

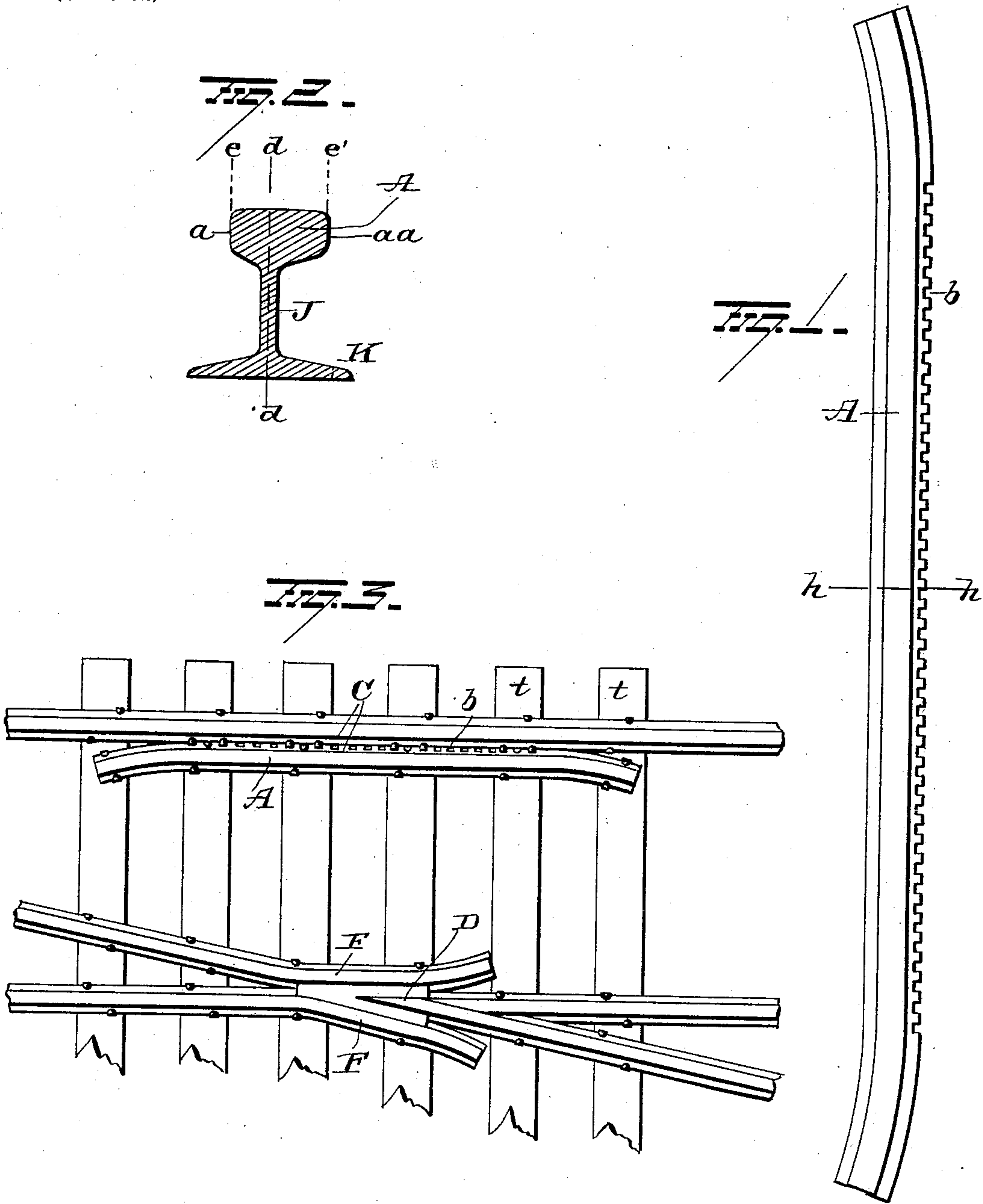
No. 697,522.

Patented Apr. 15, 1902.

T. MCGINTY.  
GUARD RAIL.

(Application filed Sept. 6, 1901.)

(No Model.)



WITNESSES  
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# UNITED STATES PATENT OFFICE.

