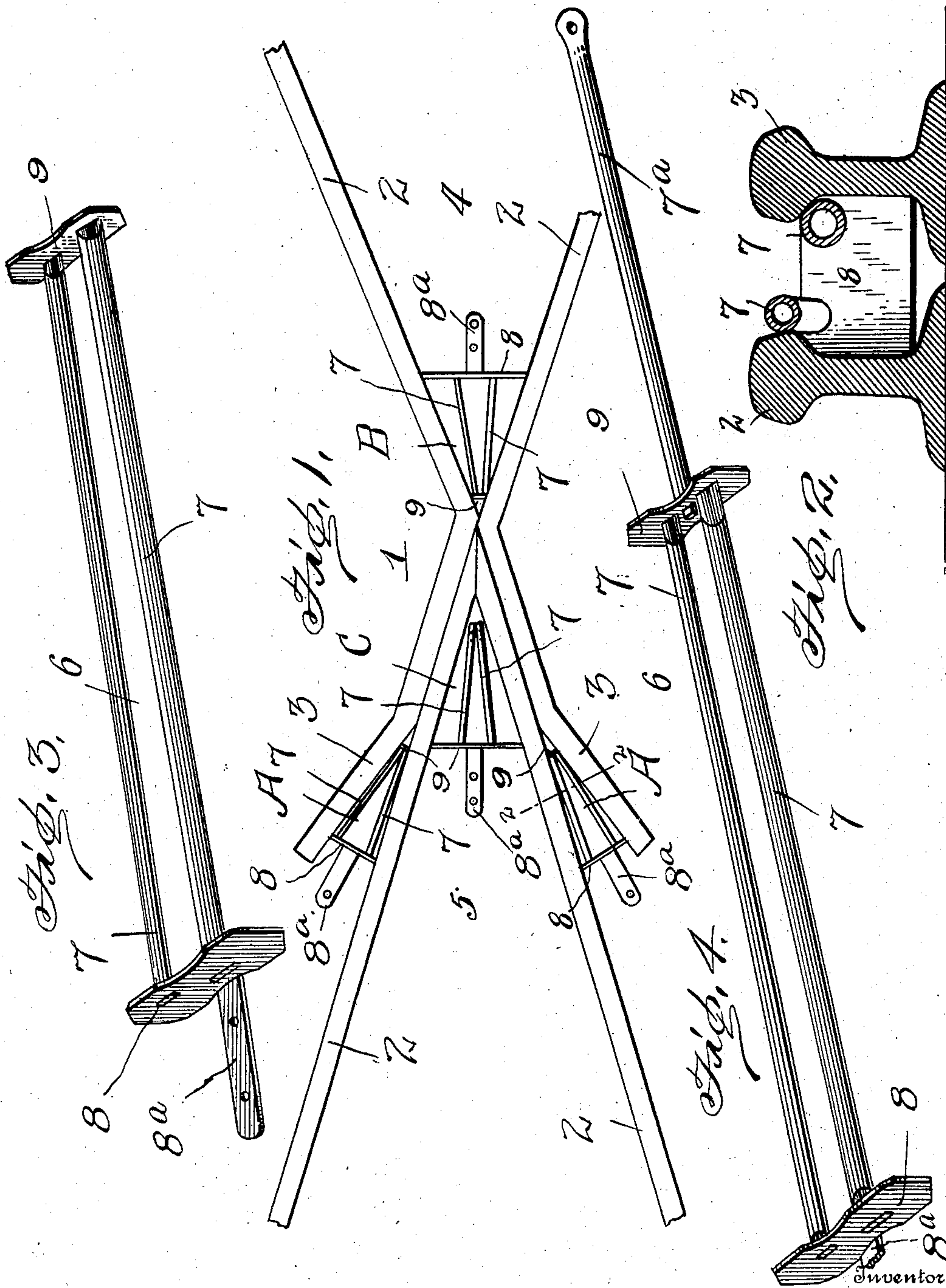


No. 737,103.

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H. HOOKER.
FOOT GUARD FOR RAILWAY FROGS.
APPLICATION FILED JUNE 1, 1903.

NO MODEL.



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UNITED STATES PATENT OFFICE.

HENRY HOOKER, OF CHADRON, NEBRASKA.

FOOT-GUARD FOR RAILWAY-FROGS.

SPECIFICATION forming part of Letters Patent No. 737,103, dated August 25, 1903.

Application filed June 1, 1903. Serial No. 159,649. (No model.)

To all whom it may concern:

Be it known that I, HENRY HOOKER, a citizen of the United States, residing at Chadron, in the county of Dawes and State of Nebraska, have invented certain new and useful Improvements in Foot-Guards for Railway-Frogs; and I do 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 means for blocking and guarding railway-frogs, guard-rails, switches, &c.

