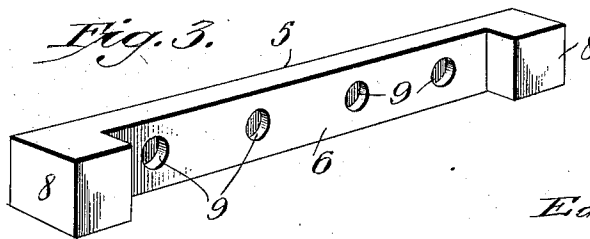
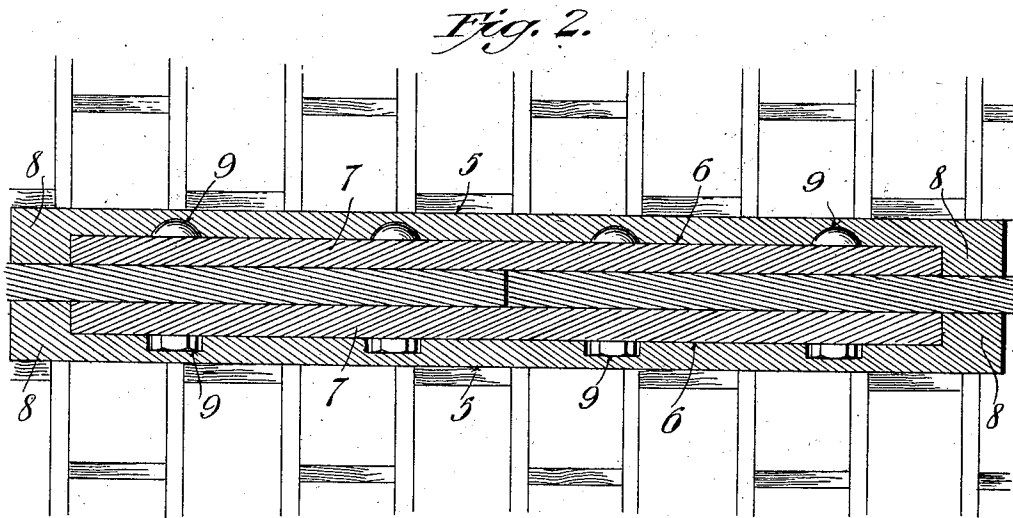
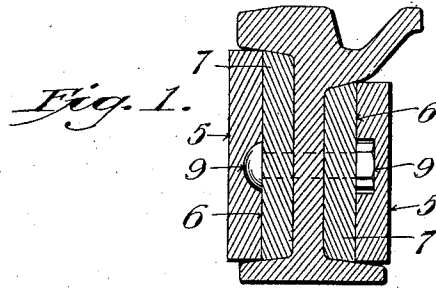


E. ALCOTT.
 PROTECTOR FOR RAILROAD RAILS.
 APPLICATION FILED JAN. 10, 1913.

1,061,967.

Patented May 20, 1913.



Witnesses

T. L. McNamee
M. E. Smith

By

Inventor
Edward Alcott
Joseph Doyle
 his Attorney

UNITED STATES PATENT OFFICE.

EDWARD ALCOTT, OF MANASSAS, VIRGINIA.

PROTECTOR FOR RAILROAD-RAILS.

1,061,967.

Specification of Letters Patent.

Patented May 20, 1913.

Application filed January 10, 1913. Serial No. 741,295.

To all whom it may concern:

Be it known that I, EDWARD ALCOTT, a subject of the King of Great Britain, residing at Manassas, in the county of Prince William and State of Virginia, have invented certain new and useful Improvements in Protectors for Railroad-Rails, of which the following is a specification.

This invention relates to the subject of railways and has particularly in view simple means for protecting fish plates and other rail connections so that the paving adjacent thereto will not damage such connections, the protecting means also serving to prevent loosening of the connections such as is incidental to rail vibrations.

The invention contemplates the provision of a protector which will be carried by a rail and cooperate therewith to form a housing in which the rail connections and the fasteners therefor are entirely inclosed, the protector being so formed that it provides an abutment for the paving which permits the rail to move or vibrate relatively to the paving without damaging the paving, and in which the paving holds the protector in position to shield the rail connections.