THOMAS MCGINTY, OF MATTHEWS, INDIANA.

## GUARD-RAIL.

SPECIFICATION forming part of Letters Patent No. 697,522, dated April 15, 1902.

Application filed September 6, 1901. Serial No. 74,557. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS MCGINTY, a resident of Matthews, in the county of Grant and State of Indiana, have invented certain new and useful Improvements in Guard-Rails; 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.

My invention relates to an improvement in guard-rails for railroads, the object of the invention being to provide a guard-rail which will be so constructed as to permit its secure attachment to the ties and when so attached will be disposed just the correct distance from the line-rail to afford the proper room for the wheel-flange.

With this object in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as will be more fully hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan view illustrating my improved guard-rail. Fig. 2 is a view in section on the line  $xx$  of Fig. 1, and Fig. 3 is a view illustrating the guard-rail applied at a switch or turnout.

Guard-rails have heretofore been made by trackmen at the place the rail is needed. They take an ordinary rail and cut it the proper length, then bend the ends and cut the base-flange of the rail to permit the head or tread thereof to lie the proper distance from the head or tread of the line-rail. This is extremely difficult and laborious, and when the rail is completed it is not accurate nor can it be very securely held in position by the spikes, owing to the difficulty of driving them between the guard and line rails, and to avoid these objectionable features of the present guard-rails and the difficulty of making and placing the same my invention was devised and will now be described.

A represents my improved guard-rail secured in position at a turnout or switch, as clearly shown in Fig. 3, wherein  $t$  represents the ties,  $F$  the frogs, and  $g$  the spikes, securing all of the rails to the ties.

The guard-rail A consists of the flanged base K, web J, and head or tread  $a$ , the proportion of these several members being best

illustrated in Fig. 2, in which a dotted line  $d\ d$  is drawn, dividing the rail vertically. It will be seen that the section  $aa$  of the head or tread is much wider than section  $a$ , the difference being clearly shown in the varying space between the line  $d\ d$  and  $e$  and the space between  $d\ d$  and  $e'$ . The rail is so constructed for the purpose of disposing the head or tread close to the head of the main-line rail when the base-flange of the guard-rail is secured against the base-flange of the line-rail, to thus leave just sufficient room between the heads of the guide and line rail to receive the flange of the engine and car wheels and not permit the latter lateral movement, as at present, which results in the wheels striking the frog of the switch and resulting in injury thereto and in finally so wearing or bending the frog as to make it dangerous to passing trains.

In order to permit the guard-rail to be rigidly and easily secured with its base-flange against the base-flange of the line-rail, I provide the inner edge of the base-flange with a series of notches  $b$  to receive not only the spikes  $g$  for securing it to the ties, but also the spikes for securing the line-rail, and as these notches are preferably located for some distance along the flange the laborer can drive the spikes in several ties and so place them as he thinks to the best advantage.

My improved guide-rail can be manufactured at but slightly-increased expense over the ordinary rail and will save the trackmen a great amount of hard labor and at the same time produce a perfect guard when in position on the track.

Various slight changes might be resorted to in the general form and arrangement of the several parts described without departing from the spirit and scope of my invention, and hence I would have it understood that I do not wish to limit myself to the precise details set forth, but consider myself at liberty to make such slight changes and alterations as fairly fall within the spirit and scope of my invention.

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

1. A guard-rail having inwardly-bent ends and provided with a head projecting a greater



distance in one direction from the web than in the opposite direction, said guard-rail having a series of notches in one of its flanges for the reception of fastening devices.

5 2. The combination with a main rail, of a guard-rail having one of its flanges abutting against a flange of the main rail, said guard-rail having a series of notches in the flange which abuts against the flange of the main  
10 rail, and fastening devices passing through said notches, the head of said rail projecting a greater distance toward the main rail than in the opposite direction.

3. As an article of manufacture, a guard-

15 rail having one side of its head or tread projecting an appreciably greater distance from its central web than the other side of said head or tread and a series of notches in the edge of the base-flange on the same side of the rail as the enlarged side of the head or  
20 tread.

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

THOMAS MCGINTY.

Witnesses:

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