The object of the invention is to provide a blocking or guard for those portions of railway-frogs, guard-rail, switches, or any other parts of a railway which unavoidably, owing to their construction, present large openings, into which the foot of an operator may be easily caught and held and from which the same might not be removed quickly enough to avoid a moving train, resulting frequently in serious and fatal accidents.

Another object is to construct such blocking or guards from cast-off material which is unfitted for other use, thereby utilizing iron which would otherwise be sold for "scrap."

A further object is to provide a blocking or guard of this character which is simple in construction, quickly assembled and applied, and which will be strong, durable, and lasting and well adapted to the purpose for which it is designed.

With these and other objects in view the invention consists in certain novel features of construction, combination, and arrangement of parts, which will be hereinafter more fully described, and particularly defined in the appended claims.

In the accompanying drawings, Figure 1 is a top plan view of a railway-frog and guard-rails, showing the application of the device. Fig. 2 is an enlarged sectional view on the line 2 2 of Fig. 1. Fig. 3 is a detail perspective view of one form of the blockings or guards, and Fig. 4 is a similar view of another form of the same.

In the drawings, 1 denotes the frog of a railway, 2 the main rails, and 3 the guard-rails.

4 denotes the front angle of the frog, and 5 denotes the rear angle of the same.

The blocking or guard 6 consists in general of two solid or tubular rods or bars 7, arranged alongside of each other and supported at their opposite ends in plates 8 and 9, the plate 8 having formed thereon a right-angularly-disposed tongue or attaching member 8^a, by which this end of the guard may be spiked down to a tie. The plate 9 at the opposite end of the guard is of such width and construction as to permit the same to be forced between the converging ends of two rails and to engage between the ball or head and the flange of the same, thereby firmly holding the same in place against movement up or down. In some instances the plate 9 is dispensed with and the ends of the rods flattened, bent down, and spiked to the tie.

At A in Fig. 1 and in Fig. 2 is shown the application of the guard or blocking to the guard-rails of a frog, and at B and C is shown the application of the same to the front and rear angles of the frog. In Fig. 3 is shown the arrangement of the guard when used in connection with the guard-rail, it being of course understood that the shape of the guard will be necessarily varied to conform to the shape of the different openings to be protected, the same principles of construction and arrangement, however, being maintained in all the forms necessary for the complete guarding of the railway. For instance, in Fig. 4 is shown the form of guard that is necessary in connection with a "split-point" switch, this form requiring the addition of a rod or bar 7^a, forming an extension to fill the long narrow space necessary to this form of switch.

In most cases the rods or bars 7 are of different diameters, the larger of the two rods being arranged to fit closely under the ball or head of the main rail out of the way of the car-wheel flange, while the smaller rod lies adjacent to the opposite rail and is disposed in a slightly-higher plane than the larger rod, thus closing up the space between the rails sufficiently to prevent the foot of the operator from getting caught therein.

The advantages derived from a guard or

blocking constructed as herein described will be readily apparent, and aside from the protection such a guard affords a great saving is afforded the railroad company in that the
5 guards are entirely constructed from scrap-iron, such as old boiler-tubes and worn-out rods of all descriptions, which are utilized for the rods of the guards, while old boiler-iron and other scraps form the supporting-plates.
10 Furthermore, guards formed in this manner and of such material are greatly superior to the wooden blockings or guards commonly used and which continually need replacing, and may be much more quickly put in place
15 and more rigidly held than most guards now in use, and will last indefinitely.

From the foregoing description, taken in connection with the accompanying drawings, the construction, mode of operation, and advantages of my invention will be readily apparent, it is thought, without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be
25 resorted to without departing from the principle or sacrificing any of the advantages of the invention.

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

1. A foot guard or blocking for railway frogs, switches and the like, comprising horizontally-disposed cylindrical rods or bars, arranged alongside each other and spaced apart on different planes, a supporting-plate fixed
35 to the inner ends of said rods or bars and adapted to fit between the heads and flanges of two adjacent rails, and a supporting-plate fixed to the opposite ends of said rods and adapted to be spiked to a railway-tie or other
40 support, substantially as described.

2. A foot guard or blocking for railway frogs, switches and the like, constructed from discarded boiler-flues and scrap-iron rods, the
45 ends of said boiler flues or rods being flattened, and means for supporting said flues and rods in proper position, said means consisting of slotted plates arranged at the ends of said flues, the flattened portions of said
50 ends being adapted to enter the slots in said plates and to be upset or clenched to hold the same in place, substantially as and for the purpose described.

In testimony whereof I have hereunto set my hand in presence of two subscribing wit-
55 nesses.

HENRY HOOKER.

Witnesses:

GUY E. BENHAM,
C. A. BAUM.