wrench or other tool.

In place of the side A' of the box forming the fish-plate a separate fish-plate A³ may be used, as shown in Fig. 4, and in some instances the side A' of the box may be dispensed with altogether, as shown in Fig. 5, the rails being secured to the chair in any suitable manner.

I claim as my invention—

1. An inclosing box for the securing devices of rail-joints, one side of said box forming a fish-plate, substantially as set forth.
2. A combined chair and box for inclosing the securing devices of rail-joints, substantially as set forth.
3. A combined chair, inclosing-box, and fish-plate for rail-joints, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM WHARTON, JR.

Witnesses:

WILLIAM D. CONNER,
HARRY SMITH.