One simple and practical embodiment of the invention is shown in the accompanying drawings, wherein—

Figure 1 is a vertical sectional view of a rail equipped with the improved protector. Fig. 2 is a horizontal sectional view thereof. Fig. 3 is a detail perspective view of the protector.

The improved protector has been shown as held in position on the rail by the type of paving set forth in my Patent 929,366, dated July 27, 1909, wherein wedges or keys are employed in connection with granite or other types of stones, the wedges in the present showing serving to force and hold the stones in contact with the protector and thereby hold the protector in position to shield the rail connections and hold them in proper position.

While the improved protector is of considerable value in connection with the type of paving set forth in the aforesaid patent, it is to be understood that it is not limited to such use, for the same can be, and frequently is, used in connection with other types of paving.

The protector may be formed of any suitable material, such as wood or metal, wood being preferred as it is noiseless and pos-

sesses a certain amount of elasticity. The said protectors, in the present embodiment of the invention, are formed each from a single block of wood that is of sufficient length to be carried by the sides of the rails, between the tread and base flange thereof, and spanning one or more of the plates or other rail connections.

The protectors are of sufficient thickness so that they will project a slight distance beyond the longitudinal edges of the widest portions of the rails to prevent the paving contacting with said rails. The surfaces of the protectors adjacent the paving, are in the form of smooth straight flat walls against which the paving abuts. The surfaces adjacent the rails are cut-away longitudinally to form a recess for the reception of the fish plate or other type of rail connection, and the end walls of the said recesses are in the form of laterally projecting end pieces which overlap the ends of the fish plates and abut the webs of the rails. The recesses may be provided with a longitudinal row of sockets which receive the heads of the bolts, or nuts of the fasteners for the rail connections. The sockets, of course, are shaped complementary to the portions of the fasteners they are to receive, the ones shown being in the form of rounded sockets to receive heads of bolts that are rounded.

In use the protectors are placed both on the inside and outside of joined rails, spanning the rail connections, with their upper edges in contact with the undersurfaces of the treads, their lower edges seated on the base flanges, and the free ends of the angular end pieces overlapping the ends of the rail connections and abutting the web. The paving is then laid and by means of the wedges, or filling if other types of paving is used, the stones, blocks, or paving material adjacent the rails, is forced into contact with the outer smooth surfaces of the protectors with sufficient force to hold the protectors in position to hold the rail connections in positions on the rails. With this arrangement of protectors on both sides of the joined rails, it will be clear that the connections are held in immovable relation to the rails, and the fasteners being also held at both ends, said fasteners can not jar loose.

As has been stated, the protectors are provided with the angular ends that abut the webs of the rails, and as said protectors are

carried by the rails, it will be seen that they cooperate with the rails to form housings that entirely inclose the rail connections, thereby not only shielding the connections from atmospheric influences, but also holding the connections immovable relative to the rails.

Another prominent feature of the invention is that the outer longitudinal surfaces of the protectors being smooth and straight, the rails, with the protectors vibrate relative to the paving without affecting the paving, and the outer surfaces of the angular end pieces 8 being also smooth and straight, form abutments for rail filler blocks, such, for example as are set forth in my patent No. 1,028,420, dated June 4, 1912.

What I claim as my invention is:—

1. A protector for rail connections comprising a block of wood shaped to be carried by the side of a rail and presenting a smooth outer wall to the abutting paving, the inner surface of the block being cut-

away to provide a recess for the reception of a rail connection, the ends of the recess abutting the rail webs, the base of the recess being provided with sockets for the reception of the ends of connection fasteners.

2. A protector for rail connections comprising a block of wood shaped to be carried by the side of a rail and presenting a smooth outer wall to the abutting paving, the inner surface of the block being cut-away to provide a longitudinal recess for the reception of a rail connection, the base of the recess abutting the connection fasteners, the formation of the recess providing angular end portions that overlap the ends of the rail connection plate and abut the web of the rail.

In testimony whereof I have affixed my signature in presence of two witnesses.

EDWARD ALCOTT.

Witnesses:

ERNEST T. GRESS,

ALFRED E. FIELD.

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